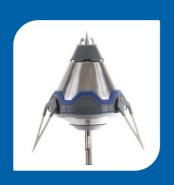
## **4** Indelec



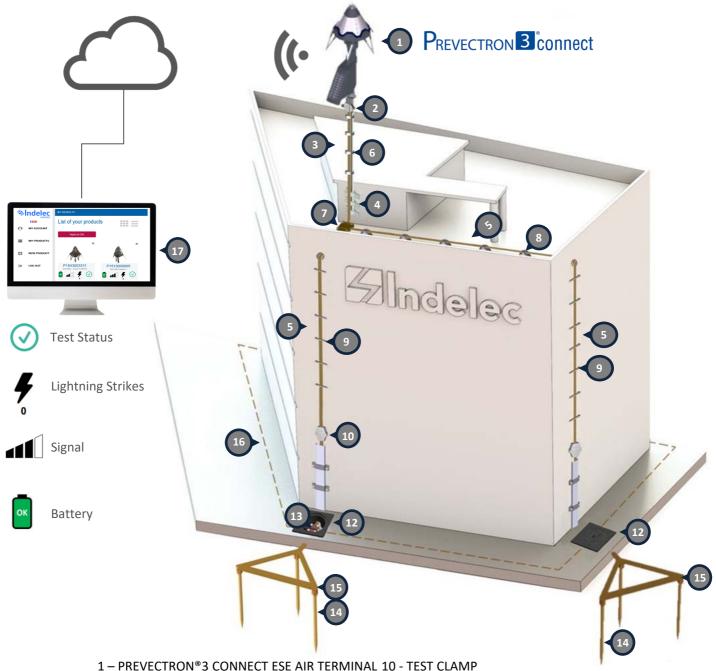




## PREVECTRON®



### **Remote-Testing ESE Lightning Protection System Typical Installation**



2 - PREVECTRON® TO CONDUCTOR CLAMP

3 - ELEVATION MAST

4 - MAST BRACKET

5 - DOWN CONDUCTORS

6 - MAST COLLAR

7 - CONDUCTOR CLAMP

8 - ROOF CONDUCTOR HOLDER

11 - PROTECTION SHEATH

12 - INSPECTION PIT

13 - EARTH CLAMP

14 - EARTH ROD

15 - ROD TO CONDUCTOR CLAMP

16 - BUILDING GENERAL EARTHING

18 - WWW.INDELEC-CONNECT.COM



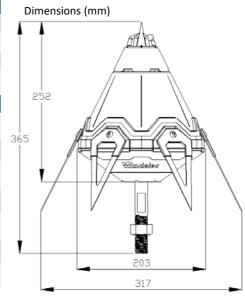
9 - DOWN CONDUCTOR FIXING ©INDELEC SA - 61 Chemin des postes F59500 DOUAI - Tel +33 327 944 944 www.indelec.com

## PREVECTRON® 3 S60 EARLY STEAMER EMISSION AIR TERMINAL (ESE)

| Reference                                      |                  | P1543   |
|--|------------------|---|
| Characteristics                                |                  |   |
| Efficiency                                     | ΔΤ               | 60 μs   |
| Standard deviation ESE / Single Rod            | σ                | $\sigma_{PDA} < 0.44  \sigma_{PTS}$   |
| Lightning current withstanding test (10/350μs) | I <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test                 | I <sub>max</sub> | 230 kA (Unicamp)  |
| Net Weight                                     | Р                | 3.900 kg  |
| Operating principles                           |                  |   |
| Detection of downward leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development cond               | ditions          | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits                              |                  | 6 independent and synchronised modules  |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing                                  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| On-site testing capabilities                   |                  | Proprietary tester  |
| Maintenance                                    |                  | Replaceable modules   |
| Warranty                                       |                  | 5 years   |
| Mechanical specifications                      |                  |   |
| Fixing on pole                                 |                  | M20 Thread  |
| Down conductor connection                      |                  | Specific clamp ref P6500 (included)   |
| Packaging                                      |                  |   |
| Dimensions                                     |                  | 438 x 228 x 220 mm  |
| Contents Gross Weight                          |                  | Prevectron®3, Down conductor clamp, Hex key 5.650 kg                            |
| Environmental sustainability                   |                  | 100% recyclable   |
| Certifications                                 |                  |   |
| NF C 17 102:2011, Annex C                      |                  | Bureau Veritas certificate N°6275241/2/1/1                                      |
| Qualifoudre                                    |                  | Ineris certificate N° N°051166662001  |
| ISO 9001 : 2015 (Quality System)               |                  | Bureau Veritas certificate  |
| CE Marking                                     |                  | Declaration of Conformity N°IND-CE-21092015-A                                   |
| Underwriter Laboratories (UL)                  |                  | UL Certified E478687  |
| Rostechnadzor (RTN Russia)                     |                  | N° RRS 00-05003   |
| Eco -label                                     |                  | AFAQ N°1335.2 11/2014 Certificate   |







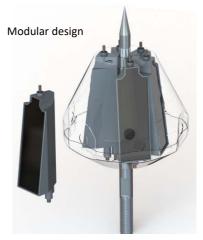




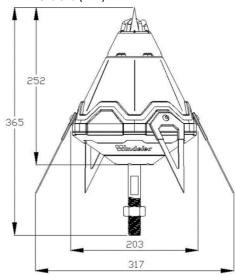
## PREVECTRON® 3 S50 EARLY STEAMER EMISSION AIR TERMINAL (ESE)

| Reference                                      |                  | P1533   |
|--|------------------|---|
| Characteristics                                |                  |   |
| Efficiency                                     | ΔΤ               | 50 μs   |
| Standard deviation ESE / Single<br>Rod         | σ                | $\sigma_{PDA} < 0.53  \sigma_{PTS}$   |
| Lightning current withstanding test (10/350μs) | I <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test                 | I <sub>max</sub> | 200 kA (Unicamp)  |
| Net Weight                                     | Р                | 3.300 kg  |
| Operating principles                           |                  |   |
| Detection of downward leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development cond               | ditions          | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits                              |                  | 4 independent and synchronised modules  |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing                                  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| On-site testing capabilities                   |                  | Proprietary tester  |
| Maintenance                                    |                  | Replaceable modules   |
| Warranty                                       |                  | 5 years   |
| Mechanical specifications                      |                  |   |
| Fixing on pole                                 |                  | M20 Thread  |
| Down conductor connection                      |                  | Specific clamp ref P6500 (included)   |
| Packaging                                      |                  |   |
| Dimensions  Contents                           |                  | 438 x 228 x 220 mm  |
| Gross Weight                                   |                  | Prevectron®3, Down conductor clamp, Hex key 5.050 kg                            |
| Environmental sustainability                   |                  | 100% recyclable   |
| Certifications                                 |                  | •   |
| NF C 17 102:2011, Annex C                      |                  | Bureau Veritas certificate N°6275241/2/1/2                                      |
| Qualifoudre                                    |                  | Ineris certificate N° N°051166662001  |
| ISO 9001 : 2015 (Quality System)               |                  | Bureau Veritas certificate  |
| CE Marking                                     |                  | Declaration of conformity N°IND-CE-21092015-B                                   |
| Underwriter Laboratories (UL)                  |                  | UL Certified E478687  |
| Rostechnadzor (RTN Russia)                     |                  | N° RRS 00-05003   |
| Eco -label                                     |                  | AFAQ N°1335.2 11/2014 Certificate   |











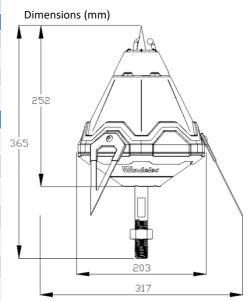


## Prevectron® 3 S40 **EARLY STEAMER EMISSION AIR TERMINAL (ESE)**

| Reference  |                  | P1523   |  |
|--|------------------|---|--|
| Characteristics                                      |                  |   |  |
| Efficiency   | ΔΤ               | 40 μs   |  |
| Standard deviation ESE / Single Rod                  | σ                | $\sigma_{PDA} < 0.57  \sigma_{PTS}$   |  |
| Lightning current withstanding test (10/350 $\mu$ s) | I <sub>imp</sub> | 100kA (normative test)  |  |
| Max. current withstanding test                       | I <sub>max</sub> | 200 kA (Unicamp)  |  |
| Net Weight   | Р                | 3.000 kg  |  |
| Operating principles                                 |                  |   |  |
| Detection of downward leader                         |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |  |
| Upward streamer development cond                     | ditions          | Patented OPTIMAX® technology optimizing the streamer development conditions     |  |
| Upward streamer emission                             |                  | Sparking by High Voltage Impulses   |  |
| Internal circuits                                    |                  | 3 independent and synchronised modules  |  |
| Central rod  |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |  |
| Metal housing  |                  | Stainless Steel 316, Electromagnetic shielding                                  |  |
| On-site testing capabilities                         |                  | Proprietary tester  |  |
| Maintenance  |                  | Replaceable modules   |  |
| Warranty   |                  | 5 years   |  |
| Mechanical specifications                            |                  |   |  |
| Fixing on pole                                       |                  | M20 Thread  |  |
| Down conductor connection                            |                  | Specific clamp ref P6500 (included)   |  |
| Packaging  |                  |   |  |
| Dimensions   |                  | 438 x 228 x 220 mm  |  |
| Contents Gross Weight                                |                  | Prevectron®3, Down conductor clamp, Hex key 4.750 kg                            |  |
| Environmental sustainability                         |                  | 100% recyclable   |  |
| Certifications                                       |                  | 100% recyclable   |  |
| NF C 17 102:2011, Annex C                            |                  | Bureau Veritas certificate N°6275241/2/1/3                                      |  |
| Qualifoudre  |                  | Ineris certificate N° N°051166662001  |  |
| ISO 9001 : 2015 (Quality System)                     |                  | Bureau Veritas certificate  |  |
| CE Marking   |                  | Attest report N°IND-CE-21092015-C   |  |
| Underwriter Laboratories (UL)                        |                  | UL Certified E478687  |  |
| Rostechnadzor (RTN Russia)                           |                  | N° RRS 00-05003   |  |
| Eco -label   |                  | AFAQ №1335.2 11/2014 Certificate  |  |
|  |                  |   |  |







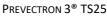




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## PREVECTRON® 3 TS25 EARLY STEAMER EMISSION AIR TERMINAL (ESE)

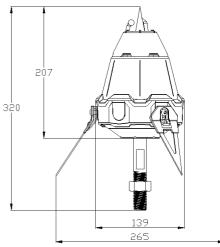
| Reference                                      |                  | P1513   |
|--|------------------|---|
| Characteristics                                |                  |   |
| Efficiency                                     | ΔΤ               | 25 μs   |
| Standard deviation ESE / Single Rod            | σ                | $\sigma_{PDA}$ < 0,65 $\sigma_{PTS}$  |
| Lightning current withstanding test (10/350µs) | l <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test                 | I <sub>max</sub> | 200 kA (Unicamp)  |
| Net Weight                                     | Р                | 2.300 kg  |
| Operating principles                           |                  |   |
| Detection of downward leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development con                | ditions          | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits                              |                  | 3 independent and synchronised modules  |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing                                  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| On-site testing capabilities                   |                  | Proprietary tester  |
| Maintenance                                    |                  | Replaceable modules   |
| Warranty                                       |                  | 5 years   |
| Mechanical specifications                      |                  |   |
| Fixing on pole                                 |                  | M20 Thread  |
| Down conductor connection                      |                  | Specific clamp ref P6500 (included)   |
| Packaging                                      |                  |   |
| Dimensions                                     |                  | 438 x 228 x 220 mm  |
| Contents                                       |                  | Prevectron®3, Down conductor clamp, Hex key                                     |
| Gross Weight                                   |                  | 4.050 kg  |
| Environmental sustainability                   |                  | 100% recyclable   |
| Certifications                                 |                  |   |
| NF C 17 102:2011, Annex C                      |                  | Bureau Veritas certificate N°6275241/2/1/4                                      |
| Qualifoudre                                    |                  | Ineris certificate N° N°051166662001  |
| ISO 9001 : 2015 (Quality System)               |                  | Bureau Veritas certificate  |
| CE Marking                                     |                  | Certificate of Conformity N°IND-CE-21092015-D                                   |
| Underwriter Laboratories (UL)                  |                  | UL Certified E478687  |
| Rostechnadzor (RTN Russia)                     |                  | N° RRS 00-05003   |
| Eco -label                                     |                  | AFAQ N°1335.2 11/2014 Certificate   |







Dimensions (mm)







## PREVECTRON® 3 TS10 EARLY STEAMER EMISSION AIR TERMINAL (ESE)

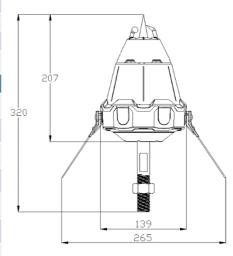
| Reference                                      |                  | P1503   |
|--|------------------|---|
| Characteristics                                |                  |   |
| Efficiency                                     | ΔΤ               | 10 μs   |
| Standard deviation ESE / Single<br>Rod         | σ                | $\sigma_{PDA} < 0.75  \sigma_{PTS}$   |
| Lightning current withstanding test (10/350μs) | I <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test                 | I <sub>max</sub> | 200 kA (Unicamp)  |
| Net Weight                                     | Р                | 2.000 kg  |
| Operating principles                           |                  |   |
| Detection of downward leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development cond               | ditions          | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits                              |                  | 2 independent and synchronised modules  |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing                                  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| On-site testing capabilities                   |                  | Proprietary tester  |
| Maintenance                                    |                  | Replaceable modules   |
| Warranty                                       |                  | 5 years   |
| Mechanical specifications                      |                  |   |
| Fixing on pole                                 |                  | M20 Thread  |
| Down conductor connection                      |                  | Specific clamp ref P6500 (included)   |
| Packaging                                      |                  | 420, 220, 220   |
| Dimensions  Contents                           |                  | 438 x 228 x 220 mm  Prevectron®3, Down conductor clamp, Hex key                 |
| Gross Weight                                   |                  | 3.750 kg  |
| Environmental sustainability                   |                  | 100% recyclable   |
| Certifications                                 |                  |   |
| NF C 17 102:2011, Annex C                      |                  | Bureau Veritas certificate N°6275241/2/1/5                                      |
| Qualifoudre                                    |                  | Ineris certificate N° N°051166662001  |
| ISO 9001 : 2015 (Quality System)               |                  | Bureau Veritas certificate  |
| CE Marking                                     |                  | Certificate of Conformity N°IND-CE-21092015-E                                   |
| Underwriter Laboratories (UL)                  |                  | UL Certified E478687  |
| Rostechnadzor (RTN Russia)                     |                  | N° RRS 00-05003   |
| Eco –label                                     |                  | AFAQ N°1335.2 11/2014 Certificate   |

PREVECTRON 3® TS10





Dimensions (mm)





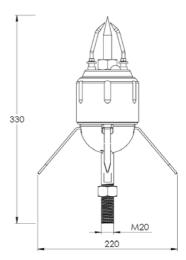


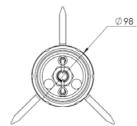
## PREVECTRON® 2 TS3.40 HERITAGE BUILDING EARLY STEAMER EMISSION AIR TERMINAL (ESE)

| Reference                                      |                  | P1214  |
|--|------------------|--|
| Characteristics                                |                  |  |
| Efficiency                                     | ΔΤ               | 40 μs  |
| Standard deviation ESE / Single<br>Rod         | σ                | $\sigma_{PDA} < 0.73  \sigma_{PTS}$                                    |
| Lightning current withstanding test (10/350μs) | I <sub>imp</sub> | 100kA (normative test)   |
| Net Weight                                     | Р                | 2.268 kg   |
| Operating principles                           |                  |  |
| Detection of download leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$ |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses                                      |
| Internal circuits                              |                  | 3 independent and redundant circuits                                   |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Copper      |
| Metal housing                                  |                  | Stainless Steel, Electromagnetic shielding                             |
| On-site testing capabilities                   |                  | Proprietary tester   |
| Maintenance                                    |                  | Replaceable modules  |
| Warranty                                       |                  | 18 months  |
| Mechanical specifications                      |                  |  |
| Fixing on pole                                 |                  | M20 Thread   |
| Down conductor connection                      |                  | Specific clamp ref P6500 (included)                                    |
| Packaging                                      |                  |  |
| Dimensions                                     |                  | 438 x 228 x 220 mm   |
| Contents                                       |                  | Prevectron®3, Down conductor clamp, Hex key                            |
| Gross Weight                                   |                  | 3.138 kg   |
| Certifications                                 |                  |  |
| NF C 17 102:2011, Annex C                      |                  | Bureau Veritas certificate N°2513661/1/7                               |
| Qualifoudre                                    |                  | Ineris certificate N° N°051166662001                                   |
| ISO 9001 : 2015 (Quality System)               |                  | Bureau Veritas certificate   |



#### Dimensions (mm)





#### Application

Prevectron2 MH on copper Ornament Cock « Louis » ref. P10.014







DOC157a.VEN-Rev1



#### Prevectron 3<sup>®</sup> S60T

#### **REMOTE-TESTING EARLY STEAMER EMISSION AIR TERMINAL (ESE)**

| Reference                                      |                  | P1543T  |
|--|------------------|---|
| Prevectron 3® Early Streamer Emiss             | ion Techi        | nical Specifications  |
| Efficiency                                     | ΔΤ               | 60 μs   |
| Standard deviation ESE / Single<br>Rod         | σ                | $\sigma_{PDA} < 0.44  \sigma_{PTS}$   |
| Lightning current withstanding test (10/350μs) | l <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test                 | I <sub>max</sub> | 230 kA (Unicamp)  |
| Detection of downward leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development conditions         |                  | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits                              |                  | 6 independent and synchronised modules  |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing                                  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| Maintenance                                    |                  | Replaceable modules (factory)   |

| Maintenance   | Replaceable modules (factory)  |
|---|--|
| Prevectron 3® Remote Testing Module Techr                                 | nical Specifications   |
| On-site working conditions testing  | Remote testing Module réf.P1591 (not included) : -ESE Lightning conductor condition -Solar Remote Testing Unit battery level |
| Remote Testing Module / ESE Lightning<br>Conductor Communication Protocol | Radio-frequency communication HF 2.4GhZ<br>Range = 100m/330 ft   |
| Power Supply  | High Performance LiFePo <sub>4</sub> Battery 3 200mA.h – 3.2V  |
| Battery Charge  | Monocrystalline Glass-coated Solar panel   |
| Remote Testing Module central rod   | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper  |
| Remote Testing Module / Prevectron connection                             | Fast Connect Technology Plug-in system   |
| Maintenance   | Battery Replacement Kit ref. P1599   |
|   |  |





Accessory (not included) Testing Remote Control P3 T réf P1591



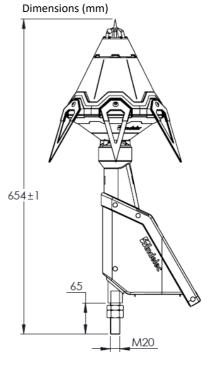


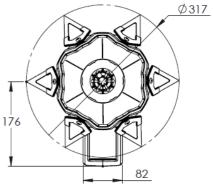


#### Prevectron 3<sup>®</sup> S60T

#### **REMOTE-TESTING EARLY STEAMER EMISSION AIR TERMINAL (ESE)**

| Reference  | P1543T   |
|--|--|
| Fixing on pole                                     | M20 Thread   |
| Down-conductor clamp                               | Proprietary clamp included   |
| Packing  |  |
| Dimensions   | 485 x 262 x 435 mm   |
| Gross Weight                                       | 8.550 kg   |
| Warranty   |  |
| Warranty (excluding Remote testing module battery) | 5 years  |
| Certificates - Standards                           |  |
| NF C 17 102:2011, Annex C                          | Bureau Veritas certificate N°6275241/2/1/1                                       |
| Qualifoudre  | Ineris certificate N° N°051166662001   |
| CE Marking   | Declaration of Conformity N°IND-CE-21092015-A (Prevectron®3 Lightning conductor) |
| Underwriter Laboratories (UL)                      | UL Certified E478687<br>(Prevectron®3 Lightning conductor)                       |
| Eco Label  | AFAQ N°1335.2 11/2014 Certificate  |
| ISO 9001 : 2015 (Quality System)                   | Bureau Veritas certificate   |







Accessory (not included)
Testing Remote Control réf P1591







DOC270a.VEN-Rev2



#### Prevectron 3<sup>®</sup> S50T

## REMOTE-TESTING EARLY STEAMER EMISSION AIR TERMINAL (ESE)

| Reference  |                  | P1533T  |
|--|------------------|---|
| Prevectron 3® Early Streamer Emission Technical Specifications |                  |   |
| Efficiency   | ΔΤ               | 50 μs   |
| Standard deviation ESE / Single Rod                            | σ                | $\sigma_{PDA} < 0.53  \sigma_{PTS}$   |
| Lightning current withstanding test (10/350μs)                 | I <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test I <sub>max</sub>                |                  | 200 kA (Unicamp)  |
| Detection of downward leader                                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development conditions                         |                  | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits  |                  | 4 independent and synchronised modules  |
| Central rod  |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| Maintenance  |                  | Replaceable modules (factory)   |

| Prevectron 3® Remote Testing Module Technical Specifications              |  |  |
|---|--|--|
| On-site working conditions testing  | Remote testing Module réf.P1591 (not included) : -ESE Lightning conductor condition -Solar Remote Testing Unit battery level |  |
| Remote Testing Module / ESE Lightning<br>Conductor Communication Protocol | Radio-frequency communication HF 2.4GhZ<br>Range = 100m/330 ft   |  |
| Power Supply  | High Performance LiFePo <sub>4</sub> Battery 3 200mA.h – 3.2V  |  |
| Battery Charge  | Monocrystalline Glass-coated Solar panel   |  |
| Remote Testing Module central rod   | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper  |  |
| Remote Testing Module / Prevectron connection                             | Fast Connect Technology Plug-in system   |  |
| Maintenance   | Battery Replacement Kit réf. P1599   |  |





Accessory (not included)
Testing Remote Control P3 T réf P1591



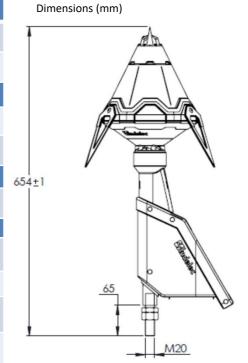


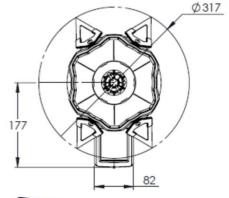


#### Prevectron 3<sup>®</sup> S50T

#### **REMOTE-TESTING EARLY STEAMER EMISSION AIR TERMINAL (ESE)**

| Reference  | P1533T  |
|--|---|
| Fixing on pole                                     | M20 Thread  |
| Down-conductor clamp                               | Proprietary clamp included  |
| Packing  |   |
| Dimensions   | 485 x 262 x 435 mm  |
| Gross Weight                                       | 7.950 kg  |
| Warranty   |   |
| Warranty (excluding Remote testing module battery) | 5 years   |
| Certificates - Standards                           |   |
| NF C 17 102:2011, Annex C                          | Bureau Veritas certificate N°6275241/2/1/1  |
| Qualifoudre  | Ineris certificate N° N°051166662001  |
| CE Marking   | Declaration of Conformity N°IND-CE-21092015-A<br>(Prevectron®3 Lightning conductor) |
| Underwriter Laboratories (UL)                      | UL Certified E478687<br>(Prevectron®3 Lightning conductor)                          |
| Eco Label  | AFAQ N°1335.2 11/2014 Certificate   |
| ISO 9001 : 2015 (Quality System)                   | Bureau Veritas certificate  |







Accessory (not included)
Testing Remote Control réf P1591









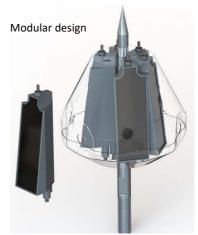
#### Prevectron 3<sup>®</sup> S40T

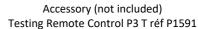
#### **REMOTE-TESTING EARLY STEAMER EMISSION AIR TERMINAL (ESE)**

| Reference  |                  | P1523T  |
|--|------------------|---|
| Prevectron 3® Early Streamer Emission Technical Specifications |                  |   |
| Efficiency   | ΔΤ               | 40 μs   |
| Standard deviation ESE / Single<br>Rod                         | σ                | $\sigma_{PDA} < 0.57  \sigma_{PTS}$   |
| Lightning current withstanding test (10/350μs)                 | I <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test                                 | I <sub>max</sub> | 200 kA (Unicamp)  |
| Detection of downward leader                                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development conditions                         |                  | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits  |                  | 3 independent and synchronised modules  |
| Central rod  |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| Maintenance  |                  | Replaceable modules (factory)   |

| Prevectron 3® Remote Testing Module Technical Specifications              |  |  |
|---|--|--|
| On-site working conditions testing  | Remote testing Module réf.P1591 (not included) : -ESE Lightning conductor condition -Solar Remote Testing Unit battery level |  |
| Remote Testing Module / ESE Lightning<br>Conductor Communication Protocol | Radio-frequency communication HF 2.4GhZ<br>Range = 100m/330 ft   |  |
| Power Supply  | High Performance LiFePo <sub>4</sub> Battery 3 200mA.h – 3.2V  |  |
| Battery Charge  | Monocrystalline Glass-coated Solar panel   |  |
| Remote Testing Module central rod   | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper  |  |
| Remote Testing Module / Prevectron connection                             | Fast Connect Technology Plug-in system   |  |
| Maintenance   | Battery Replacement Kit réf. P1599   |  |











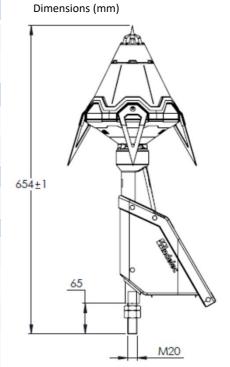


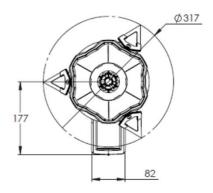
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#### Prevectron 3<sup>®</sup> S40T

#### **REMOTE-TESTING EARLY STEAMER EMISSION AIR TERMINAL (ESE)**

| Reference  | P1523T  |  |
|--|---|--|
| Fixing on pole                                     | M20 Thread  |  |
| Down-conductor clamp                               | Proprietary clamp included  |  |
| Packing  |   |  |
| Dimensions   | 485 x 262 x 435 mm  |  |
| Gross Weight                                       | 7.650 kg  |  |
| Warranty   |   |  |
| Warranty (excluding Remote testing module battery) | 5 years   |  |
| Certificates - Standards                           |   |  |
| NF C 17 102:2011, Annex C                          | Bureau Veritas certificate N°6275241/2/1/1  |  |
| Qualifoudre  | Ineris certificate N° N°051166662001  |  |
| CE Marking   | Declaration of Conformity N°IND-CE-21092015-A<br>(Prevectron®3 Lightning conductor) |  |
| Underwriter Laboratories (UL)                      | UL Certified E478687<br>(Prevectron®3 Lightning conductor)                          |  |
| Eco Label  | AFAQ N°1335.2 11/2014 Certificate   |  |
| ISO 9001 : 2015 (Quality System)                   | Bureau Veritas certificate  |  |







Accessory (not included)
Testing Remote Control réf P1591









#### Prevectron 3® TS25T

#### **REMOTE-TESTING EARLY STEAMER EMISSION AIR TERMINAL (ESE)**

| Reference                                      |                  | P1513T  |
|--|------------------|---|
| Prevectron 3® Early Streamer Emiss             | ion Techi        | nical Specifications  |
| Efficiency                                     | ΔΤ               | 25 μs   |
| Standard deviation ESE / Single<br>Rod         | σ                | $\sigma_{PDA} < 0.65  \sigma_{PTS}$   |
| Lightning current withstanding test (10/350μs) | l <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test                 | I <sub>max</sub> | 200 kA (Unicamp)  |
| Detection of downward leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development conditions         |                  | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits                              |                  | 3 independent and synchronised modules  |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing                                  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| Maintenance                                    |                  | Replaceable modules (factory)   |

| Prevectron 3® Remote Testing Module Technical Specifications              |  |  |
|---|--|--|
| On-site working conditions testing  | Remote testing Module réf.P1591 (not included) : -ESE Lightning conductor condition -Solar Remote Testing Unit battery level |  |
| Remote Testing Module / ESE Lightning<br>Conductor Communication Protocol | Radio-frequency communication HF 2.4GhZ<br>Range = 100m/330 ft   |  |
| Power Supply  | High Performance LiFePo <sub>4</sub> Battery 3 200mA.h – 3.2V  |  |
| Battery Charge  | Monocrystalline Glass-coated Solar panel   |  |
| Remote Testing Module central rod   | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper  |  |
| Remote Testing Module / Prevectron connection                             | Fast Connect Technology Plug-in system   |  |
| Maintenance   | Battery Replacement Kit réf. P1599   |  |





Accessory (not included) Testing Remote Control P3 T réf P1591





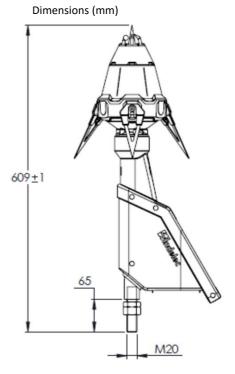


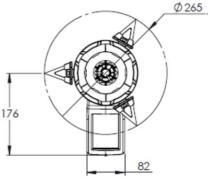
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#### Prevectron 3® TS25T

#### **REMOTE-TESTING EARLY STEAMER EMISSION AIR TERMINAL (ESE)**

| Reference  | P1513T  |  |
|--|---|--|
| Fixing on pole                                     | M20 Thread  |  |
| Down-conductor clamp                               | Proprietary clamp included  |  |
| Packing  |   |  |
| Dimensions   | 485 x 262 x 435 mm  |  |
| Gross Weight                                       | 6.950 kg  |  |
| Warranty   |   |  |
| Warranty (excluding Remote testing module battery) | 5 years   |  |
| Certificates - Standards                           |   |  |
| NF C 17 102:2011, Annex C                          | Bureau Veritas certificate N°6275241/2/1/1  |  |
| Qualifoudre  | Ineris certificate N° N°051166662001  |  |
| CE Marking   | Declaration of Conformity N°IND-CE-21092015-A<br>(Prevectron®3 Lightning conductor) |  |
| Underwriter Laboratories (UL)                      | UL Certified E478687<br>(Prevectron®3 Lightning conductor)                          |  |
| Eco Label  | AFAQ N°1335.2 11/2014 Certificate   |  |
| ISO 9001 : 2015 (Quality System)                   | Bureau Veritas certificate  |  |







Accessory (not included)
Testing Remote Control réf P1591







DOC267a.VEN-Rev2



#### Prevectron 3® TS10T

#### **REMOTE-TESTING EARLY STEAMER EMISSION AIR TERMINAL (ESE)**

| Reference                                      |                  | P1503T  |
|--|------------------|---|
| Prevectron 3® Early Streamer Emiss             | ion Tech         | nical Specifications  |
| Efficiency                                     | ΔΤ               | 10 μs   |
| Standard deviation ESE / Single<br>Rod         | σ                | $\sigma_{PDA} < 0.75  \sigma_{PTS}$   |
| Lightning current withstanding test (10/350μs) | l <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test                 | I <sub>max</sub> | 200 kA (Unicamp)  |
| Detection of downward leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development conditions         |                  | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits                              |                  | 2 independent and synchronised modules  |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing                                  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| Maintenance                                    |                  | Replaceable modules (factory)   |

| Prevectron 3® Remote Testing Module Technical Specifications              |  |  |
|---|--|--|
| On-site working conditions testing  | Remote testing Module réf.P1591 (not included) : -ESE Lightning conductor condition -Solar Remote Testing Unit battery level |  |
| Remote Testing Module / ESE Lightning<br>Conductor Communication Protocol | Radio-frequency communication HF 2.4GhZ<br>Range = 100m/330 ft   |  |
| Power Supply  | High Performance LiFePo <sub>4</sub> Battery 3 200mA.h – 3.2V  |  |
| Battery Charge  | Monocrystalline Glass-coated Solar panel   |  |
| Remote Testing Module central rod   | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper  |  |
| Remote Testing Module / Prevectron connection                             | Fast Connect Technology Plug-in system   |  |
| Maintenance   | Battery Replacement Kit réf. P1599   |  |





Accessory (not included) Testing Remote Control P3 T réf P1591





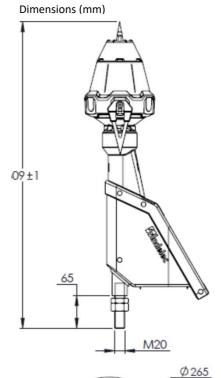


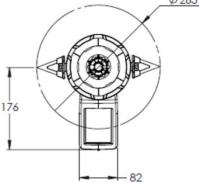
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#### Prevectron 3® TS10T

#### **REMOTE-TESTING EARLY STEAMER EMISSION AIR TERMINAL (ESE)**

| Reference  | P1503T  |  |
|--|---|--|
| Fixing on pole                                     | M20 Thread  |  |
| Down-conductor clamp                               | Proprietary clamp included  |  |
| Packing  |   |  |
| Dimensions   | 485 x 262 x 435 mm  |  |
| Gross Weight                                       | 6.650 kg  |  |
| Warranty   |   |  |
| Warranty (excluding Remote testing module battery) | 5 years   |  |
| Certificates - Standards                           |   |  |
| NF C 17 102:2011, Annex C                          | Bureau Veritas certificate N°6275241/2/1/1  |  |
| Qualifoudre  | Ineris certificate N° N°051166662001  |  |
| CE Marking   | Declaration of Conformity N°IND-CE-21092015-A<br>(Prevectron®3 Lightning conductor) |  |
| Underwriter Laboratories (UL)                      | UL Certified E478687<br>(Prevectron®3 Lightning conductor)                          |  |
| Eco Label  | AFAQ N°1335.2 11/2014 Certificate   |  |
| ISO 9001 : 2015 (Quality System)                   | Bureau Veritas certificate  |  |







Accessory (not included)
Testing Remote Control réf P1591



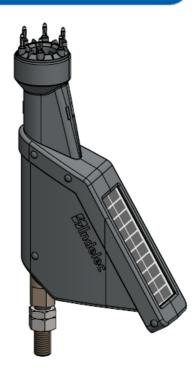




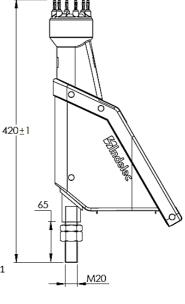


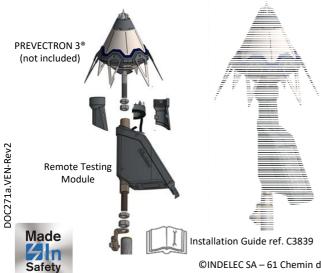
#### PREVECTRON® 3 REMOTE TESTING MODULE

| Reference   | P1580<br>Remote Testing Module T   |
|---|--|
| Specifications  |  |
| Adaptability  | Plug & Play module for all 5 Prevectron®3 models Factory pairing based on the Prevectron®3 unit Serial Number                |
| On-site testing capabilities  | Remote testing Module réf.P1591 (not included) : -ESE Lightning conductor condition -Solar Remote Testing Unit battery level |
| Remote Testing Module / ESE Lightning<br>Conductor Communication Protocol | Radio-frequency communication HF 2.4GhZ<br>Range = 100m/330 ft   |
| Power Supply  | High Performance LiFePo₄ Battery<br>3 200mA.h – 3.2V   |
| Battery Charge  | Monocrystalline Glass-coated Solar panel   |
| Remote Testing Module central rod   | Full electrical continuity<br>200mm² section – Nickel plated Copper  |
| Remote Testing Module / Prevectron connection                             | Fast Connect Technology Plug-in system   |
| Maintenance   | Battery Replacement Kit ref. P1599   |
| Warranty (excluding battery)  | 5 years  |
| Packing   |  |
| Dimensions  | 470 x 250 x 165 mm   |
| Gross Weight  | 2.900 kg   |
| Certifications - Standards  |  |
| Qualifoudre   | Ineris certificate N° N°051166662001   |
| ISO 9001 : 2015   | Bureau Veritas certificate   |
| Eco Label   | AFAQ N°1335.2 11/2014 Certificate  |

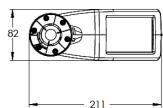


#### Dimensions (mm)











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#### Prevectron 3<sup>®</sup> S60 Connect

### EARLY STREAMER EMISSION AIR TERMINAL (ESE)

**IOT CONNECTED** 

| Reference                                      |                  | P1543C  |
|--|------------------|---|
| Prevectron 3® Early Streamer Emission Tech     |                  | nical Specifications  |
| Efficiency                                     | ΔΤ               | 60 μs   |
| Standard deviation ESE / Single<br>Rod         | σ                | $\sigma_{PDA} < 0.44  \sigma_{PTS}$   |
| Lightning current withstanding test (10/350µs) |                  | 100kA (normative test)  |
| Max. current withstanding test                 | I <sub>max</sub> | 230 kA (Unicamp)  |
| Detection of downward leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development conditions         |                  | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits                              |                  | 6 independent and synchronised modules  |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing                                  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| Maintenance                                    |                  | Replaceable modules (factory)   |







#### Prevectron 3® Connect Module Technical Specifications

| Prevectron®3 Connect remote information | via www.indelec-connect.com : -ESE Lightning rod status -battery level -GSM signal quality   |  |
|---|--|--|
| Communication                           | GSM/GPRS Quad-Band compatible 2G and above   |  |
| Power Supply                            | High Performance LiFePo <sub>4</sub> Battery 3 200mA.h – 3.2V  |  |
| Battery Charge                          | Monocrystalline Glass-coated Solar panel   |  |
| Lightning Strike Counter                | Integrated Type 1 Lightning Strike Counter<br>Patented contactless counting technology<br>I <sub>imp min</sub> = 2kA<br>I <sub>imp max</sub> = 100kA |  |
| Module central rod                      | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper  |  |
| Module / Prevectron®3 connection        | Fast Connect Technology Plug-in system   |  |
| Maintenance                             | Battery Replacement Kit ref. P1599   |  |



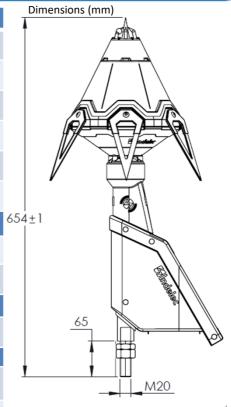


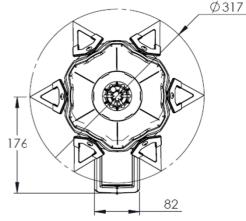
### Prevectron 3<sup>®</sup> S60 Connect

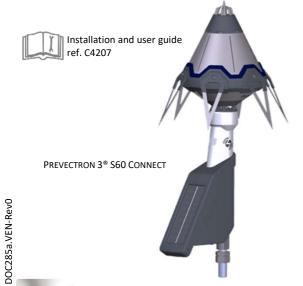
#### EARLY STREAMER EMISSION AIR TERMINAL (ESE)

**IOT CONNECTED** 

| Operating Temperature range   | -15°C to + 55°C  |
|-------------------------------|--|
| Relative Humidity             | 0% HR to 100% HR   |
| Max. Operating Altitude       | 4000 m HASL (Height Above Sea Level)   |
| Ingress Protection            | IP 54  |
| Fixing on pole                | M20 Thread   |
| Down-conductor clamp          | Proprietary clamp included   |
| Packing                       |  |
| Dimensions                    | 485 x 260 x 429 mm   |
| Gross Weight                  | 8.650 kg   |
| Warranty                      |  |
| Warranty (excluding battery)  | 5 years  |
| Certifications - Standard     |  |
| Prevectron®3 Lightning Rod    | NF C 17 102:2011, Annexe C<br>Bureau Veritas Certificate N°6275241/2/1/1                         |
| Lightning Strike Counter      | NF EN 62 561-6:2018 Edition 2  |
| Qualifoudre                   | Ineris Certificate N° N°051166662001   |
| CE Marking                    | Attestation N°IND-CE-21092015-A (Prevectron 3)<br>Attestation N°IND-CE-16122020 (Module Connect) |
| Underwriter Laboratories (UL) | UL Certified E478687<br>(Prevectron®3 Lightning rod )  |
| Eco Label                     | Certificate AFAQ N°1335.2 11/2014  |
| ISO 9001 : 2015               | Bureau Veritas Certificate   |
|                               | 4  |









www.indelec-connect.com





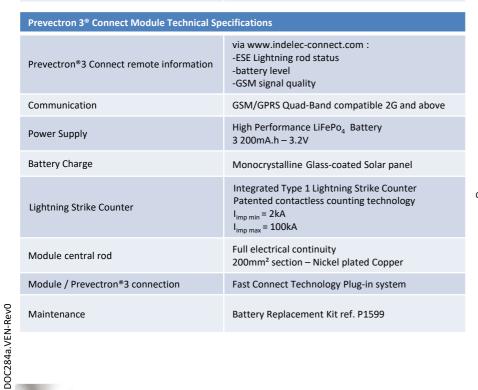
### Prevectron 3<sup>®</sup> S50 Connect

#### EARLY STREAMER EMISSION AIR TERMINAL (ESE)

**IOT CONNECTED** 

| Reference                                      |                  | P1533C  |
|--|------------------|---|
| Prevectron 3® Early Streamer Emission Tech     |                  | nical Specifications  |
| Efficiency                                     | ΔΤ               | 50 μs   |
| Standard deviation ESE / Single Rod            | σ                | $\sigma_{PDA} < 0.53  \sigma_{PTS}$   |
| Lightning current withstanding test (10/350μs) | l <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test                 | I <sub>max</sub> | 230 kA (Unicamp)  |
| Detection of downward leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development conditions         |                  | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits                              |                  | 4 independent and synchronised modules  |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing                                  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| Maintenance                                    |                  | Replaceable modules (factory)   |











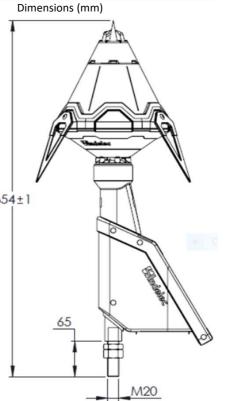


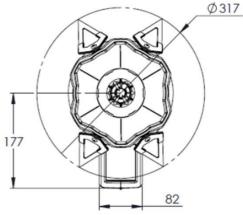
#### Prevectron 3<sup>®</sup> S50 Connect

#### **EARLY STREAMER EMISSION AIR TERMINAL (ESE)**

**IOT CONNECTED** 

| Operating Temperature range  | -15°C to + 55°C  |   |
|------------------------------|--|---|
| Relative Humidity            | 0% HR to 100% HR   |   |
| Max. Operating Altitude      | 4000 m HASL (Height Above Sea Level)                                     |   |
| Ingress Protection           | IP 54  |   |
| Fixing on pole               | M20 Thread   |   |
| Down-conductor clamp         | Proprietary clamp included   | 6 |
| Packing                      |  |   |
| Dimensions                   | 485 x 260 x 429 mm   |   |
| Gross Weight                 | 8.050 kg   |   |
| Warranty                     |  |   |
| Warranty (excluding battery) | 5 years  |   |
| Certifications - Standard    |  |   |
| Prevectron®3 Lightning Rod   | NF C 17 102:2011, Annexe C<br>Bureau Veritas Certificate N°6275241/2/1/2 |   |
| Lightning Strike Counter     | NF EN 62 561-6:2018 Edition 2  |   |
| Qualifoudre                  | Ineris Certificate N° N°051166662001                                     |   |









www.indelec-connect.com



CE Marking

Eco Label

ISO 9001: 2015

**Underwriter Laboratories (UL)** 



Attestation N°IND-CE-21092015-B (Prevectron 3)

UL Certified E478687

(Prevectron®3 Lightning rod)

**Bureau Veritas Certificate** 

Certificate AFAQ N°1335.2 11/2014

Attestation N°IND-CE-16122020 (Module Connect)

### Prevectron 3<sup>®</sup> S40 Connect

#### **EARLY STREAMER EMISSION AIR TERMINAL (ESE)**

**IOT CONNECTED** 

| Reference                                      |                  | P1523C  |
|--|------------------|---|
| Prevectron 3® Early Streamer Emission Tech     |                  | nical Specifications  |
| Efficiency ΔT                                  |                  | 40 μs   |
| Standard deviation ESE / Single<br>Rod         | σ                | $\sigma_{PDA} < 0.57  \sigma_{PTS}$   |
| Lightning current withstanding test (10/350μs) | I <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test                 | I <sub>max</sub> | 230 kA (Unicamp)  |
| Detection of downward leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development conditions         |                  | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits                              |                  | 3 independent and synchronised modules  |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing                                  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| Maintenance                                    |                  | Replaceable modules (factory)   |

| REVECTRON | 3® | S40 | CONNECT |
|-----------|----|-----|---------|
|-----------|----|-----|---------|









#### **Prevectron 3® Connect Module Technical Specifications**

| Prevectron®3 Connect remote information | via www.indelec-connect.com : -ESE Lightning rod status -battery level -GSM signal quality                                      |
|---|---|
| Communication                           | GSM/GPRS Quad-Band compatible 2G and above  |
| Power Supply                            | High Performance LiFePo <sub>4</sub> Battery 3 200mA.h – 3.2V   |
| Battery Charge                          | Monocrystalline Glass-coated Solar panel  |
| Lightning Strike Counter                | Integrated Type 1 Lightning Strike Counter Patented contactless counting technology $I_{imp\ min} = 2kA$ $I_{imp\ max} = 100kA$ |
| Module central rod                      | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper   |
| Module / Prevectron®3 connection        | Fast Connect Technology Plug-in system  |
| Maintenance                             | Battery Replacement Kit ref. P1599  |



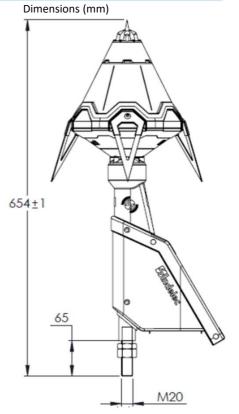


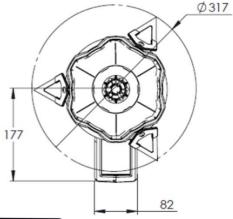
### Prevectron 3<sup>®</sup> S40 Connect

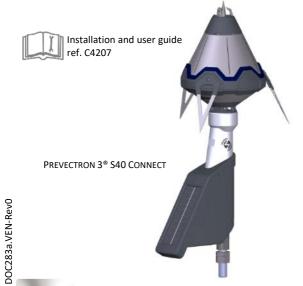
#### EARLY STREAMER EMISSION AIR TERMINAL (ESE)

**IOT CONNECTED** 

| Operating Temperature range  | -15°C to + 55°C   |
|--|---|
| Relative Humidity  | 0% HR to 100% HR  |
| Max. Operating Altitude  | 4000 m HASL (Height Above Sea Level)  |
| Ingress Protection   | IP 54   |
| Fixing on pole   | M20 Thread  |
| Down-conductor clamp   | Proprietary clamp included  |
| Packing  |   |
| Dimensions   | 485 x 260 x 429 mm  |
| Gross Weight   | 7.750 kg  |
|  |   |
| Warranty   |   |
| Warranty Warranty (excluding battery)  | 5 years   |
|  | 5 years   |
| Warranty (excluding battery)   | 5 years  NF C 17 102:2011, Annexe C Bureau Veritas Certificate N°6275241/2/1/3  |
| Warranty (excluding battery)  Certifications - Standard  | NF C 17 102:2011, Annexe C  |
| Warranty (excluding battery)  Certifications - Standard  Prevectron®3 Lightning Rod  | NF C 17 102:2011, Annexe C Bureau Veritas Certificate N°6275241/2/1/3   |
| Warranty (excluding battery)  Certifications - Standard  Prevectron®3 Lightning Rod  Lightning Strike Counter                          | NF C 17 102:2011, Annexe C Bureau Veritas Certificate N°6275241/2/1/3 NF EN 62 561-6:2018 Edition 2   |
| Warranty (excluding battery)  Certifications - Standard  Prevectron®3 Lightning Rod  Lightning Strike Counter  Qualifoudre             | NF C 17 102:2011, Annexe C Bureau Veritas Certificate N°6275241/2/1/3 NF EN 62 561-6:2018 Edition 2 Ineris Certificate N° N°051166662001 Attestation N°IND-CE-21092015-C (Prevectron 3)   |
| Warranty (excluding battery)  Certifications - Standard  Prevectron®3 Lightning Rod  Lightning Strike Counter  Qualifoudre  CE Marking | NF C 17 102:2011, Annexe C Bureau Veritas Certificate N°6275241/2/1/3  NF EN 62 561-6:2018 Edition 2  Ineris Certificate N° N°051166662001  Attestation N°IND-CE-21092015-C (Prevectron 3) Attestation N°IND-CE-16122020 (Module Connect)  UL Certified E478687 |









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#### Prevectron 3<sup>®</sup> TS25 Connect

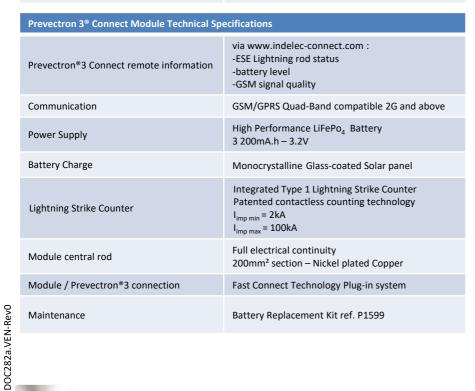
#### EARLY STREAMER EMISSION AIR TERMINAL (ESE)

IOT CONNECTED

| Reference                                      |                  | P1513C  |
|--|------------------|---|
| Prevectron 3® Early Streamer Emission Tech     |                  | nical Specifications  |
| Efficiency                                     | ΔΤ               | 25 μs   |
| Standard deviation ESE / Single<br>Rod         | σ                | $\sigma_{PDA}$ < 0.65 $\sigma_{PTS}$  |
| Lightning current withstanding test (10/350μs) | I <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test                 | I <sub>max</sub> | 230 kA (Unicamp)  |
| Detection of downward leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t$ )         |
| Upward streamer development conditions         |                  | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits                              |                  | 3 independent and synchronised modules  |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing                                  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| Maintenance                                    |                  | Replaceable modules (factory)   |

| (5) |
|-----|
|     |

PREVECTRON 3® TS25 CONNECT











Maintenance

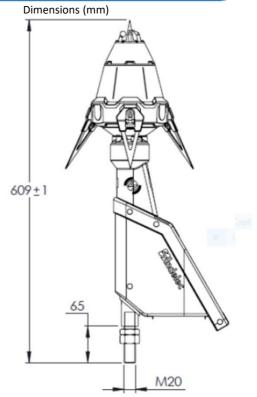
Battery Replacement Kit ref. P1599

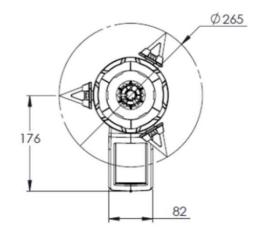
### Prevectron 3<sup>®</sup> TS25 Connect

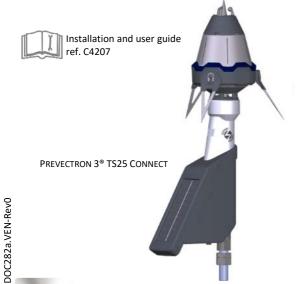
#### EARLY STREAMER EMISSION AIR TERMINAL (ESE)

**IOT CONNECTED** 

| Operating Temperature range   | -15°C to + 55°C  |
|-------------------------------|--|
| Relative Humidity             | 0% HR to 100% HR   |
| Max. Operating Altitude       | 4000 m HASL (Height Above Sea Level)   |
| Ingress Protection            | IP 54  |
| Fixing on pole                | M20 Thread   |
| Down-conductor clamp          | Proprietary clamp included   |
| Packing                       |  |
| Dimensions                    | 485 x 260 x 429 mm   |
| Gross Weight                  | 7.050 kg   |
| Warranty                      |  |
| Warranty (excluding battery)  | 5 years  |
| Certifications - Standard     |  |
| Prevectron®3 Lightning Rod    | NF C 17 102:2011, Annexe C<br>Bureau Veritas Certificate N°6275241/2/1/4                         |
| Lightning Strike Counter      | NF EN 62 561-6:2018 Edition 2  |
| Qualifoudre                   | Ineris Certificate N° N°051166662001   |
| CE Marking                    | Attestation N°IND-CE-21092015-D (Prevectron 3)<br>Attestation N°IND-CE-16122020 (Module Connect) |
| Underwriter Laboratories (UL) | UL Certified E478687<br>(Prevectron®3 Lightning rod )  |
| Eco Label                     | Certificate AFAQ N°1335.2 11/2014  |
| 200 2000.                     |  |









www.indelec-connect.com





#### Prevectron 3<sup>®</sup> TS10 Connect

#### **EARLY STREAMER EMISSION AIR TERMINAL (ESE)**

**IOT CONNECTED** 

| Reference                                      |                  | P1503C  |
|--|------------------|---|
| Prevectron 3® Early Streamer Emission Tech     |                  | nical Specifications  |
| Efficiency                                     | ΔΤ               | 10 μs   |
| Standard deviation ESE / Single<br>Rod         | σ                | $\sigma_{PDA} < 0.75  \sigma_{PTS}$   |
| Lightning current withstanding test (10/350μs) | I <sub>imp</sub> | 100kA (normative test)  |
| Max. current withstanding test                 | I <sub>max</sub> | 230 kA (Unicamp)  |
| Detection of downward leader                   |                  | Continuous measuring of electric field gradient ( $\Delta E/\Delta t)$          |
| Upward streamer development conditions         |                  | Patented OPTIMAX® technology optimizing the streamer development conditions     |
| Upward streamer emission                       |                  | Sparking by High Voltage Impulses   |
| Internal circuits                              |                  | 2 independent and synchronised modules  |
| Central rod                                    |                  | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper |
| Metal housing                                  |                  | Stainless Steel 316, Electromagnetic shielding                                  |
| Maintenance                                    |                  | Replaceable modules (factory)   |









#### **Prevectron 3® Connect Module Technical Specifications**

| Prevectron®3 Connect remote information | via www.indelec-connect.com : -ESE Lightning rod status -battery level -GSM signal quality                                      |
|---|---|
| Communication                           | GSM/GPRS Quad-Band compatible 2G and above  |
| Power Supply                            | High Performance LiFePo <sub>4</sub> Battery 3 200mA.h – 3.2V   |
| Battery Charge                          | Monocrystalline Glass-coated Solar panel  |
| Lightning Strike Counter                | Integrated Type 1 Lightning Strike Counter Patented contactless counting technology $I_{imp\ min} = 2kA$ $I_{imp\ max} = 100kA$ |
| Module central rod                      | Full electrical continuity<br>200mm <sup>2</sup> section – Nickel plated Copper   |
| Module / Prevectron®3 connection        | Fast Connect Technology Plug-in system  |
| Maintenance                             | Battery Replacement Kit ref. P1599  |





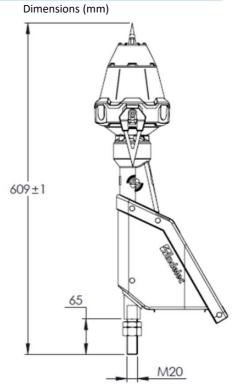
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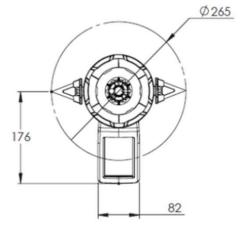
#### Prevectron 3<sup>®</sup> TS10 Connect

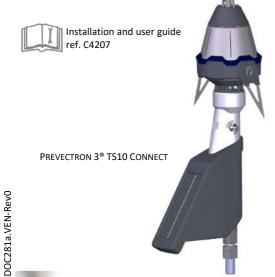
#### EARLY STREAMER EMISSION AIR TERMINAL (ESE)

**IOT CONNECTED** 

| Operating Temperature range  | -15°C to + 55°C   |
|--|---|
| Relative Humidity  | 0% HR to 100% HR  |
| Max. Operating Altitude  | 4000 m HASL (Height Above Sea Level)  |
| Ingress Protection   | IP 54   |
| Fixing on pole   | M20 Thread  |
| Down-conductor clamp   | Proprietary clamp included  |
| Packing  |   |
| Dimensions   | 485 x 260 x 429 mm  |
| Gross Weight   | 6.750 kg  |
|  |   |
| Warranty   |   |
| Warranty Warranty (excluding battery)  | 5 years   |
|  | 5 years   |
| Warranty (excluding battery)   | 5 years  NF C 17 102:2011, Annexe C Bureau Veritas Certificate N°6275241/2/1/5  |
| Warranty (excluding battery)  Certifications - Standard  | NF C 17 102:2011, Annexe C  |
| Warranty (excluding battery)  Certifications - Standard  Prevectron®3 Lightning Rod  | NF C 17 102:2011, Annexe C Bureau Veritas Certificate N°6275241/2/1/5   |
| Warranty (excluding battery)  Certifications - Standard  Prevectron®3 Lightning Rod  Lightning Strike Counter                          | NF C 17 102:2011, Annexe C<br>Bureau Veritas Certificate N°6275241/2/1/5<br>NF EN 62 561-6:2018 Edition 2   |
| Warranty (excluding battery)  Certifications - Standard  Prevectron®3 Lightning Rod  Lightning Strike Counter  Qualifoudre             | NF C 17 102:2011, Annexe C Bureau Veritas Certificate N°6275241/2/1/5 NF EN 62 561-6:2018 Edition 2 Ineris Certificate N° N°051166662001 Attestation N°IND-CE-21092015-E (Prevectron 3)   |
| Warranty (excluding battery)  Certifications - Standard  Prevectron®3 Lightning Rod  Lightning Strike Counter  Qualifoudre  CE Marking | NF C 17 102:2011, Annexe C Bureau Veritas Certificate N°6275241/2/1/5  NF EN 62 561-6:2018 Edition 2  Ineris Certificate N° N°051166662001  Attestation N°IND-CE-21092015-E (Prevectron 3) Attestation N°IND-CE-16122020 (Module Connect)  UL Certified E478687 |









www.indelec-connect.com





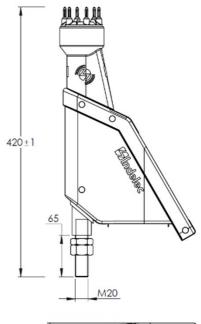
## Prevectron® 3 Connect module

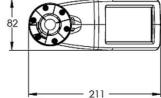
#### **IOT CONNECTED**

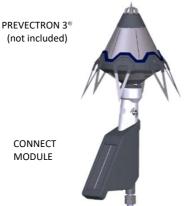
| Adaptability Plug & Play module for all 5 Prevectron®3 models — Factory pairing based on the Prevectron®3 unit Serial Number  via www.indelec-connect.com: -ESE Lightning rod status -battery level -GSM signal quality  Communication GSM/GPRS Quad-Band compatible 2G and above High Performance LiFePo4 Battery 3 200mA.h — 3.2V  Battery Charge Monocrystalline Glass-coated Solar panel Integrated Type 1 Lightning Strike Counter Patented contactless counting technology Imp max = 100kA  Module central rod Full electrical continuity 200mm² section — Nickel plated Copper  Module / Prevectron connection Operating Temperature range -15°C to +55°C Relative Humidity O% HR to 100% HR Max. Operating Altitude Ingress Protection IP 54 Max Operating Altitude Maintenance Battery Replacement Kit réf. P1599  Warranty (excluding battery) 5 years  Packing Dimensions 470 x 250 x 165 mm Gross Weight 3.000 kg  Certifications - Standards Qualifoudre Ineris certificate N° N°051166662001  Bo 9001 : 2015 Bureau Veritas certificate Lightning Flash Counter  AFAQ N°1335.2 11/2014 Certificate  | Reference  | P1586   |
|---|--|---|
| Prevectron®3 Connect remote information  Prevectron®3 Connect remote information  Prevectron®3 Connect remote information  Prevectron®3 Connect remote information  SSM/GPRS Quad-Band compatible 2G and above  Power Supply  Battery Charge  Monocrystalline Glass-coated Solar panel  Integrated Type 1 Lightning Strike Counter  Patented contactless counting technology  Imporian = 2kA Imporian = 10kA  Module central rod  Full electrical continuity 200mm² section – Nickel plated Copper  Module / Prevectron connection  Fast Connect Technology Plug-in system  Operating Temperature range -15°C to +55°C Relative Humidity -0% HR to 100% HR  Max. Operating Altitude Ingress Protection IP 54  Maintenance Battery Replacement Kit réf. P1599  Warranty (excluding battery)  5 years  Packing  Dimensions  470 x 250 x 165 mm  Gross Weight  | Specifications   |   |
| Prevectron*3 Connect remote information  -ESE Lightning rod status -battery level -GSM signal quality  Communication  GSM/GPRS Quad-Band compatible 2G and above  Power Supply  Battery Charge  Monocrystalline Glass-coated Solar panel  Integrated Type 1 Lightning Strike Counter Patented contactless counting technology  Imp max = 100kA  Module central rod  Full electrical continuity 200mm² section – Nickel plated Copper  Module / Prevectron connection  Operating Temperature range -15°C to +55°C Relative Humidity -0% HR to 100% HR  Max. Operating Altitude -10 M20 m HASL (Height Above Sea Level) Ingress Protection -10 F34  Fixing on pole -11 M20 Thread -12 M20 Thread -13 M20 Thread -14 M20 Thread -15 M20 M30 M30 M30  Maintenance -15 M20 M30 M30 M30  Maintenance -15 M30 M30 M30 M30  M30 M30 M30 M30  M30 M30 M30 M30  Certifications - Standards  Qualifoudre  | Adaptability   |   |
| High Performance LiFePo4 Battery 3 200mA.h – 3.2V  Battery Charge Monocrystalline Glass-coated Solar panel  Lightning Strike Counter Integrated Type 1 Lightning Strike Counter Patented contactless counting technology Integrated Type 1 Lightning Strike Counter Patented contactless counting technology Imp min = 2kA Imp max = 100kA  Module central rod Full electrical continuity 200mm² section – Nickel plated Copper  Module / Prevectron connection Fast Connect Technology Plug-in system  Operating Temperature range -15°C to +55°C Relative Humidity 0% HR to 100% HR Max. Operating Altitude 4000 m HASL (Height Above Sea Level) Ingress Protection IP 54  Fixing on pole M20 Thread  Maintenance Battery Replacement Kit réf. P1599  Warranty (excluding battery) 5 years  Packing  Dimensions 470 x 250 x 165 mm  Gross Weight 3.000 kg  Certifications - Standards  Qualifoudre Ineris certificate N° N°051166662001  ISO 9001 : 2015 Bureau Veritas certificate  Lightning Flash Counter NF EN 62 561-6:2018 Edition 2  CE Marking Attestation N°IND-CE-16122020  | Prevectron®3 Connect remote information                      | -ESE Lightning rod status<br>-battery level                         |
| Battery Charge Monocrystalline Glass-coated Solar panel  Lightning Strike Counter Integrated Type 1 Lightning Strike Counter Patented contactless counting technology Imp min = 2kA Imp | Communication  | GSM/GPRS Quad-Band compatible 2G and above                          |
| Lightning Strike Counter    Integrated Type 1 Lightning Strike Counter Patented contactless counting technology I <sub>Imp min</sub> = 2kA I <sub>Imp max</sub> = 100kA    Module central rod   Full electrical continuity 200mm² section — Nickel plated Copper  | Power Supply   | -   |
| Lightning Strike Counter    Patented contactless counting technology   Imp min = 2kA   Imp max = 100kA     Module central rod   Full electrical continuity 200mm² section – Nickel plated Copper  | Battery Charge   | Monocrystalline Glass-coated Solar panel                            |
| Module / Prevectron connection  Module / Prevectron connection  Fast Connect Technology Plug-in system  Operating Temperature range -15°C to +55°C  Relative Humidity Max. Operating Altitude Ingress Protection Fixing on pole Maintenance  Maintenance  Battery Replacement Kit réf. P1599  Warranty (excluding battery)  5 years  Packing  Dimensions  470 x 250 x 165 mm  Gross Weight 3.000 kg  Certifications - Standards  Qualifoudre  Ineris certificate N° N°051166662001  ISO 9001 : 2015  Bureau Veritas certificate  Lightning Flash Counter  NF EN 62 561-6:2018 Edition 2  CE Marking  Attestation N°IND-CE-16122020  | Lightning Strike Counter                                     | Patented contactless counting technology I <sub>imp min</sub> = 2kA |
| Operating Temperature range Relative Humidity O% HR to 100% HR Max. Operating Altitude Ingress Protection IP 54 Fixing on pole Maintenance Battery Replacement Kit réf. P1599 Warranty (excluding battery) 5 years  Packing Dimensions 470 x 250 x 165 mm  Gross Weight 3.000 kg  Certifications - Standards Qualifoudre Ineris certificate N° N°051166662001 ISO 9001 : 2015 Bureau Veritas certificate Lightning Flash Counter NF EN 62 561-6:2018 Edition 2 CE Marking Attestation N°IND-CE-16122020   | Module central rod   | •   |
| Relative Humidity  Max. Operating Altitude Ingress Protection IP 54 Fixing on pole Maintenance  Maintenance  Battery Replacement Kit réf. P1599  Warranty (excluding battery)  5 years  Packing  Dimensions  470 x 250 x 165 mm  Gross Weight 3.000 kg  Certifications - Standards  Qualifoudre  Ineris certificate N° N°051166662001  ISO 9001 : 2015  Bureau Veritas certificate  Lightning Flash Counter  NF EN 62 561-6:2018 Edition 2  CE Marking  Attestation N°IND-CE-16122020   | Module / Prevectron connection                               | Fast Connect Technology Plug-in system                              |
| Maintenance  Battery Replacement Kit réf. P1599  Warranty (excluding battery)  5 years  Packing  Dimensions  470 x 250 x 165 mm  Gross Weight  3.000 kg  Certifications - Standards  Qualifoudre  Ineris certificate N° N°051166662001  ISO 9001 : 2015  Bureau Veritas certificate  Lightning Flash Counter  NF EN 62 561-6:2018 Edition 2  CE Marking  Attestation N°IND-CE-16122020  | Relative Humidity Max. Operating Altitude Ingress Protection | 0% HR to 100% HR<br>4000 m HASL (Height Above Sea Level)<br>IP 54   |
| Packing  Dimensions 470 x 250 x 165 mm  Gross Weight 3.000 kg  Certifications - Standards  Qualifoudre Ineris certificate N° N°051166662001  ISO 9001 : 2015 Bureau Veritas certificate  Lightning Flash Counter NF EN 62 561-6:2018 Edition 2  CE Marking Attestation N°IND-CE-16122020  |  |   |
| Dimensions 470 x 250 x 165 mm  Gross Weight 3.000 kg  Certifications - Standards  Qualifoudre Ineris certificate N° N°051166662001  ISO 9001 : 2015 Bureau Veritas certificate  Lightning Flash Counter NF EN 62 561-6:2018 Edition 2  CE Marking Attestation N°IND-CE-16122020   | Warranty (excluding battery)                                 | 5 years   |
| Gross Weight  Certifications - Standards  Qualifoudre  Ineris certificate N° N°051166662001  ISO 9001 : 2015  Bureau Veritas certificate  Lightning Flash Counter  NF EN 62 561-6:2018 Edition 2  CE Marking  Attestation N°IND-CE-16122020   | Packing  |   |
| Certifications - Standards  Qualifoudre Ineris certificate N° N°051166662001  ISO 9001 : 2015 Bureau Veritas certificate  Lightning Flash Counter NF EN 62 561-6:2018 Edition 2  CE Marking Attestation N°IND-CE-16122020   | Dimensions   | 470 x 250 x 165 mm  |
| Qualifoudre Ineris certificate N° N°051166662001  ISO 9001 : 2015 Bureau Veritas certificate  Lightning Flash Counter NF EN 62 561-6:2018 Edition 2  CE Marking Attestation N°IND-CE-16122020   | Gross Weight   | 3.000 kg  |
| Bureau Veritas certificate  Lightning Flash Counter  NF EN 62 561-6:2018 Edition 2  CE Marking  Attestation N°IND-CE-16122020   | Certifications - Standards                                   |   |
| Lightning Flash Counter NF EN 62 561-6:2018 Edition 2  CE Marking Attestation N°IND-CE-16122020   | Qualifoudre  | Ineris certificate N° N°051166662001                                |
| CE Marking Attestation N°IND-CE-16122020  | ISO 9001 : 2015  | Bureau Veritas certificate  |
|   | Lightning Flash Counter                                      | NF EN 62 561-6:2018 Edition 2                                       |
| Eco Label AFAQ N°1335.2 11/2014 Certificate   | CE Marking   | Attestation N°IND-CE-16122020                                       |
|   | Eco Label  | AFAQ N°1335.2 11/2014 Certificate                                   |

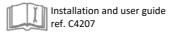


#### Dimensions (mm)

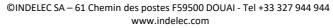














#### PREVECTRON® 3 REMOTE TESTING MODULE BATTERY

| Reference   | P1599<br>Remote Testing Module Battery                               |
|---|--|
| Specifications  |  |
| Nominal Capacity  | 3200 mAh @0.2C   |
| Minimum Capacity  | 3200 mAh @0.2C   |
| Nominal Voltage   | 3.20V  |
| Max Charging voltage  | 3.65 ±0.05V  |
| Discharge Ending voltage                                    | 2.00 ±0.05V  |
| Standard charge current                                     | 0.5C   |
| Max charge current  | 1C   |
| Max discharge current                                       | 3C   |
| Max recommended charge & discharge cell surface temperature | Charge: 0 ~ 45°C<br>Discharge: -20 ~ 60°C                            |
| Storage temperature & Time                                  | 1 year : -20 ~ 25°C<br>3 months : -20 ~ 45°C<br>1 month : -20 ~ 60°C |
| Internal Resistance   | $\leq$ 2°m $\Omega$ (AC impedance 1000 Hz)                           |



Battery cover

| Packing                                      |                 |
|--|-----------------|
| Dimensions                                   | 90 x 50 x 36 mm |
| Gross Weight                                 | 0.195 kg        |
| Warning and cautions in handling the lithiur | n-ion cell      |

To prevent the possibility of the cell from

leaking, heating, explosion, please

observe the following precautions:

- Don't immerse the cell in water.
- Don't use and leave the cell near a heat source such as fire or heater.
- When charging, use a cell charger specifically for that purpose.
- Don't reverse the positive and negative terminals.
- Don't connect the cell to an electrical outlet directly.
- Don't discard the cell in fire or heater.
- Don't connect the positive and negative terminal directly with metal objects.
- Don't transport and store the cell together with metal objects such as necklaces, hairpins.
- Don't strike, throw or trample the cell. Don't pierce the cell with a nail or other sharp object.



Battery kit Ref. P1599





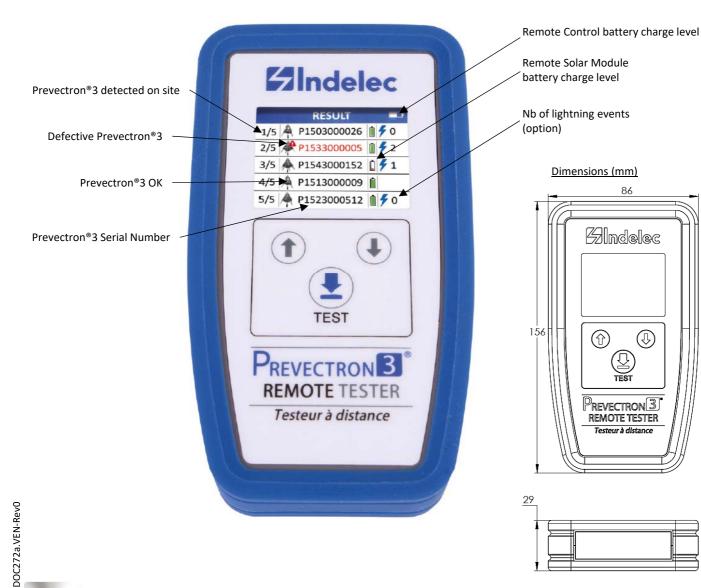


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#### **PREVECTRON® 3 TESTING REMOTE CONTROL**

| Reference                 | P1591  |
|---------------------------|--|
| Application               | Test all Prevectron®3 T Lightning Conductors detected on site. |
| Communication<br>Protocol | Radio-frequency communication HF 2.4GhZ<br>Range > 100m/330 ft |
| Gross Weight (kg)         | 0.290 kg   |
| Power                     | 3 units of LR6 – AA 1.5V Battery                               |
| Warranty                  | 12 months  |





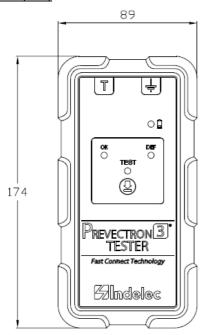




#### PREVECTRON® 3 Tester Fast Connect Technology

| Réf.        | P1590  |
|-------------|--|
| Weight (kg) | 0.415  |
| Application | The tester has been specially designed for a perfect portability for both installation and routing maintenance purposes.  It is supplied with isolated cables and transport bag. Thanks to its unique "Fast connect technology", each circuit condition is now tested through a single connection point. |
| Power       | Four 1.5V AA type batteries.   |
| Warranty    | 12 months  |

#### Dimensions (mm)







#### **Application**



#### Contents:

Transport bag with INDELEC logo Indelec « Fast Connect Technology » Tester Yellow cable + crocodile clip (Earth) Black cable + plug (Prevectron®3 circuits)







## Andelec







# Lightning Protection Systems

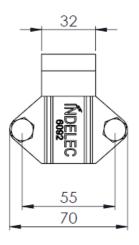


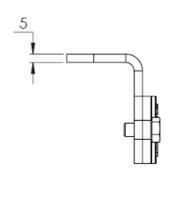
## **PREVECTRON® / Down Conductor Adaptor**

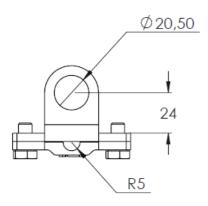
| Ref.        | P6500   |
|-------------|---|
| Material    | Tinned copper   |
| Weight (kg) | 0.750   |
| Application | Connect down conductor to central rod of PREVECTRON Air<br>Terminal |
| Standard    | EN 62561-1  |

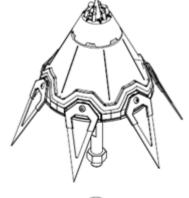


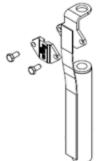
#### Dimensions (mm)















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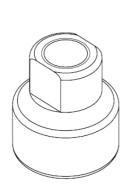


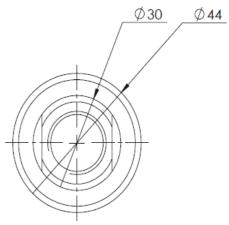
## Adaptor Female M20 / Female G34

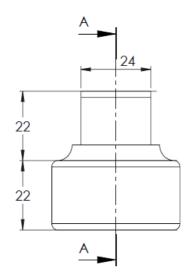
| Characteristics | C2433                                     |
|-----------------|---|
| Material        | Brass                                     |
| Weight (kg)     | 0.220                                     |
| Application     | Fixing PREVECTRON® on a G34 threaded pole |

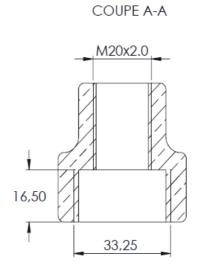


#### Dimensions (mm)







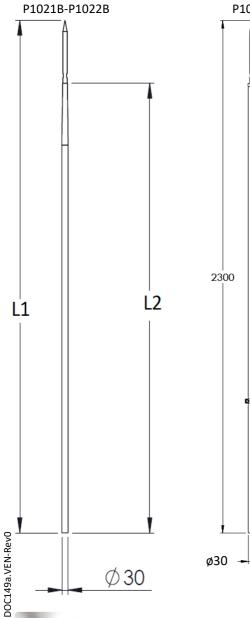


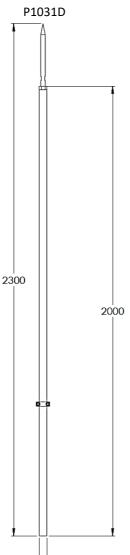


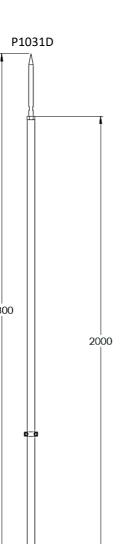
### **Single Rods**

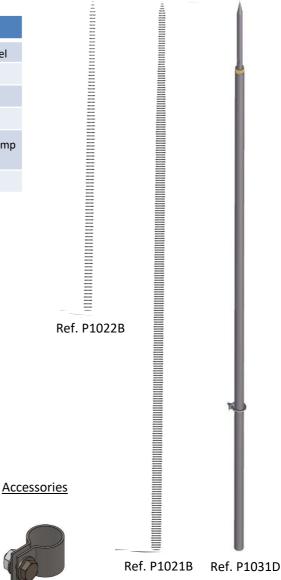
| Characteristics | P1021B                      | P1022B                    | P1031D          |  |
|-----------------|-----------------------------|---------------------------|-----------------|--|
| Material        | Chromium p                  | olated copper             | Stainless steel |  |
| L1 ( mm )       | 2300 mm                     | 1300 mm                   | 2300 mm         |  |
| L2 ( mm )       | 2000 mm                     | 1000 mm                   | 2000 mm         |  |
| Weight (kg)     | 3.500                       | 2.340                     | 3.000           |  |
| Connection      | With a connecting P3096 (no | connecting clamp included |                 |  |
| Standard        | EN 62561-2                  |                           |                 |  |

#### Dimensions (mm)











Rod to flat conductor connecting clamp



Ref. P3096 Rod to round conductor connecting clamp



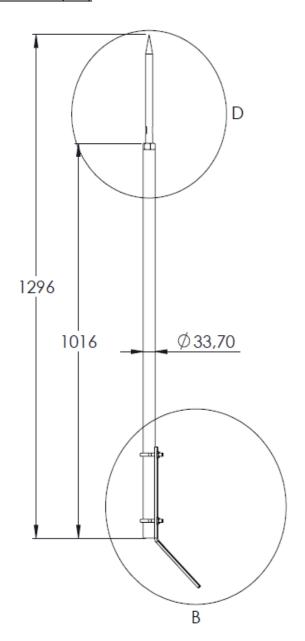
Ref. P1031D connecting clamp for flat conductor included





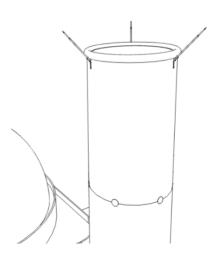
### **Stainless Steel Air Rod Special Chimney**

| Characteristics | P1041C                             |
|-----------------|------------------------------------|
| Material        | Stainless steel                    |
| Weight (Kg)     | 3.460                              |
| Connection      | With a connecting clamp (included) |
| Application     | Protection of industrial chimney   |
| Standard        | EN 62561-2                         |





**Application** 



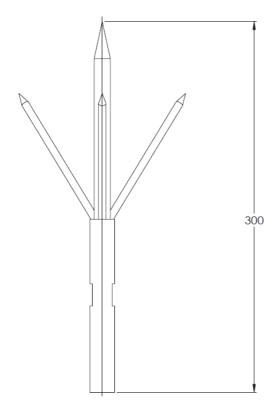


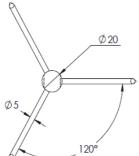


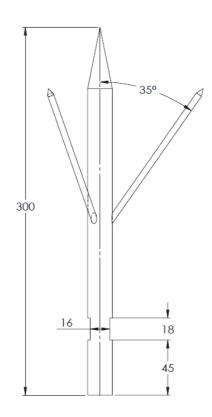
### **Jupiter Multi-Point Air Rod**

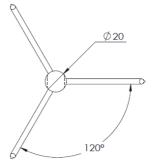
| Characteristics | P1052B                 | P1053C          |  |  |  |
|-----------------|------------------------|-----------------|--|--|--|
| Material        | Chromium plated copper | Stainless steel |  |  |  |
| Weight (kg)     | 0.600                  | 0.700           |  |  |  |
| Connection      | Thread M20             |                 |  |  |  |
| Standards       | EN 62561-2             |                 |  |  |  |















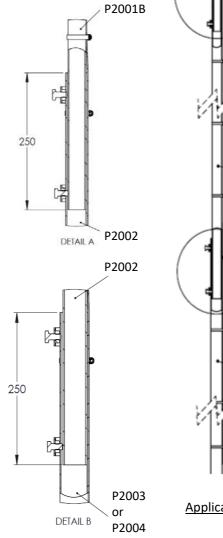
### **Galvanized Steel Elevation Mast**

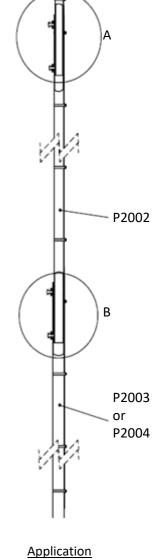
| Characteristics | P2001B                                  | P2002                                   | P2002 P2003                             |   |  |  |
|-----------------|---|---|---|---|--|--|
| Description     | Galv.Steel Mast<br>1 <sup>st</sup> part | Galv.Steel Mast<br>2 <sup>nd</sup> part | Galv.Steel Mast<br>3 <sup>rd</sup> part | Galv.Steel Mast<br>3 <sup>rd</sup> part |  |  |
| Length (m)      | 2.00                                    | 2.00                                    | 2.00                                    | 3.00                                    |  |  |
| Diameter(mm)    | 35                                      | 42                                      | 50                                      | 50                                      |  |  |
| Weight (kg)     | 3.250                                   | 5.000                                   | 4.700                                   | 7.300                                   |  |  |
| Material        | Galvanized steel                        |   |   |   |  |  |
| Connection      | Tapped M20                              | Press-screw                             | Press-screw                             | Press-screw                             |  |  |

Made of special «high resistance» steel and galvanized inside and out, Indelec's elevation poles allow the lightning rod (PREVECTRON® E.S.E., Indelec multiple rod or Pointed Air Rod) to be raised by up to 6,5 m without resorting to guy wires.

The telescopic sections are fixed together by two stainless steel press-screws. The lightning rod is screwed at the top of the first section (P2001B).

| Assembly   |                        |
|------------|------------------------|
| Mast 3.75m | P2001B + P2002         |
| Mast 5.50m | P2001B + P2002 + P2003 |
| Mast 6.50m | P2001B + P2002 + P2004 |





**ESE** 

P2001B





### **Stainless Steel Elevation Mast**

| Characteristics | P2015   | P2016  | P2017  | P2018  |  |  |
|-----------------|---|--|--|--|--|--|
| Designation     | Elevation<br>Mast<br>1 <sup>st</sup><br>element | Elevation<br>Mast<br>1 <sup>st</sup> element<br>with clamp | Elevation<br>Mast<br>2 <sup>nd</sup> element | Elevation<br>Mast<br>3 <sup>rd</sup> element |  |  |
| Length (m)      | 2.00  | 2.00   | 2.00   | 2.00   |  |  |
| Diameter (mm)   | 30  | 30   | 33.7   | 42.4   |  |  |
| Weight (kg)     | 2.5   | 2.5  | 4.0  | 5.0  |  |  |
| Material        | Stainless Steel – 304L                          |  |  |  |  |  |
| Connection      | Thread<br>M20                                   | Thread M2  | Necked<br>tube<br>Ø25,2mm                    | Necked<br>tube<br>Ø28mm                      |  |  |

Made of 304L stainless steel, Indelec's elevation poles enable the lightning rod (PREVECTRON® E.S.E., Indelec multiple rod or Pointed Air Rod) to be raised by up to 6 m without resorting to guy wires.

The telescopic sections are fixed together by male-female fitting.

The lightning rod is screwed (M20 thread) at the top of the first section (P2015 or 2016).

Detail 1 Upper termination P2015



Detail 2 **Included Clamp** P2016



Necked tube



P2017 & P2018

| Assembly   |                              |  |  |  |
|------------|------------------------------|--|--|--|
| Mast 3.80m | P2015 or 2016 + P2017        |  |  |  |
| Mast 5.50m | P2015 or 2016 + P2017 + 2018 |  |  |  |

+10 2000 0

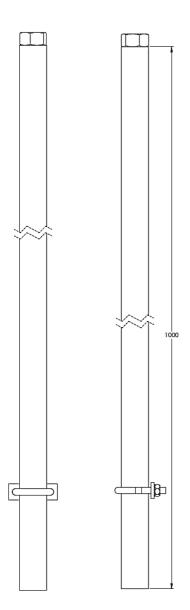


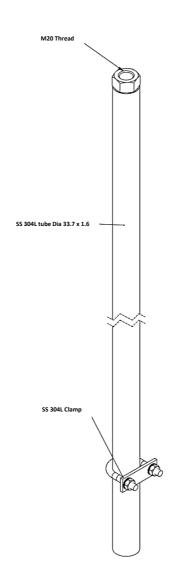


### **Stainless Steel Elevation Mast – 1m**

| Characteristics | C1836C                   |
|-----------------|--------------------------|
| Material        | Stainless Steel 304L     |
| Weight (kg)     | 1.600                    |
| Connection      | Clamp included           |
| Termination     | M20 Thread               |
| Application     | M20 Lightning Rod fixing |

#### Dimensions (mm)







M20 Threaded Lightning Rod fixing



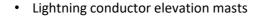
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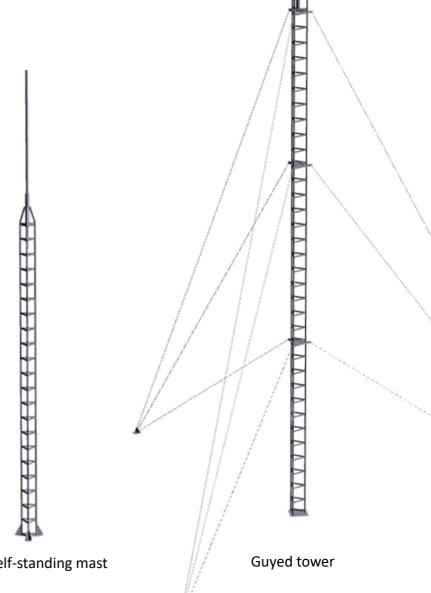


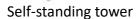
### **Range of Steel Towers**

Design and manufacturing in France of lattice towers based on your technical specifications:

- ✓ Wind velocity
- ✓ Wind surface
- ✓ Geotechnical characteristics
- Self-standing towers up to 36 meters
- Light self-standing masts up to 20 meters
- Guyed towers up to 60 meters













### **Light Self Standing Masts (LSM)**

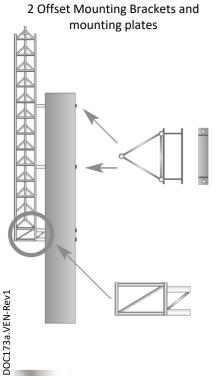
Made from light-weight dip-galvanized tubing, in lengths of 3m or 6m bolted together; the Lightning Self Standing Mast is fixed to the ground with a ground bracket sealed in concrete block, on a wall or gable with offset mounting brackets.

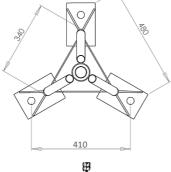
The Light Self Standing Mast allows the fixing of lightning conductors (tapped M20) up to 14 meters. No guy wires are necessary if the base is adequate.

| Designation                       | Ref.  | Total Height | Weight |
|-----------------------------------|-------|--------------|--------|
| L.S.M 5m (Ground fixing)          | P2051 | 5 m          | 36 kg  |
| L.S.M 11m (Ground fixing)         | P2052 | 11 m         | 71 kg  |
| L.S.M 14m (Ground fixing)         | P2053 | 14 m         | 86 kg  |
| L.S.M 5m (Wall fixing)            | P2056 | 5 m          | 36 kg  |
| L.S.M 11m (Wall fixing)           | P2057 | 11 m         | 71 kg  |
| L.S.M 14m (Wall fixing)           | P2058 | 14 m         | 86 kg  |
| Set of 3 offset mounting brackets | P2054 | -            | 25 kg  |
| Ground bracket                    | P2055 | -            | 6 kg   |

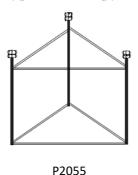


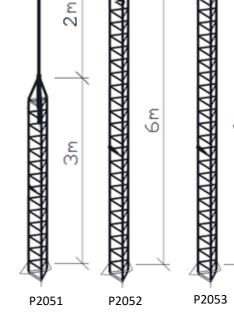
1 Base Offset Mounting Bracket and mounting plate





Dimensions (mm)





Concrete block dimensions (1.5 bar soil pressure)

P2051 0.8 x 0.8 x 0.8 m<sup>3</sup> P2052 0.9 x 0.9 x 0.9 m<sup>3</sup> P2053 1.0 x 1.0 x 1.0 m<sup>3</sup>





2

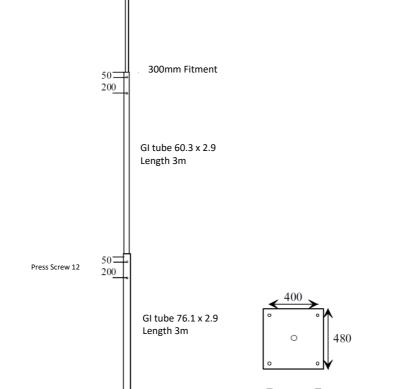
### **Lightning Mast 8M**

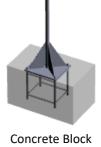
3m sections made of special «high resistance» steel and galvanized inside and out.

The telescopic sections are fixed together by two stainless steel press-screws. ; The mast is fixed to the ground with a ground bracket sealed in concrete block.

The M20 Thread upper termination is designed for M20 lightning rod fixing. Guy wires are not required for wind velocity < 150 km/h

| Characteristics                      | Ref.  | Total Height                       | Weight |
|--------------------------------------|-------|------------------------------------|--------|
| Lightning Mast 8M                    | C3469 | 8 m                                | 75 kg  |
| Dimensions (mm)  Lightning Rod press | screw | m<br>I tube 48.3 x 2.9<br>ength 3m |        |





Concrete Block 0,8 m x 0,8 m x 0,8m





### **Self Standing Towers**

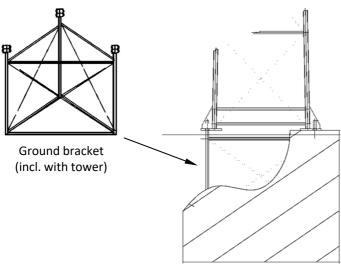
Indelec's self-standing towers are made from high-resistance steel and then dipgalvanized. They allow for lightning rods to be erected up to 36 m for the protection of open areas, for example.

They are supplied in kit form, in 3 or 6 m sections. A metal ground bracket is supplied and should be buried in a solid concrete block (see figures in table below).

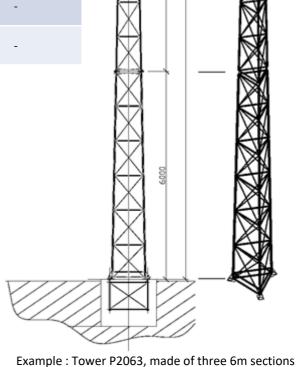
Maximum top surface (Wind zone 2, 112 km/h): 0.25 m<sup>2</sup>.

Upper termination is designed for lightning conductor fixing pole with press screw (max. dia. 50 mm).

| Designation                                | Ref.   | Height | Weight | Concrete Block<br>(1.5 bars soil pressure) |
|--|--------|--------|--------|--|
| Self Standing Tower                        | P2061  | 9 m    | 99 kg  | 0.8 m <sup>3</sup>                         |
| Self Standing Tower                        | P2062  | 12 m   | 145 kg | 1 m³                                       |
| Self Standing Tower                        | P2063  | 18 m   | 262 kg | 2.5 m <sup>3</sup>                         |
| Self Standing Tower                        | P2064  | 24 m   | 404 kg | 4 m³                                       |
| Self Standing Tower                        | P2065  | 30 m   | 590 kg | 10 m³                                      |
| Self Standing Tower                        | P2066  | 36 m   | 811 kg | 13 m³                                      |
| Lightning conductor fixing pole dia. 50mm  | P2067S | 6 m    | 22 kg  | -  |
| M20 tapped Lightning conductor fixing pole | P2067P | 6 m    | 22 kg  | -  |













### **Self Standing Towers (PYL Type)**

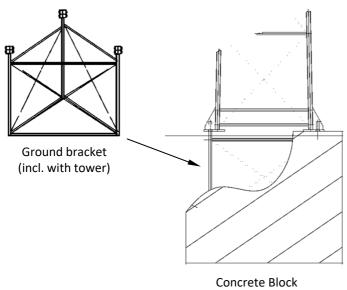
Indelec's self-standing towers are made from high-resistance steel and then dipgalvanized. They allow for lightning rods to be erected up to 36 m for the protection of open areas, for example.

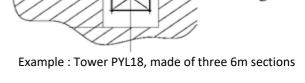
They are supplied in kit form, in 3 or 6 m sections. A metal ground bracket is supplied and should be burried in a solid concrete block (see figures in table below).

Maximum top surface (Wind zone 2, 112 km/h): 1.00 m<sup>2</sup>.

Upper termination is designed for lightning conductor fixing pole with press screw (max. dia. 50 mm).

| Designation                                | Ref.   | Height | Weight | Concrete Block<br>(1.5 bars soil pressure) |
|--|--------|--------|--------|--|
| Self Standing Tower                        | P2085  | 9 m    | 119 kg | 1.0 m <sup>3</sup>                         |
| Self Standing Tower                        | C1776  | 12 m   | 173 kg | 1.5 m <sup>3</sup>                         |
| Self Standing Tower                        | C1775  | 18 m   | 305 kg | 3.4 m <sup>3</sup>                         |
| Self Standing Tower                        | C1781  | 24 m   | 479 kg | 6.0 m <sup>3</sup>                         |
| Self Standing Tower                        | P2086  | 30 m   | 689 kg | 13.1 m <sup>3</sup>                        |
| Self Standing Tower                        | P2087  | 36 m   | 963 kg | 18.0 m <sup>3</sup>                        |
| Lightning conductor fixing pole dia. 50mm  | P2067S | 6 m    | 22 kg  | -  |
| M20 tapped Lightning conductor fixing pole | P2067P | 6 m    | 22 kg  | -  |









### **PH23 Guyed Towers**

Made from dip-galvanized steel, and designed to receive guy wires, these towers come in 3 m sections, 23 cm wide. The sections are M12 bolted (included) together at the joints and the base can be supplied either with a spike or a flat base section for ground mounting.

Guy wires are needed every 3 or 6 m on three guy anchors fixed at ground level at a distance from the base equal to half the height of the tower.

A lightning rod fixing pole can be installed at the top of the tower (Ref P2001B).

| rengiteming roa manag pore our se motar                       |       |        | ·            |
|---|-------|--------|--------------|
| Designation   | Ref.  | Height | Weight       |
| Upper section   | P2070 | 3 m    | 12 kg        |
| Mid section   | P2071 | 3 m    | 10 kg        |
| Base section with spike                                       | P2072 | 3 m    | 12 kg        |
| Flat base section   | P2073 | 3 m    | 12 kg        |
| Stainless steel cable Ø2,4mm –100m coil                       | P2074 | -      | 2.4 kg       |
| Tensioning kit: 1 turnbuckle, 2 thimbles, 4 steel wire clamps | P2075 | -      | -            |
| 3 guy wires anchor  | P2076 | -      | 3 kg         |
| guy wires anchor  | P2077 | -      | 6 kg         |
| guy wires anchor – for roof terrace                           | P2088 | -      | 3 kg         |
| guy wires anchor – for roof terrace                           | P2089 | -      | 6 kg         |
| Triangle for guy wires fixing                                 | P2082 | -      | -            |
|   |       | 60°    |              |
| P2070 P2071 P2073   | i)    | `      |              |
| Accessory : guy wires triangle t                              | P2077 | P20    | )<br>≫<br>89 |

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### **PH30 Guyed Towers**

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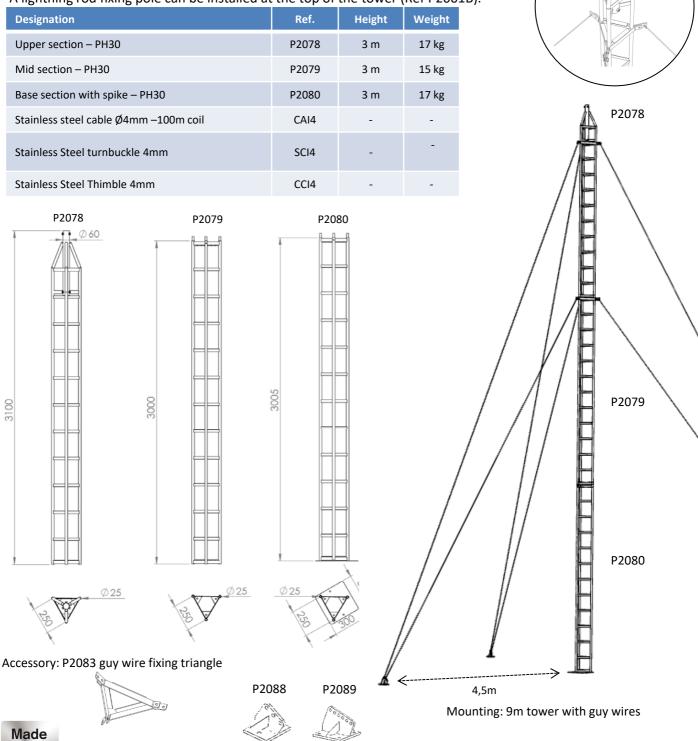
7 In

Safety

Made from dip-galvanized steel, and designed to receive guy wires, these towers come in 3 m sections, 23 cm wide. The sections are M12 bolted (included) together at the joints and the base can be supplied either with a spike or a flat base section for ground mounting.

Guy wires are needed every 3 or 6 m on three guy anchors fixed at ground level at a distance from the base equal to half the height of the tower.

A lightning rod fixing pole can be installed at the top of the tower (Ref P2001B).

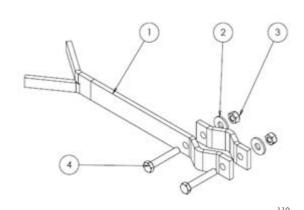


### **Side Mounting Wall Anchor**

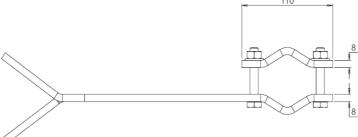
| Characteristics | C1924  |
|-----------------|--|
| Material        | Galvanized steel                             |
| Weight (kg)     | 1.200  |
| Application     | Installation in offset of the support member |
| Axial offset    | 230 mm                                       |
| Accessories     | Galvanized Steel Bolts included              |

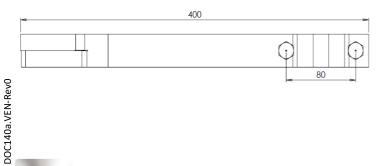


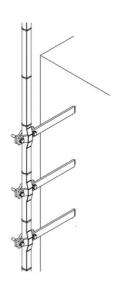
### Dimensions (mm)



| Description                   | QTY |
|-------------------------------|-----|
| Mounting to seal with flange  | 1   |
| Washer AC ZN – M10 moyenne    | 2   |
| Screw AC ZN – h M10 –DIN934   | 2   |
| Screw AC ZN H M10*60 – DIN933 | 2   |







**Application** Mast ≤ 2m : 2 Anchors Mast > 2m: 3 Anchors



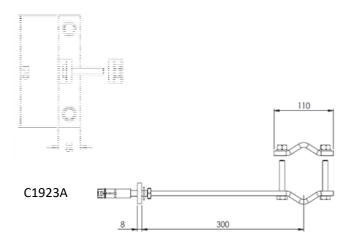


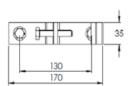
### **Side Mounting Bolted Brackets**

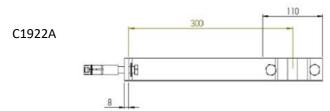
| Characteristics    | P3011 P3010                               |          |
|--------------------|---|----------|
| Orientation        | Horizontal                                | Vertical |
| Material           | Galvanized steel                          |          |
| Weight (kg)        | 1.650                                     | 1.700    |
| drilling Ø (mm)    | 16  |          |
| Support max Ø (mm) | 50  |          |
| Fixing             | M10 bolts and iron plugs included         |          |
| Offset (mm)        | 300                                       |          |
| Application        | Used to fix a pole on a vertical surface. |          |

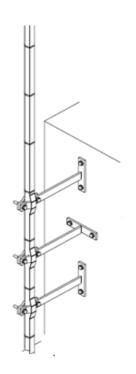


#### Dimensions (mm)









 $\begin{array}{c} \underline{\text{Application}} \\ \text{Mast} & \leq 2 \text{m} : 2 \text{ x P3010} \\ \text{Mast} & > 2 \text{m} : 1 \text{x P3011} + 2 \text{x P3010} \\ \end{array}$ 



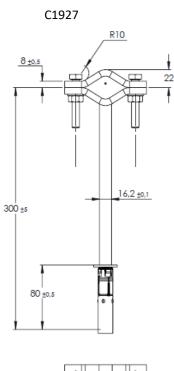


### **Wall Mounting Brackets**

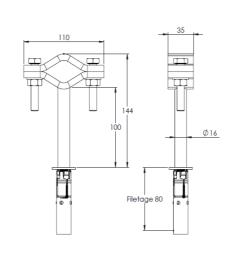
| Réf.            | C1925  | C1926  | C1927  |
|-----------------|--|--------|--------|
| Offset L (mm)   | aucun  | 100 mm | 200 mm |
| Material        | Hot galvanized steel                         |        |        |
| Weight (kg)     | 0,750 0,900 1,100                            |        |        |
| Drilling Ø (mm) | 20   |        |        |
| Max mast Ø (mm) | 50   |        |        |
| Application     | Dip-galvanized steel cast iron plug supplied |        |        |
| Fixing          | Used to fix a pole on a vertical surface     |        |        |



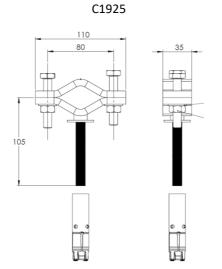
#### Dimensions (mm)







C1926





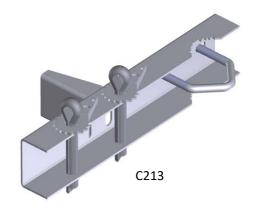
**Application** Mast ≤ 2m : 2 Brackets Mast > 2m: 3 Brackets

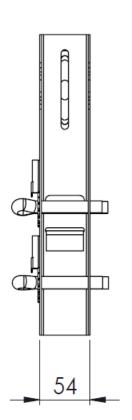


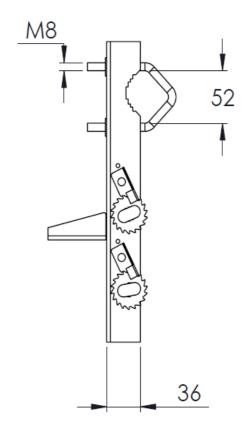


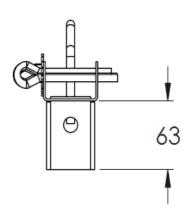
### **Hoop Mounting**

| Characteristics | C213  | P3024                               |
|-----------------|---|-------------------------------------|
| Designation     | Hoop mounting                                     | Galvanized steel strapping roll 20m |
| Materiel        | Zinc coated steel                                 | Galvanized steel                    |
| Weight (kg)     | 0.820   | 3.695                               |
| Application     | For the strapping of a pole to a domestic chimney |                                     |











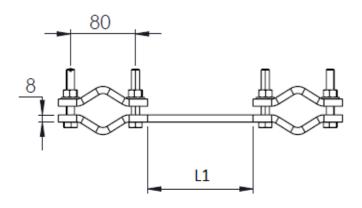


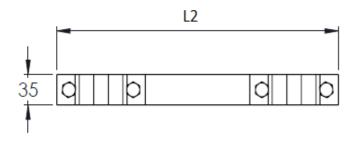
### Offset pipe bracket

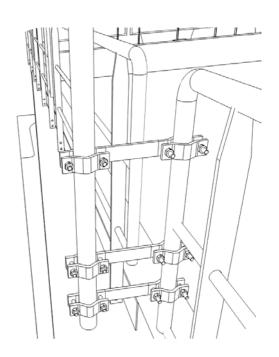
| Characteristic | C1928                                 | C 1929 |
|----------------|---------------------------------------|--------|
| Material       | Galvanized steel                      |        |
| Weight (kg)    | 1.230                                 | 1.445  |
| Offset(mm)     | 140                                   | 240    |
| Length L1 (mm) | 30                                    | 130    |
| Length L2 (mm) | 250                                   | 350    |
| Ø max (mm)     | 50                                    | 50     |
| Fixing         | Galvanized steel bolt included        |        |
| Application    | Fixing a mast on a vertical structure |        |



#### Dimensions (mm)







Application

Mast ≤ 2m : 2 Brackets

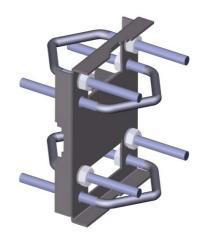
Mast > 2m : 3 Brackets

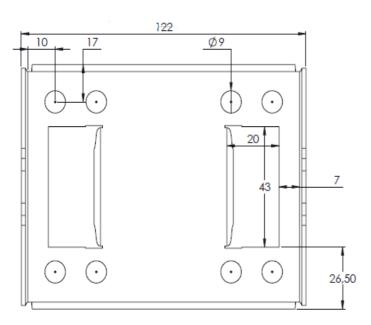


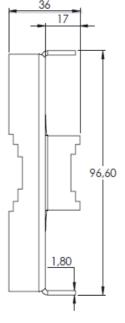


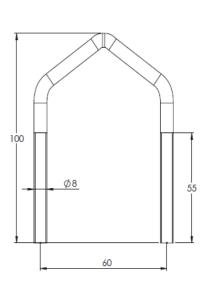
### **Multipurpose Fixing Bracket**

| Characteristics | P3034   |
|-----------------|---|
| Material        | Stainless steel   |
| Weight (kg)     | 0.570   |
| Ø max (mm)      | 50  |
| Application     | Fixing a mast on a vertical or horizontal tubular structure |







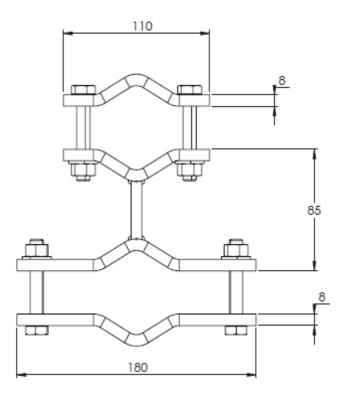


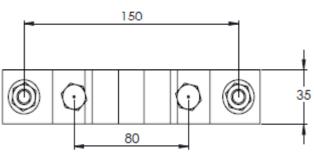


### Offset Pipe Collar « X » type

| Characteristics | C1931                                  |
|-----------------|--|
| Material        | Hot galvanized steel                   |
| Weight (kg)     | 1.590                                  |
| Ø max (mm)      | 50                                     |
| Application     | Fixing elevation mast on vertical tube |



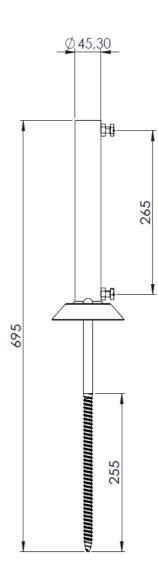


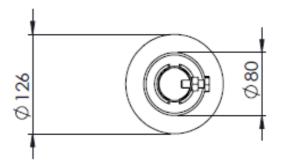




### **Anchor Cement Mounting**

| Characteristics | P3042   |
|-----------------|---|
| Material        | Hot Galvanized steel  |
| Weight (kg)     | 1.360   |
| Ø max support   | 35mm  |
| Application     | For lightning rod or elevation pole (2m height max) fixing on a wooden or concrete frame. |





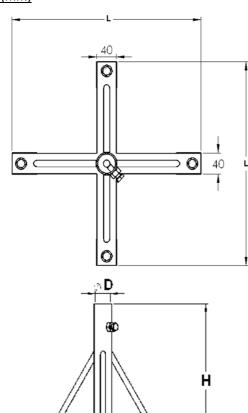


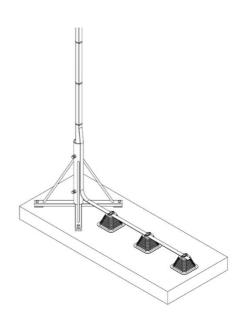
### **Mounting Stand for Mast**

| Characteristics      | P3052  | P3053  |  |
|----------------------|--|--|--|
| Material             | Galvanized steel   |  |  |
| Weight (kg)          | 4.855  | 7.515  |  |
| Height H (mm)        | 341  | 503  |  |
| Center distance (mm) | 360  | 515  |  |
| Ø max of mast D (mm) | 35   | 50   |  |
| Length L (mm)        | 390  | 560  |  |
| Fixation             | bolt zinc coated steel<br>Drilling (                                 | •  |  |
| Application          | 2m max pole fixing on a flat<br>roof without the need of guy<br>wire | 5.5m max pole fixing on a flat roof without the need of guy wire |  |



### Dimensions (mm)





**Application** 



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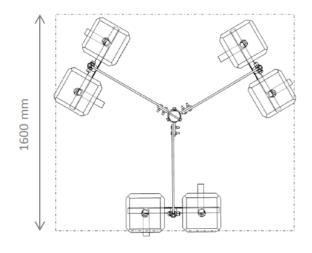


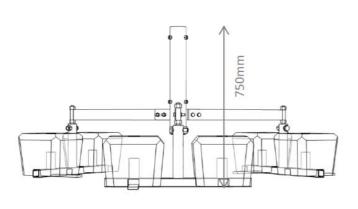
### **Mast Self-Standing Tripod Base**

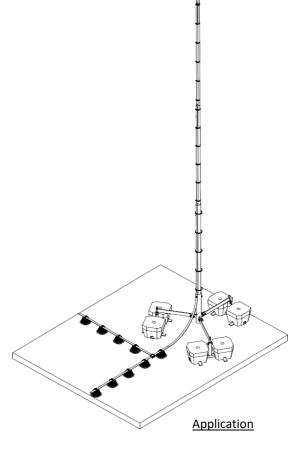
| Characteristics   | C3678   |  |
|-------------------|---|--|
| Material          | Galvanized steel  |  |
| Weight (kg)       | 25.000 (without concrete bloc)  |  |
| Ø max of mast(mm) | 65  |  |
| Fixing            | By 6 concrete blocks (25 kg not provided)                             |  |
| Tilt              | Up to 10°   |  |
| Application       | Fixing a lighting mast on a flat roof without the need of guying wire |  |



#### **Dimensions (mm)**







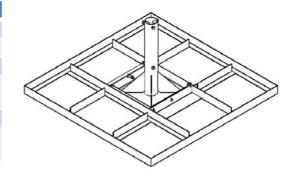


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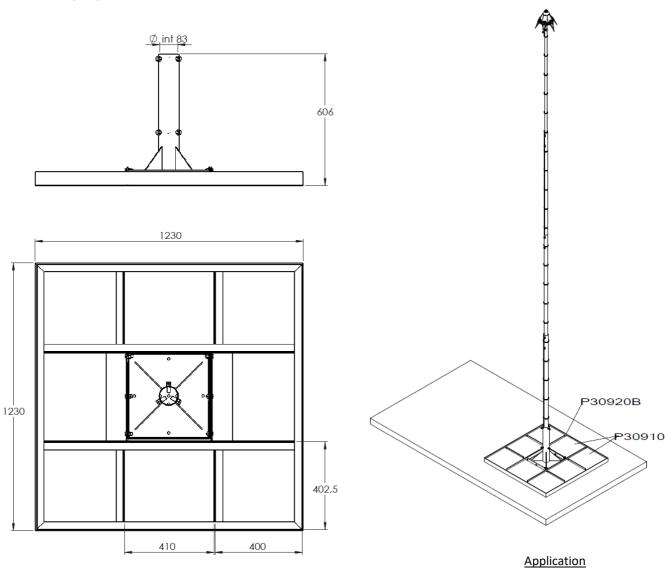


### **Mast Self-Standing Tripod Base Metallic** Frame

| Characteristics   | Р30920В   |  |
|-------------------|---|--|
| Material          | Hot dip galvanized steel  |  |
| Weight (kg)       | 50,5 kg (excluding concrete plate ref.P30910)                             |  |
| Pole max diameter | 83 mm   |  |
| Fixing            | Minimum 8 concrete plates (15,5kg per plate)<br>(not included ref.P30910) |  |
| Tilt              | Up to 10°   |  |
| Application       | Fixing a 5.50m high max lighting mast on a roof                           |  |



#### Dimensions (mm)





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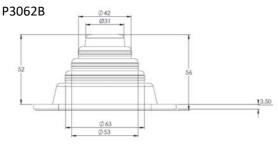


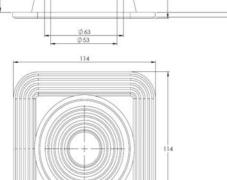
## Waterproofing Collar

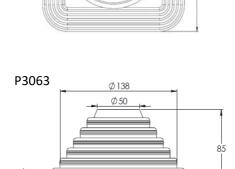
| Characteristics. | P3062B                | P3063 | P3065 |
|------------------|-----------------------|-------|-------|
| Material         | Rubber                |       | Zinc  |
| Weight (kg)      | 0.070                 | 0.200 | 0.145 |
| Application      | Waterproofing on mast |       |       |

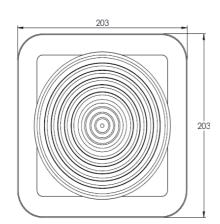


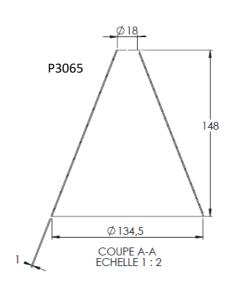
#### Dimensions (mm)





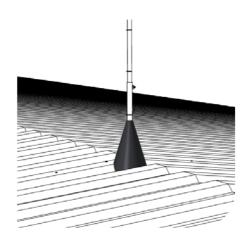






P3065

**Application** 





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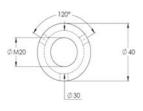
### **Adapter Sleeve**

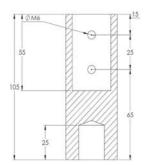
| Characteristics | P3066B  | P30637B | P3068A |
|-----------------|---|---------|--------|
| Material        |   | brass   |        |
| Weight (kg)     | 0.735   | 1.135   | 2.295  |
| Height (mm)     | 100   | 250     | 550    |
| Ø max(mm)       | 200   | 200     | 250    |
| Application     | Fixing a lightning conductor on a Round or square shaft |         |        |



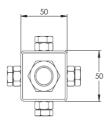
### Dimensions (mm)

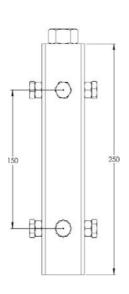
#### P3066B



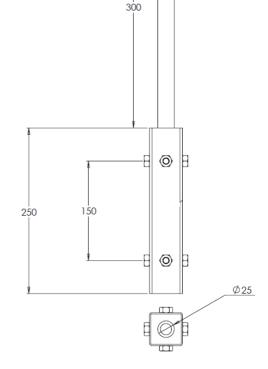


#### P3067B







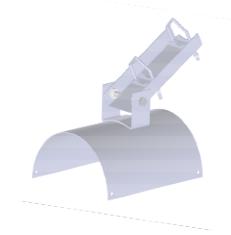


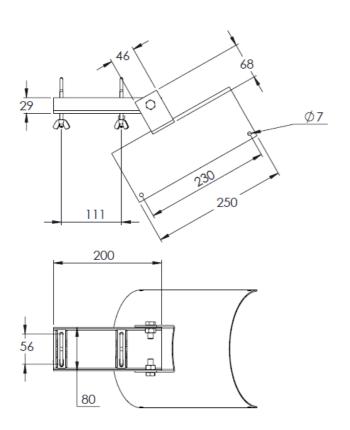


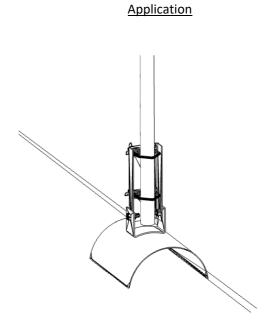


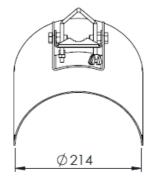
### **Pivoting Base**

| Characteristics | P3081   |  |
|-----------------|---|--|
| Material        | Dichromate steel  |  |
| Weight (kg)     | 2.055   |  |
| Ø max (mm)      | 50  |  |
| Application     | Withstanding elevation mast on roof ridge (in complement of guy wiring) |  |







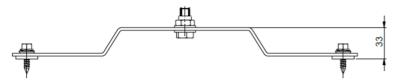


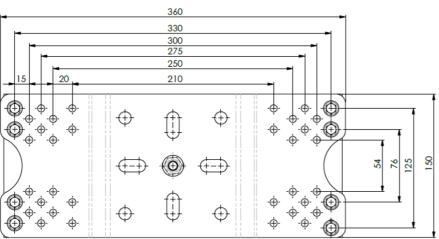


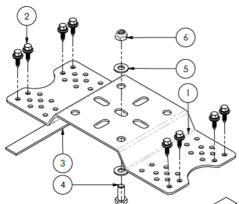
### **Support Plate for Cladding**

| Réf.        | P3045  |
|-------------|--|
| Material    | AISI 304   |
| Weight (kg) | 1,410  |
| Application | Used to fix a pole on a vertical metal cladding sheet. |
| Accessories | refer to table below                                   |

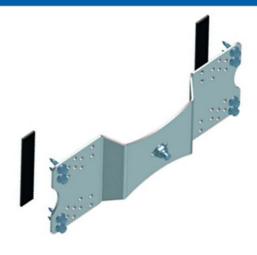
#### Dimensions (mm)







| Item | Description   | QT |
|------|---|----|
| #    |   | Υ  |
| 1    | PLATE FOR RIBBED CLADDING SHEET                             | 1  |
| 2    | SELF DRILLING SCREW TH 6x25 StSt A2 WATERPROOF WASHER ø16mm | 8  |
| 3    | WATERPROOF STRIP  | 2  |
| 4    | SCREW HM 10x25 StSt   | 1  |
| 5    | WASHER M10  | 2  |
| 6    | LOCKNUT M10 StSt A2   | 1  |





**Application** Lightning rod elevation mast fixing. P3045 plates in association with C1925 mounting brackets (not included)

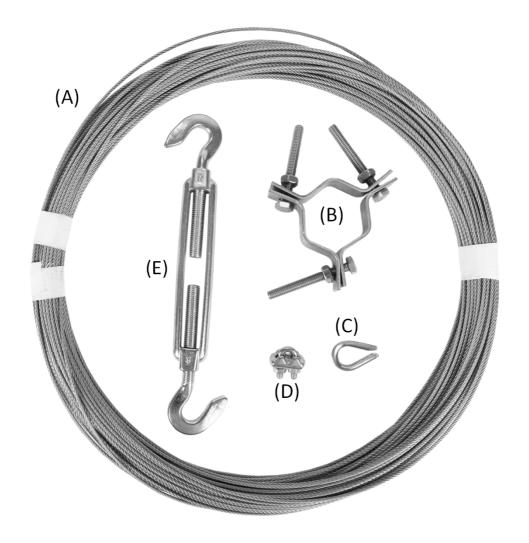


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### **Steel Guy Wire Kit**

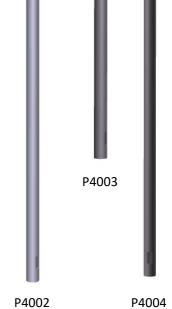
| Characteristics | P3082   | P3083           |
|-----------------|---|-----------------|
| Material        | Galvanized steel  | Stainless steel |
| Weight (kg)     | 2.265 2.315   |                 |
| Application     | 2 x 3 wire guys for elevation mast.   |                 |
| Contents:       | 50m galvanized steel cable Ø2mm (A) 2 mast collar (B) 12 heart thimbles (C) Cable clips(D) 6 tensioners (E) |                 |



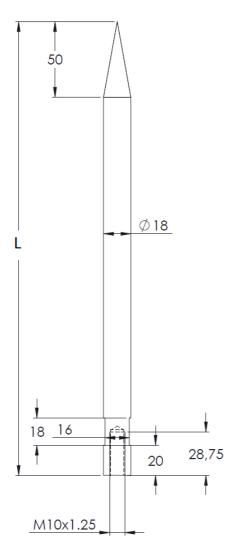


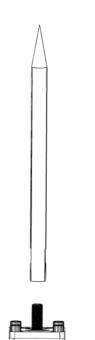
### **Tapped Air Rod**

| Characteristics | P4001  | P4002 | P4003   | P4004    |
|-----------------|--|-------|---------|----------|
| Material        | Chromium plated copper   |       | Stainle | ss steel |
| Weight (kg)     | 0.585  | 1.035 | 0.520   | 0.920    |
| Diameter (mm)   | 18   | 18    | 18      | 18       |
| Length (mm)     | 300  | 500   | 300     | 500      |
| Fixing          | Air rod base (P4050B, P4060), Angle saddle(P4051B, P4061B) or pivot saddle(P4052B) |       |         |          |
| Standard        | EN 62561-2   |       |         |          |
|                 |  |       |         |          |

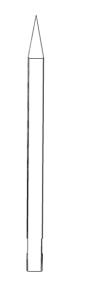


Dimensions (mm)





P4050B



P4051B

P4001





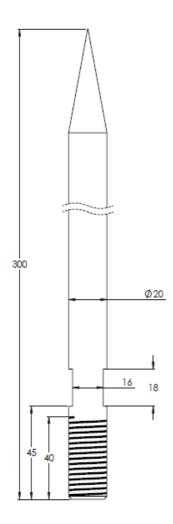


P4052B

### Threaded Air Rod

| Characteristics | P4005C P4006C                          |       |
|-----------------|--|-------|
| Material        | Chromium plated copper Stainless steel |       |
| Weight (kg)     | 0.720                                  | 0.640 |
| Ø (mm)          | 20                                     |       |
| Height ( mm)    | 300 300                                |       |
| Fixation        | M20 screwing on a mast (Ref : P2001)   |       |
| Standard        | EN 62561-2                             |       |

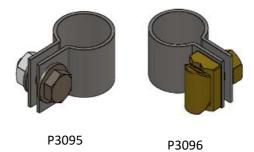


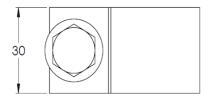


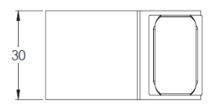


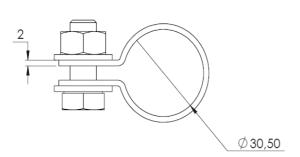
### **Rod to Conductor Clamp**

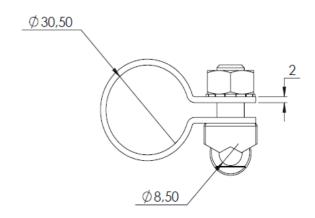
| Characteristics | P3095                     | P3096                      |
|-----------------|---------------------------|----------------------------|
| Material        | Stainless Steel           |                            |
| Diameter (mm)   | 30.5                      |                            |
| Application     | Flat conductor connection | Round conductor connection |













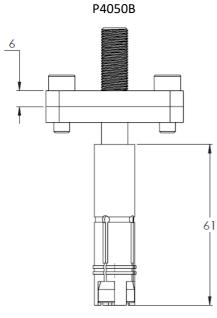
### **Air Rod Base**

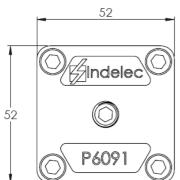
| Characteristics | P4050B  | P4060  |  |
|-----------------|---|--|--|
| Material        | Brass   | Copper   |  |
| Weight (kg)     | 0.390   | 0.185  |  |
| Connection      | Flat conductor by clamping between plates                               | Round conductor by a collar at the base of the air rod |  |
| Fixation        | Screw and anchor bolts  |  |  |
| Application     | Fixation of threaded air rod and connection for tape or round conductor |  |  |
| Standards       | EN 62561-1, EN 62561-4  |  |  |

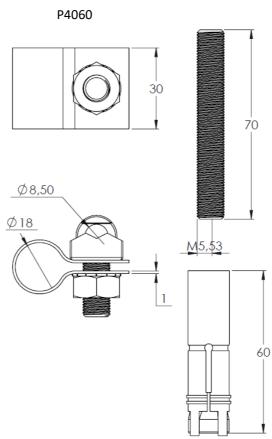


P4060

### Dimensions (mm)







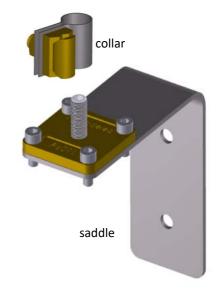


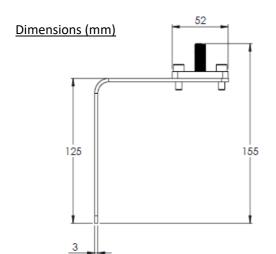
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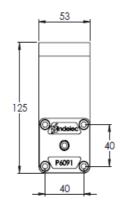


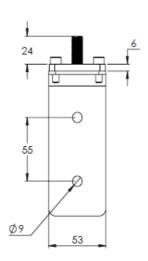
### **Air Rod Angle Saddle**

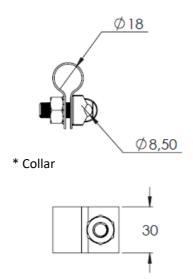
| Characteristics | P4051B   | P4061B                                     |  |
|-----------------|--|--|--|
| Material        | Stainless steel, brass   |  |  |
| Weight (kg)     | 0.445  | 0.550                                      |  |
| Conductor       | Flat, max 30x2   | Round Ø max 10 mm                          |  |
| Connection      | clamping between the plates  | collar to be placed at the base of the tip |  |
| Composition     | Saddle Saddle + collar*  |  |  |
| Application     | Fixing tapped air road In offset on a vertical wall, and connection to round or flat conductor |  |  |
| Standards       | EN 62561-1, EN 62561-4   |  |  |











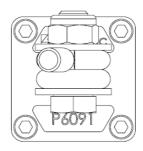


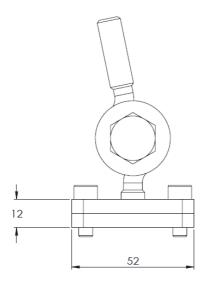


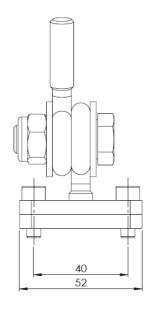
### **Pivoting Saddle**

| Characteristics | P4052B   |  |
|-----------------|--|--|
| Material        | Stainless steel - brass                              |  |
| Weight (kg)     | 0.430  |  |
| Connection      | Flat conductor clamped between the plates            |  |
| Application     | Fixing the tip and conductors on an inclined support |  |
| Standards       | EN 62561-1, EN 62561-4                               |  |







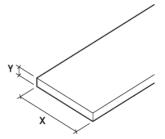




### **Conductors**

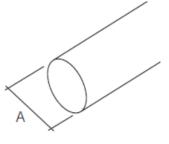
## **TAPE CONDUCTORS Standard EN 62561-2**

| Ref.   | Dimensions<br>(X x Y) mm | Material                 | Weight per<br>meter (kg) | Length    |
|--------|--------------------------|--------------------------|--------------------------|-----------|
| P5001B | 27 x 2                   | Tinned copper            | 0.500                    | 50m Coil  |
| P5001H | 27 x 2                   | Tinned copper            | 0.500                    | 70m Coil  |
| P5001X | 27 x 2                   | Tinned copper            | 0.500                    | Per meter |
| P5001J | 30 x 2                   | Tinned copper            | 0.534                    | 50m coil  |
| P5004  | 30 x 3                   | Aluminum                 | 0.230                    | 90m Coil  |
| P5005  | 30 x 2                   | Stainless steel AISI 304 | 0.500                    | 60m Coil  |
| P5006  | 30 x 3,5                 | Galvanized steel         | 0.850                    | 60m Coil  |



# **ROUND CONDUCTORS Standard EN 62561-2**

| Ref.  | Diameter<br>(A) mm | Material             | Weight per<br>meter (kg) | Length    |
|-------|--------------------|----------------------|--------------------------|-----------|
| P5011 | 8                  | Tinned copper        | 0.464                    | 50m Coil  |
| P5012 | 8                  | Bare Copper          | 0.440                    | 70m Coil  |
| P5013 | 8                  | Galvanized steel     | 0.395                    | Per meter |
| P5015 | 10                 | Aluminium            | 0.215                    | 90m coil  |
| P5016 | 8                  | Stainless steel AISI | 0.400                    | 60m coil  |

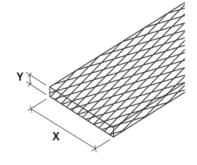




### **Flexible Conductors**

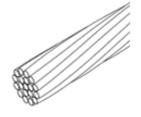
### **COPPER BRAID Standard EN 62561-2**

| Ref.  | Dimensions<br>(X x Y) mm | Section<br>mm² | Material      | Weight by<br>meter (kg) | Length   |
|-------|--------------------------|----------------|---------------|-------------------------|----------|
| P5021 | 30 x 3,5                 | 50             | Tinned copper | 0.470                   | 25m Coil |
| P5025 | 16 x 2                   | 16             | Tinned copper | 0.144                   | 50m Coil |

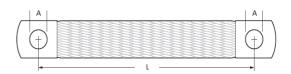


### CABLE Standard EN 62561-2

| Ref. | Section<br>mm² | Material   | Weight by<br>meter (kg) | Length   |
|------|----------------|------------|-------------------------|----------|
| C836 | 50             | Raw copper | 0.420                   | Coil 50m |



### **FLEXIBLE COPPER EARTH BRAID Standard EN 62561-2**



| Ref.  | Section<br>mm² | Length (L)<br>mm | Ø eyelet<br>(A) mm | Material      | Weight<br>(kg) |
|-------|----------------|------------------|--------------------|---------------|----------------|
| P5022 | 50             | 300              | 10,5               | Tinned copper | 0.185          |
| P5023 | 50             | 500              | 10,5               | Tinned copper | 0.290          |
| P5024 | 50             | 1000             | 10,5               | Tinned copper | 0.520          |



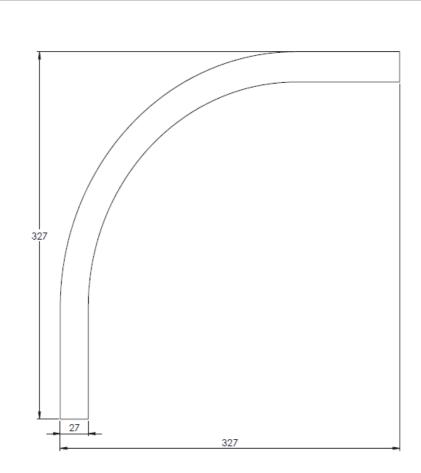


### Tinned Copper Tape Elbow

| Characteristics | P5007                                |
|-----------------|--------------------------------------|
| Material        | Tinned copper                        |
| Weight (kg)     | 0.245                                |
| Application     | achieve an angle with tape conductor |



#### Dimensions (mm)



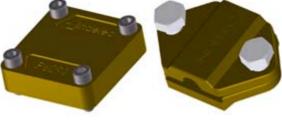


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### **Brass Square Clamp**

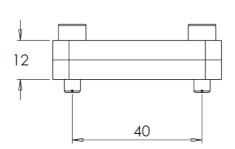
| Characteristics | P6091C          | P6092           |  |
|-----------------|-----------------|-----------------|--|
| Material        | Brass           |                 |  |
| Conductor       | Flat            | Flat or round   |  |
| Weight (kg)     | 0.275           | 0.205           |  |
| Application     | Connection bety | ween conductors |  |
| Standard        | EN 62           | 2561-1          |  |

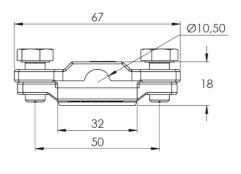


#### P6091C P6092

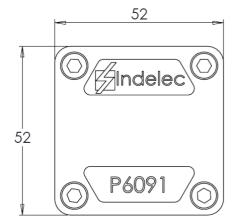
#### Dimensions (mm)

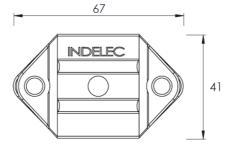
P6091C

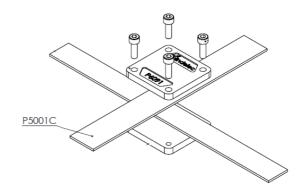




P6092







#### **Application**

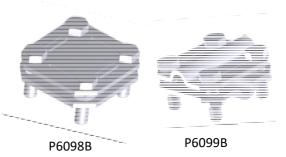


DOC205a.VEN-Rev0



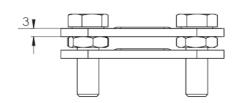
### **Galvanized steel Square Clamp**

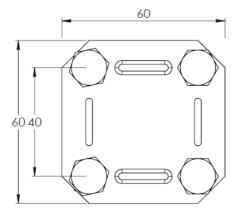
| Characteristics | P6098B                               | P6099B  |
|-----------------|--------------------------------------|---|
| Material        | Galvani                              | zed steel                                     |
| Conductor       | Tape                                 | Tape or Round                                 |
| Weight (kg)     | 0.220                                | 0.250   |
| Application     | Connection between 2 tape conductors | Connection between 2 tape or round conductors |
| Standard        | EN 62                                | 2561-1  |



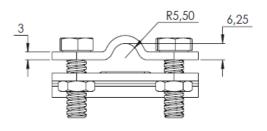
#### Dimensions (mm)

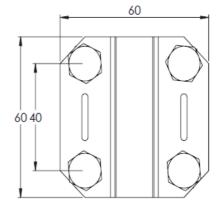
# P6098B 10





#### P6099B





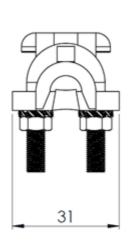


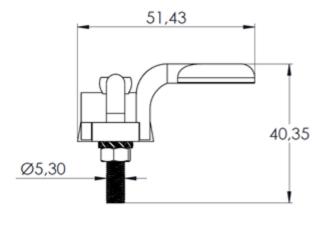
### **Brass Socket for Round Conductor**

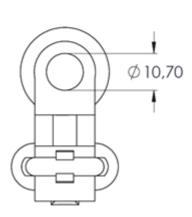
| Characteristics | P6096                                   |
|-----------------|---|
| Material        | brass                                   |
| Weight (kg)     | 0.075                                   |
| Application     | Connecting round conductor on earth bar |
| Standard        | EN 62561-1                              |

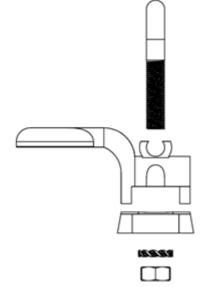


#### Dimensions (mm)









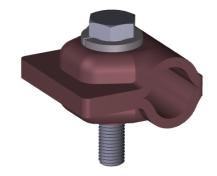




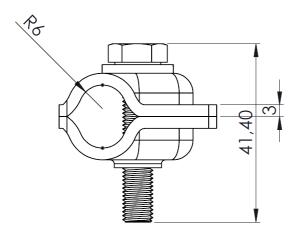
DOC206a.VEN-Rev0

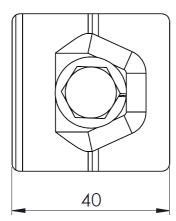
### Multi Purpose Square Clamp for Round Conductor

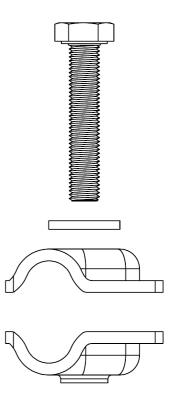
| Characteristics | P6097                             |
|-----------------|-----------------------------------|
| Material        | Copper                            |
| Weight (kg)     | 0.115                             |
| Application     | Connecting round conductors (8mm) |
| Standard        | EN 62561-1                        |



#### Dimensions (mm)









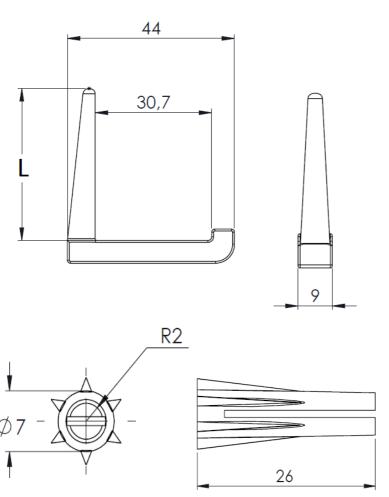
DOC207a.VEN-Rev0



### **Galvanized Steel Hook and Lead Plug**

| Characteristics | P6001            | P6002                    | P6005B      |
|-----------------|------------------|--------------------------|-------------|
| Materiel        | Galvanized steel |                          | Lead        |
| Length L (mm)   | 30               | 40                       | 26          |
| Weight (kg)     | 0.015            | 0.025                    | 0.005       |
| Application     | Mainta           | in tape conductor on cor | ncrete wall |
| Standard        | EN 62561-4       |                          |             |







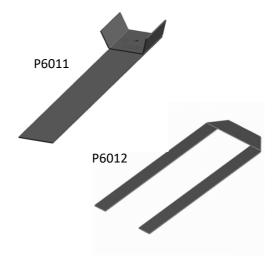
**Application** Drilling Ø of the wall 7mm

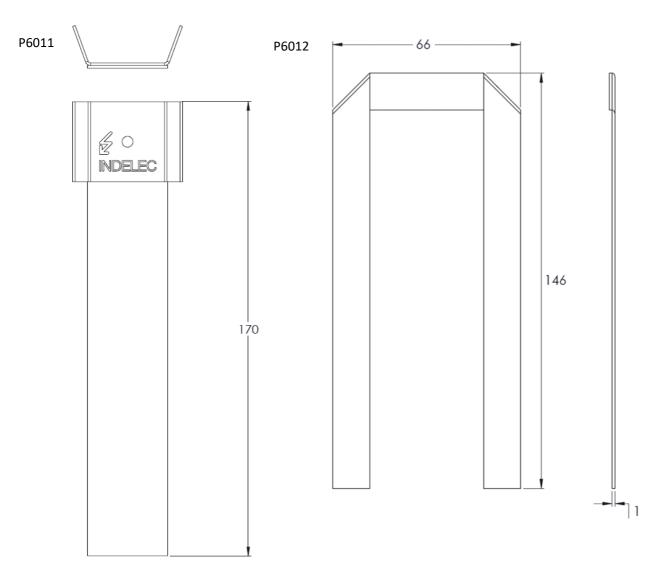




### **Slate Holdfast for Tape**

| Characteristics | P6011  | P6012  |
|-----------------|--|--|
| Material        | Tinned   | copper   |
| Weight (kg)     | 0.065  | 0.030  |
| Thickness (mm)  | 1  | 1  |
| Application     | Used to fix tape on a tile or slate roof. The mounting is pushed in between two tiles and the two flanges folded back to hold the conductor in place | Used to fix tape on a tile or slate roof. The mounting is pushed in between two slates and the conductor is welded on. |
| Standard        | EN 62561-4   |  |



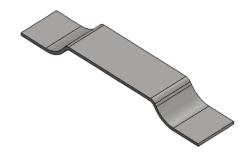


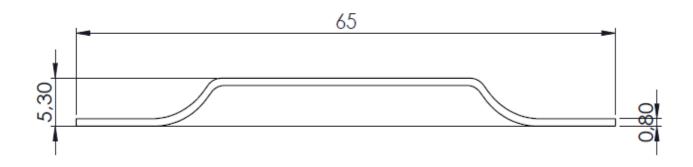




### Tinned Copper Welding Clip

| Characteristics | P6021  |
|-----------------|--|
| Material        | Tinned copper  |
| Weight (kg)     | 0.150  |
| Thickness (mm)  | 1  |
| Application     | Used to fix tape on to a metal roof (e.g. zinc or lead).  The clip is welded to the roof on either side of the tape. |
| Standard        | EN 62561-4   |



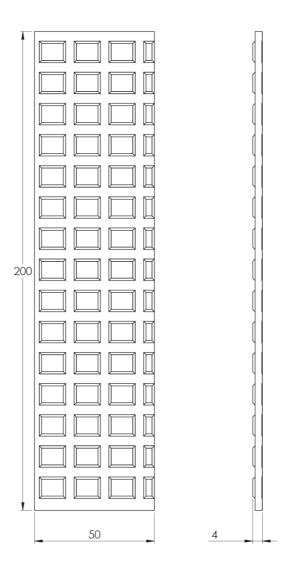




### **Heat Weldable Holdfast (x25)**

| Characteristics | P6031  |
|-----------------|--|
| Material        | Aluminum, tar                                |
| Weight (kg)     | 1.320 (pack of 25 pcs)                       |
| Packing         | 25 pieces                                    |
| Application     | Used to fix tape to waterproof roofing felt. |



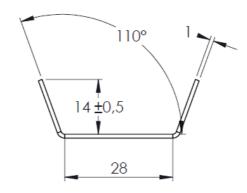


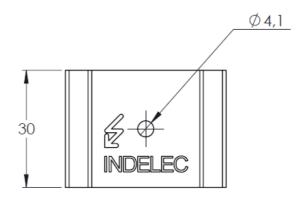


### Tinned Copper DC Tape Clip

| Characteristics | P6041  |
|-----------------|--|
| Matter          | Tinned copper  |
| Weight (kg)     | 0.010  |
| Thickness       | 1mm  |
| Application     | The fold-back clip is first fixed to the support wall by means of pop rivets, metal screws or expanding plugs. |
| Standard        | EN 62561-4   |







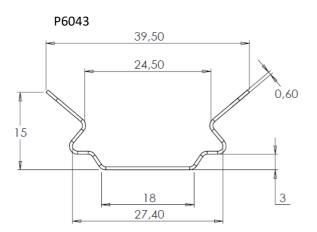


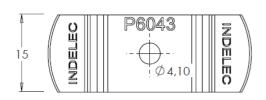
### **Stainless Steel Push-In DC Tape Clip**

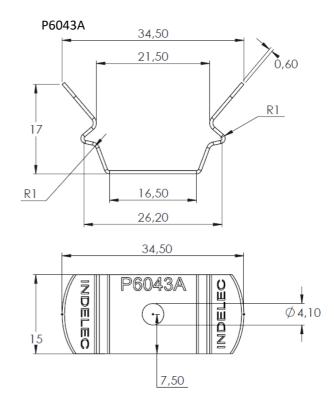
| Characteristics | P6043        | P6043A                                       |
|-----------------|--------------|--|
| Conductors      | tape 30x2 mm | Tape 27x2 mm                                 |
| Material        | Stainle      | ss Steel                                     |
| Weight (kg)     | 0.0          | 004  |
| Fixing          | · ·          | ts (not included),<br>to washer (ref: P6044) |
| Application     |              | ace and are either pop-riveted ed down.      |
| Standard        | EN 62        | 2561-4                                       |

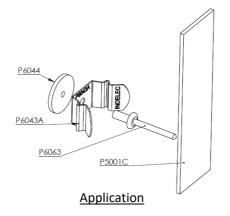


#### Dimensions (mm)











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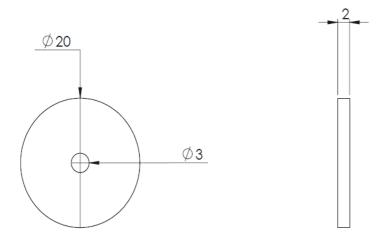


### **Rubber Sealing Plain Washer**

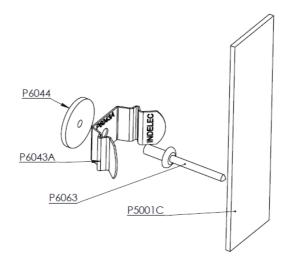
| Characteristics | P6044   |
|-----------------|---|
| Material        | Rubber  |
| Weight (kg)     |   |
| Application     | Used with rivets to hold fixings such as clips in place on steel surfaces or cladding panels. The rivets supplied are waterproof. |



#### Dimensions (mm)



#### **Application**



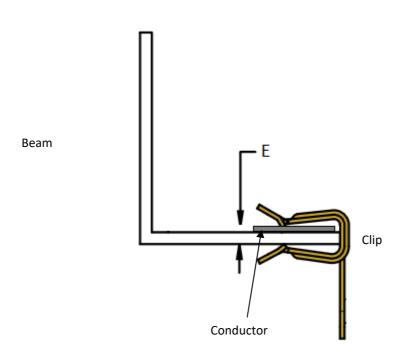


### **Hammer-on Beam Clips**

| Characteristics                 | C1460  | C1461             | C1462  |
|---------------------------------|--|-------------------|--------|
| Material                        | Spring steel   |                   |        |
| Admissible conductor            | Tape o   | onductor thikness | 2mm    |
| Weight (kg)                     | 0.060  | 0.014             | 0.014  |
| Thikness E<br>(beam + conducto) | 14-20 mm   | 8-14 mm           | 3-8 mm |
| Application                     | Maintains a tape conductor on metallic beam<br>Requires only a hammer to install |                   |        |



#### **Application**





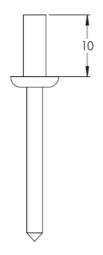


### **Waterproof Pop Rivet**

| Characteristics | P6061     | P6062                     | P6063           |
|-----------------|-----------|---------------------------|-----------------|
| Material        | Aluminium | Copper                    | Stainless steel |
| Weight (kg)     |           | 0.002                     |                 |
| Packing         |           | 100 units                 |                 |
| Application     |           | I to hold fixings such as |                 |

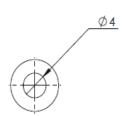


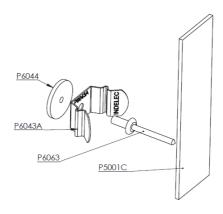
#### **Dimensions (mm)**





Rivet Clamping Tool ref. P6064





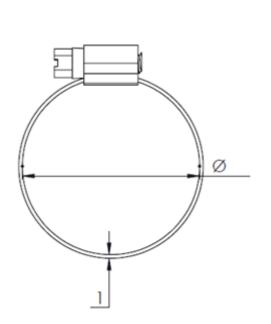
#### **Application**

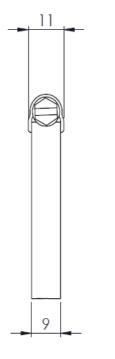


### **Stainless Steel Mast Collar**

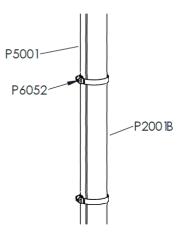
| Characteristics | P6051  | P6052 | P6053  | P6054 |
|-----------------|--|-------|--------|-------|
| Material        | Stainless steel  |       |        |       |
| Weight (kg)     | 0.020  | 0.020 | 0.025  | 0.025 |
| Ø (mm) min-maxi | 32-50  | 40-60 | 60-80  | 70-90 |
| Application     | Used to maintain conductor on tube. The collar is held in place by screwing. |       |        |       |
| Standard        |  | EN 62 | 2561-4 |       |











**Application** 



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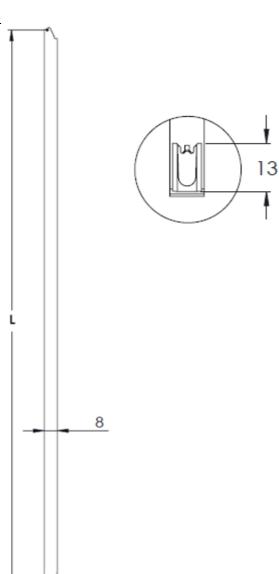


### Stainless Steel Clamping Collar

| Characteristics | P6058  | P6059 |
|-----------------|--|-------|
| Material        | Stainless steel  |       |
| Lenght (mm)     | 360  | 520   |
| Weight (kg)     | 0.005  | 0.010 |
| Application     | Down Conductor fixing on tube. Self-locking collar which is permanently tightened around its support thanks dedicated pliers (ref P6060) |       |
| Ø max (mm)      | 100  | 150   |
| Normes          | EN 625   | 661-4 |

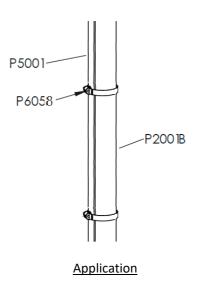


#### Dimensions (mm)





Collar Pliers ref. P6060





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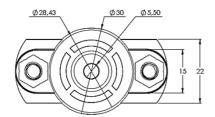
### **Non-metalic DC Clip**

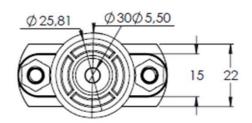
| Characteristics | P6015  | P6016                        |
|-----------------|--|------------------------------|
| Material        | Polypropylene  |                              |
| Weight (kg)     | 0,028  | 0,040                        |
| Application     | Used to fix a flat conductor (max 30x3,5mm) or round conductor (max ø10mm) |                              |
| Fixing          | To be screwed in place or he   | eld by a screw-in bracket M6 |
| Standard        | EN 62  | 2561-4                       |

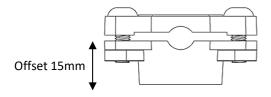


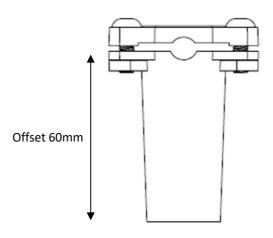
Dimensions (mm)

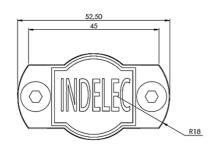
P6016 P6015

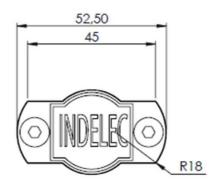












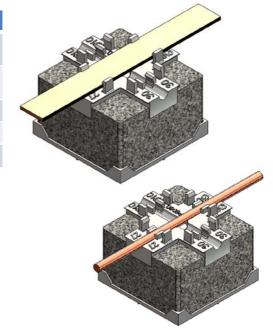


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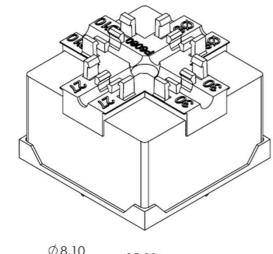


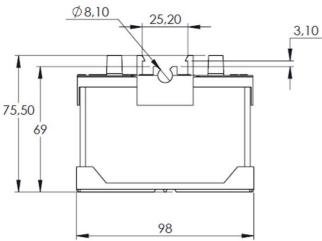
### **Universal Concrete Block**

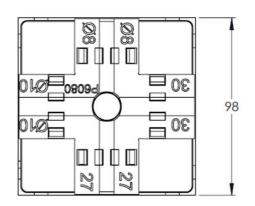
| Characteristics     | P6080   |
|---------------------|---|
| Allowable conductor | th.2mm 27-30mm / th.3mm 25-27mm<br>Ø 8 -10 mm |
| Material            | Block : concrete – holder : plastic           |
| Weight (kg)         | 1,000   |
| Packing             | 10 units pack                                 |
| Application         | Maintain tape or round conductor on flat roof |

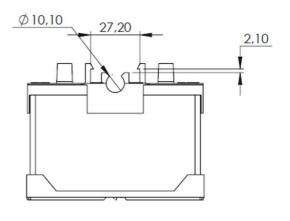


#### Dimensions (mm)











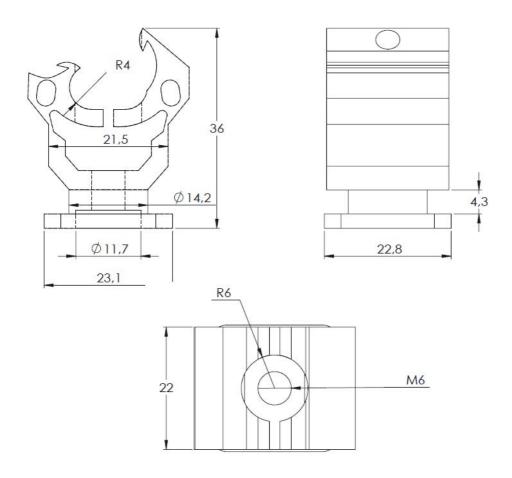
DOC277a.VEN-Rev0



### Non metallic clip for Round Conductor

| Characteristics | P6072   |
|-----------------|---|
| Material        | PVC   |
| Weight (kg)     | 0.010   |
| Conductor       | Round Ø 6-10 mm   |
| Application     | Round conductor fixing                                    |
| Fixing          | To be screwed in place or held by a screw-in bracket (M6) |
| Standard        | EN 62561-4  |

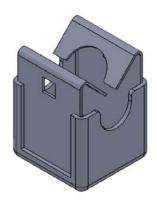


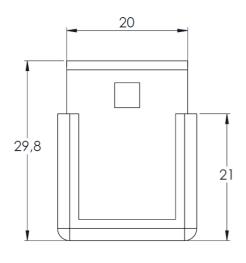


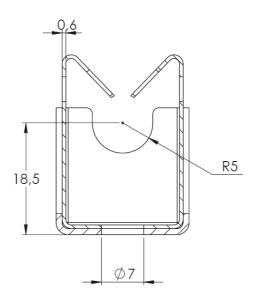


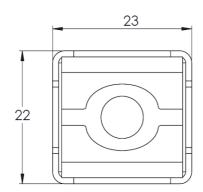
### > Stainless steel clip for round conductor

| Characteristics | P6143   |
|-----------------|---|
| Material        | Stainless Steel   |
| Weight (kg)     | 0.010   |
| Application     | These clips hold the round conductor in place and are either pop-riveted or screwed down. |







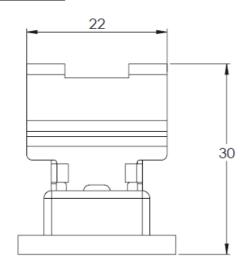


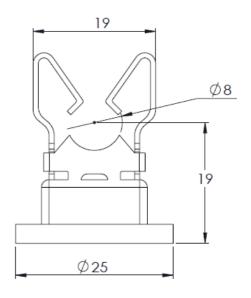


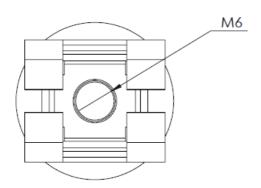
### Heritage Building clip for round conductor

| Characteristics | P6144   | P6145              |
|-----------------|---|--------------------|
| Material        | Stainless Steel / PVC   | Bare Copper / PVC  |
| Weight (kg)     | 0.010   | 0.010              |
| Conductor       | Ro  | und Ø 6-10 mm      |
| Application     | Roun  | d conductor fixing |
| Fixing          | These clips hold the round conductor in place and are either pop-riveted or screwed down. |                    |
| Standard        |   | EN 62561-4         |







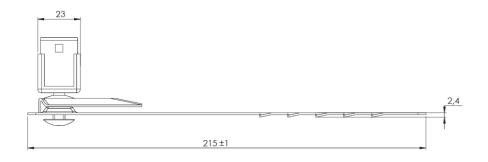


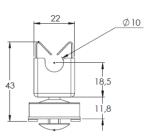


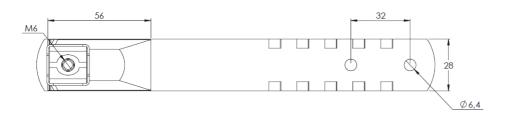
## **Stainless Steel Slate Holdfast for round conductor**

| Characteristics | P6110  |
|-----------------|--|
| Material        | Stainless Steel  |
| Weight (kg)     | 0.075  |
| Conductor       | Round, Ø 6 to 10 mm  |
| Application     | Used to fix round conductor on a slate roof.               |
| Fixing          | The mounting is locked/screwed/folded in between two tiles |
| Standard        | EN 62561-4   |







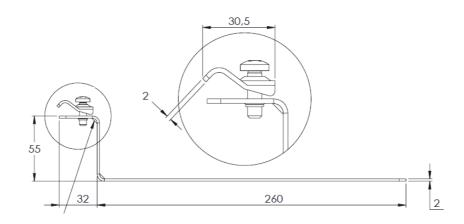




## Copper Slate Holdfast for round conductor – Heritage Building

| Characteristics | P6111  |
|-----------------|--|
| Material        | Copper   |
| Weight (kg)     | 0.180  |
| Conductor       | Round, Ø 6 to 10 mm  |
| Application     | Used to fix round conductor on a slate roof.               |
| Fixing          | The mounting is locked/screwed/folded in between two tiles |
| Standard        | EN 62561-4   |







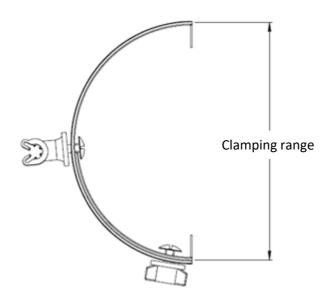




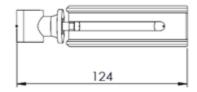
### Stainless Steel ridge conductor holder

| Characteristics | P6114  |
|-----------------|--|
| Material        | Stainless Steel/ PVC   |
| Weight (kg)     | 0.085  |
| Conductor       | Round Ø 6-10 mm  |
| Application     | Used to fix round conductor on a roof ridge without drilling |
| Fixing          | Clamping on the ridge (adjustable)                           |
| Clamping range  | 180 – 280 mm   |
| Standard        | EN 62561-4   |









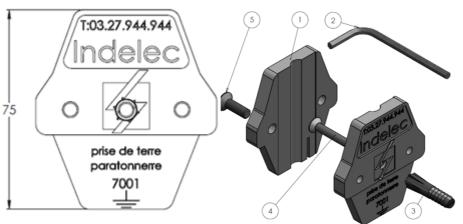




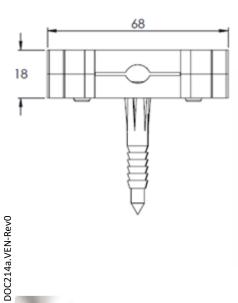
### **Test Clamp**

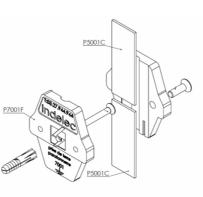
| Characteristics | P7001F  |
|-----------------|---|
| Matter          | Stamped brass   |
| Weight (kg)     | 0.535   |
| Application     | allows the down conductor to be disconnected from the earthing point so that the earth resistance may be measured |
| Standard        | EN 62561-1  |

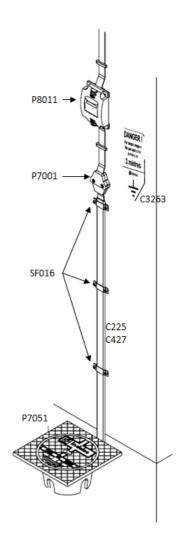




| No. ARTICLE DESCRIPTION |                                  | QTE |
|-------------------------|----------------------------------|-----|
| 1                       | Joint de contrôle laiton nickelé |     |
| 2                       | Clé BTR 4mm                      | 1   |
| 3                       | CHEVILLE Polyet. 8X35 - Verte    | 1   |
| 4                       | Vis inox Pozi fraisée 5x50       | 1   |
| 5                       | Vis CHC M6 fraisée               | 2   |





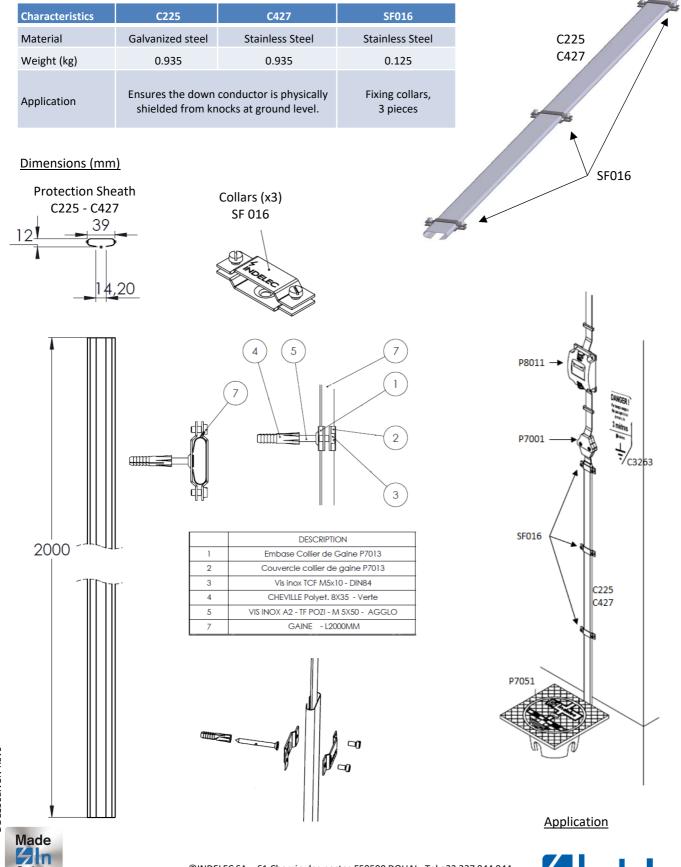


**Application** 





### **Protection Sheath for Tape Conductor**



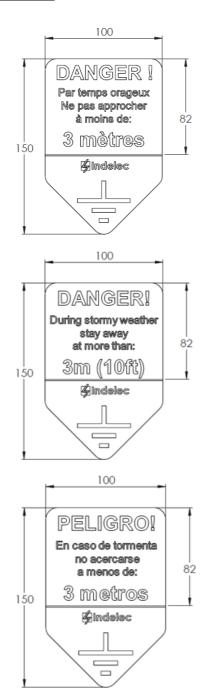
DOC136a.VEN-Rev0

Safety

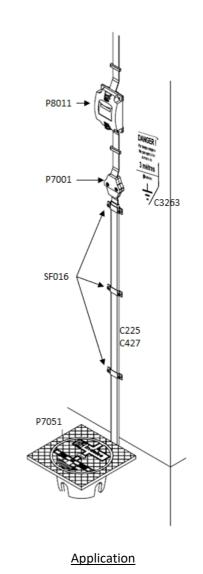
### **Information Sign**

| Characteristics | C3263C                                       | C3263A  | С3263В  |
|-----------------|--|---------|---------|
| Material        |  | PVC     |         |
| Language        | French                                       | English | Spanish |
| Application     | Lightning Protection System Information Sign |         |         |

#### Dimensions (mm)







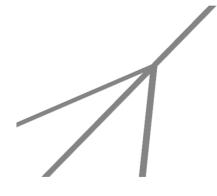


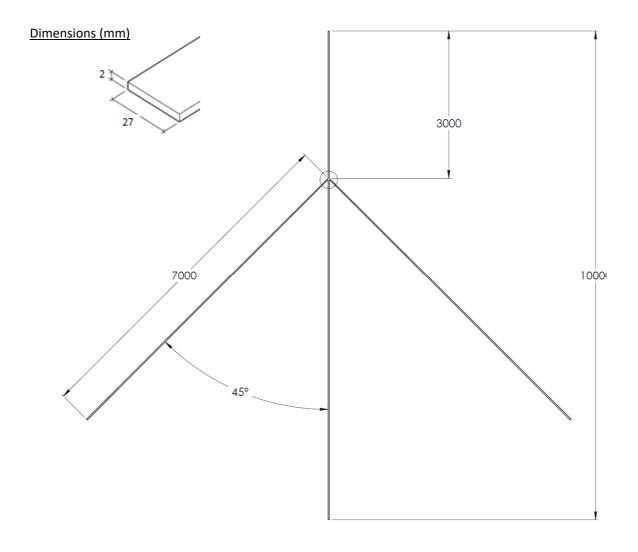
DOC145a.VEN-Rev2



### **Factory-Made « Crow Foot » Earthing**

| Characteristics | P7021  |
|-----------------|--|
| Material        | Tinned copper  |
| Weight (kg)     | 12.000   |
| Application     | «Crow-Foot» earthing system consists of three 7- meter prongs angled at 45° and a 3-metre long central prong which is connected to the test clamp. This earthing system is easy to unroll and bury. It avoids mechanical connections which would be prone to corrosion over time |



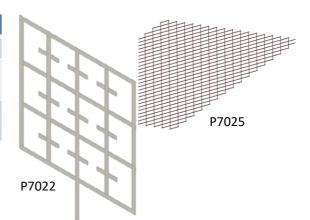


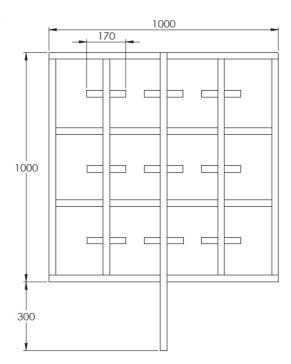




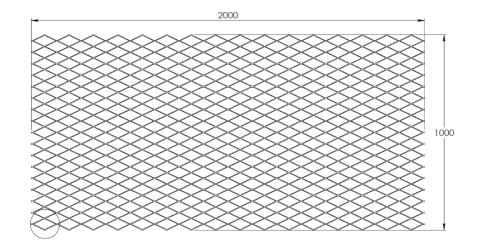
### **Tinned Copper Catice Earth mat 1x1m**

| Characteristics | P7022   | P7025  |
|-----------------|---|--------|
| Material        | Tinned copper   | Copper |
| Weight (kg)     | 4.525   | 5.000  |
| Application     | Improving the grounding or when the ground does not allow the insertion rod |        |









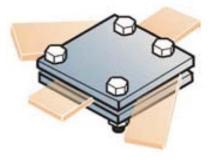


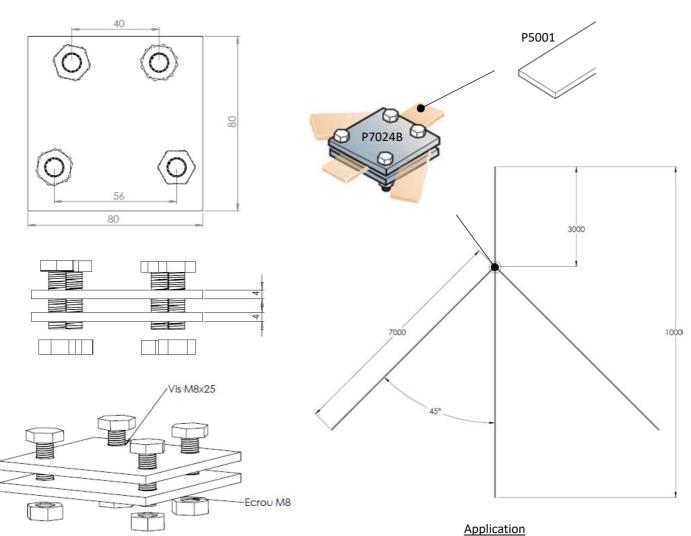


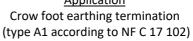


### « Crow Foot » clamp

| Characteristics | P7024B  |
|-----------------|---|
| Material        | Tinned copper   |
| Weight (kg)     | 0.520   |
| Application     | Clamp for "crow-foot" conductors earthing termination interconnection |
| Standard        | EN 62561-1  |









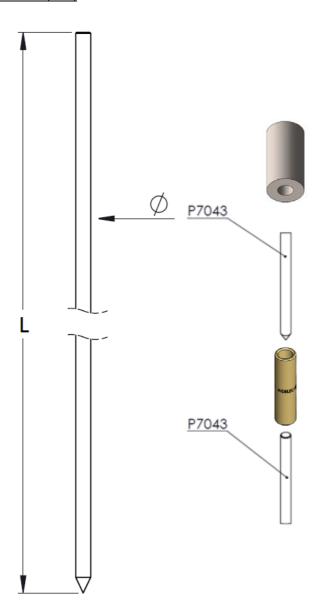


### **Pointed Copperbound Earth Rod**

| Characteristics | P7043 | P7033                   |
|-----------------|-------|-------------------------|
| Material        |       | l S235JR<br>opper 254μm |
| Length (mm)     | 2     | 000                     |
| Diameter (mm)   | 14.3  | 17.2                    |
| Weight (kg)     | 2.485 | 3.765                   |
| Standard        | EN 6  | 2561-2                  |

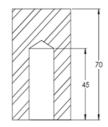


#### **Dimensions (mm)**



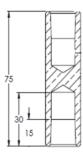
#### **Driving Stud**

Réf. P7035 Ø 14,3mm, Weight: 0.200 kg Réf. P7036 Ø 17,2mm, Weight: 0.300 kg



#### **Coupling Sleeve**

Réf. P7037B Ø 14,3mm, Weight: 0.100 kg Réf. P7038 Ø 17,2mm, Weight: 0,200 kg

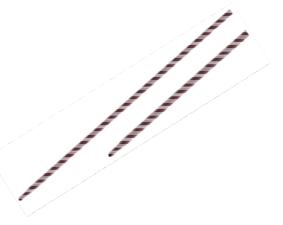




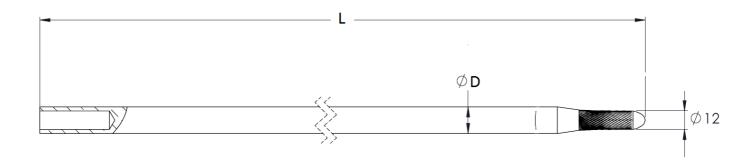


### **Self Coupling Earth Rods**

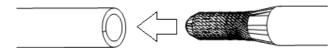
| Characteristics | P7040   | P7041      | P7042 |
|-----------------|---|------------|-------|
| Material        | Stainless Steel S235JR<br>Coating: Copper 254μm |            |       |
| Diameter D (mm) | 14.3  | 14.3       | 17.2  |
| Lenght L (mm)   | 2000  | 1000       | 1000  |
| Weight (kg)     | 2.500   | 1.250      | 1.765 |
| Standard        |   | EN 62561-2 |       |

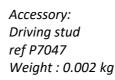


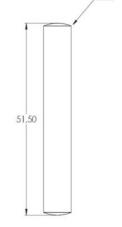
#### Dimensions (mm)



#### Coupling detail:







Ø8

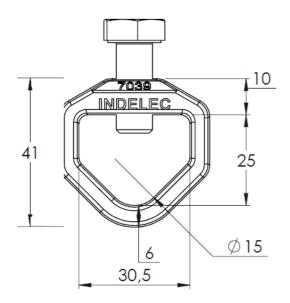


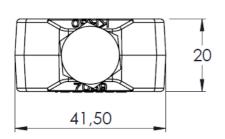


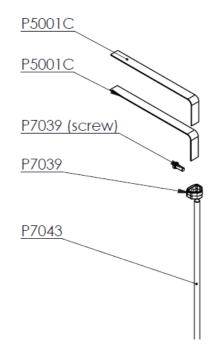
### **Rod to Conductor Clamp**

| Characteristics | P7039   |
|-----------------|---|
| Material        | Brass   |
| Weight (kg)     | 0.120   |
| Application     | Connection between conductor and earth rod (max 19mm diam.) |
| Standard        | EN 62561-2  |









**Application** 

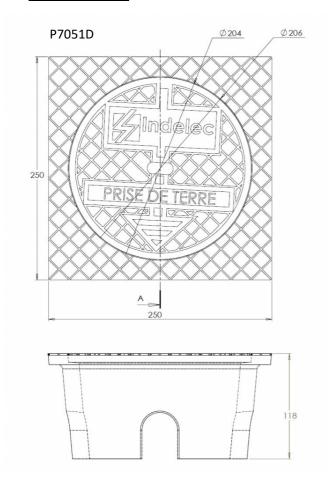


### **Inspection Pit**

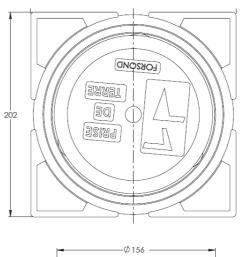
| Characteristics | P7051H                                     | P7052 |
|-----------------|--|-------|
| Material        | Cast Iron                                  | PVC   |
| Weight (kg)     | 8.045                                      | 0.440 |
| Application     | Allows the inspection of buried conductors |       |
| Standard        | EN 62561-5                                 |       |

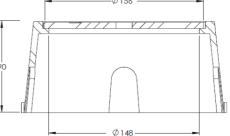


#### Dimensions (mm)



### P7052



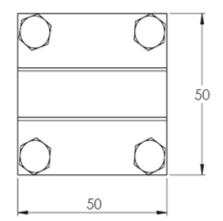


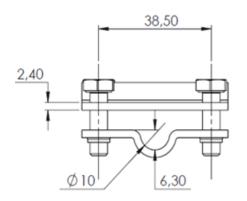


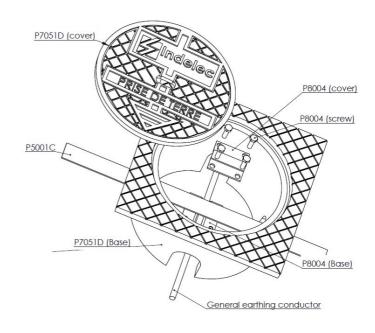
### **Earth clamp**

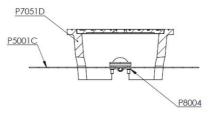
| Characteristics | P8004  |
|-----------------|--|
| Material        | Copper   |
| Weight (Kg)     | 0.130  |
| Application     | Used to fix tape (lightning conductor earthing) to copper cable (mains earth). |











**Application** 





### Digital flash lightning counter

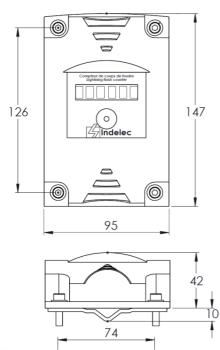
| Reference                                 |                  | P8011  |
|---|------------------|--|
| Characteristics                           |                  |  |
| Minimal detectable current I <sub>d</sub> |                  | 1 kA   |
| Maximal detectable Current                | I <sub>max</sub> | 100 kA   |
| Minimum current sensitivity(id/3)         | I <sub>nd</sub>  | 333 A  |
| Protection Class                          | IP               | 67   |
| Net Weight W                              |                  | 0.700 kg   |
| Operating principles                      |                  |  |
| Display                                   |                  | Digital  |
| Digits                                    |                  | 6  |
| Recording                                 |                  | By induction while lightning<br>current pass through doxn<br>conductor |
| On-site testing capabilities              |                  | Proprietary tester ref. P8015  |
| Maintenance                               |                  | Replaceable lithium batteries P8017                                    |
| Warranty                                  |                  | 18 months  |
| Mechanical specifications                 |                  |  |
| Down conductor fixing                     |                  | Specific clamp (included)  |
| Certifications                            |                  |  |
| EN 62561-6 Standard                       |                  | AttestationN°IND-62561-6-<br>08112016                                  |

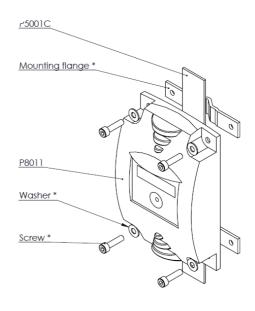




Lightning Counter Tester <u>Ref P8015</u>

#### Dimensions (mm)





**Application** 



DOC225a.VEN-Rev1



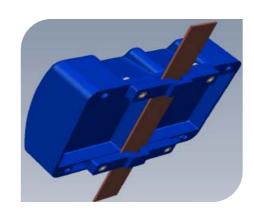
### **Advanced Lightning Flash Counter**

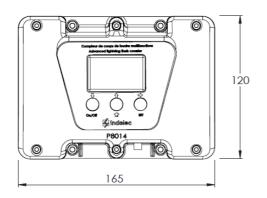
| Reference                         |  | P 8016                    |
|-----------------------------------|--|---------------------------|
| Characteristics                   |  |                           |
| Minimal detectable current        | I <sub>d</sub>   | 1 kA                      |
| Maximal detectable Current        | I <sub>max</sub>   | 100 kA                    |
| Minimum current sensitivity(id/3) | I <sub>nd</sub>  | 333 A                     |
| Protection Class                  | IP   | 67                        |
| Operating temperature range       | T°   | -20 °C +75 °C             |
| Net Weight                        | W  | 0.890 kg                  |
| Operating principles              |  |                           |
| Display                           | Digital  |                           |
| Digital characters                | 16   |                           |
| Features                          | Date of event dd/mm/yy Time of event hh/mm Peak Current (+ / - 10% accuracy) Polarity of current |                           |
| On-site testing capabilities      | Proprietary tester P8015   |                           |
| Maintenance                       | Replaceable lithium batteries P80170   |                           |
| Warranty                          | 18 months  |                           |
| Mechanical specifications         |  |                           |
| Down conductor fixing             |  | Specific clamp (included) |
| Certifications                    |  |                           |
| Standard                          |  | EN 62561-6                |



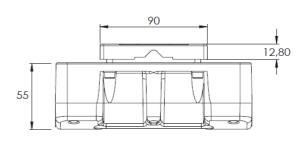


Lightning Flash Counter Tester Ref P8015





**Application** 







### **RFID Lightning Flash Counter – Type I**

| Reference   |  | P8050              |
|---|--|--------------------|
| Characteristics                                       |  |                    |
| Minimal detectable current (10/350μs)                 | I <sub>imp</sub>   | 2 kA               |
| Maximal detectable current (10/350μs)                 | I <sub>imp</sub><br>maxi   | 100 kA             |
| Minimum current sensitivity (0.5 x $I_{timp\ mini}$ ) | I <sub>mcs</sub>   | 1 kA               |
| Protection Class                                      | IP   | 43                 |
| Net Weight  | W  | 0.200 kg           |
| Temperature Range                                     | Т  | - 20°C ≤ T ≤ +85°C |
| Humidity  | RH   | 0% ≤ RH ≤ 100%     |
| Maximal altitude (Height Above Sea Level)             | HASL   | ≤ 4000 m           |
| Operating principles                                  |  |                    |
| RFID Lightning Counter Reader App                     | RFID Lightning Counter Reader                                      |                    |
| Digits  | 2  |                    |
| Recording   | By induction while lightning current passes through down conductor |                    |
| Maintenance   | Not required (no battery)  |                    |
| Warranty  | 18 months  |                    |
| Installation specifications                           |  |                    |
| Down conductor fixing                                 | Clamp (included)   |                    |
| Standards   |  |                    |
| RFID Lightning Flash Counter                          | Tested according to NF EN 62 561 – 6 Ed 2                          |                    |



RFID Lightning Flash Counter Ref P8050



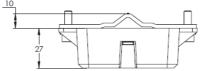
#### **Application**















### StorMonitor – Electromagnetic Storm Detector

The StorMonitor is a electromagnetic type thunderstorm detector. It registers storm activity and lightning discharges within a 15 km radius from its antenna.

The StorMonitor provides alert information to the site operation manager :

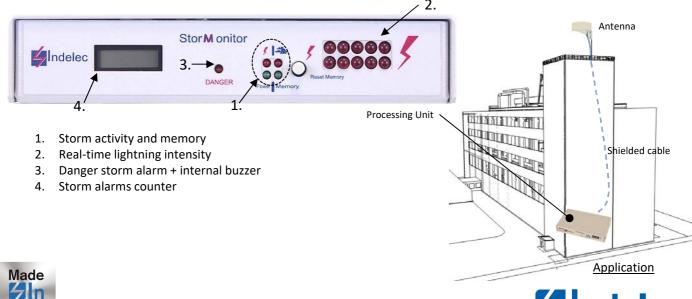
- triggering relevant alarms of nearby or approaching storms.
- · registering storm events.

On average, these alarms provide a lightning strike warning time of 15-30 minutes .

During a thunderstorm, lightning strikes radiate electromagnetic waves that are detected by the StorMonitor antenna; signals are transmitted to the processing unit which delivers real-time lightning strikes intensity and thunderstorm activity.



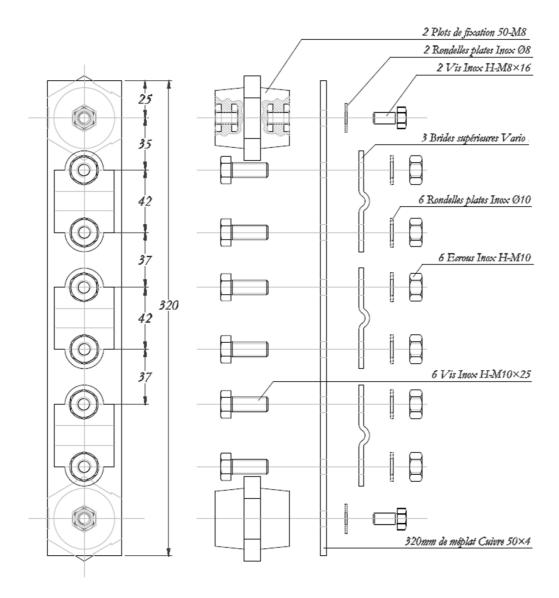
| Characteristics          | P90040                                |                          |  |
|--------------------------|---------------------------------------|--------------------------|--|
|                          | Antenna                               | Processing unit          |  |
| Dimensions ( H x L x P)  | 188 x 168.5 x 123 (mm)                | 42 x 195 x 127 (mm)      |  |
| Weight                   | 0.720 kg                              | 0.760 kg                 |  |
| Protection class         | IP 55                                 | IP 30                    |  |
| Connection (included)    | Shielded cable (15m) + RJ45 connector | 24 VDC power supply unit |  |
| Consumption              | /                                     | 50 mA                    |  |
| Maximum detection radius | 15 km                                 | /                        |  |
| Operating temperature    | -20°C à +60°C                         |                          |  |
| Standards                | IEC 62793, CEM 2014/30/UE             |                          |  |



### Copper Earth Bar – 3 way

| Characteristics | P7053   |
|-----------------|---|
| Material        | Copper  |
| Weight(Kg)      | 1.25  |
| Application     | The earth bar is used to connect different earth conductors or metallic masses together. There are 6 welded bolts (M10) which allow 6 conductors to be connected by lugs (not supplied). There are also 3 back plates allowing 3 separate 30x2 mm tape conductor to be connected without the need for drilling. |



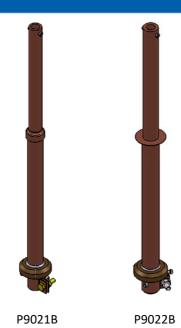




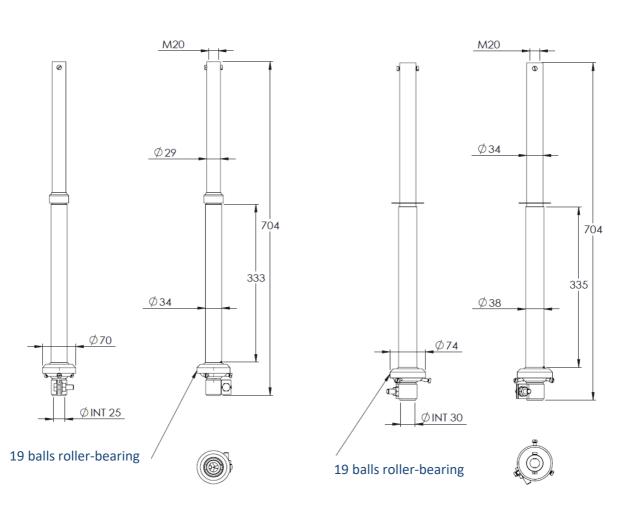


### **Heritage Building Copper Adapting Sleeve**

| Characteristics        | P9021B   | Р9022В |
|------------------------|--|--------|
| Material               | Copper   | Copper |
| Weight (kg)            | 2.000  | 2.150  |
| Internal diameter (mm) | 25   | 30     |
| Application            | Bell Tower revamping Used to fix a M20 Lighting conductor on the upper side Lower base fixed on a weathervane Down conductors clamp is included. |        |



Dimensions (mm)







DOC273a.VEN-Rev0