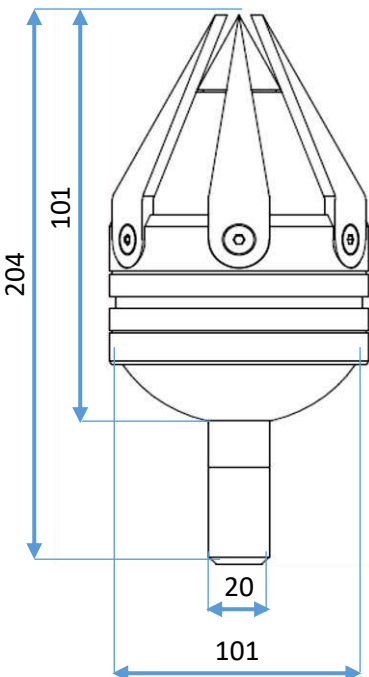


STAR® 645

EARLY STREAMER EMISSION (ESE) AIR TERMINAL



Reference	STAR645
Technical specifications	
Power Δt	45 - microsecond boot time (us)
Lightning shock	Wave 10/350 microseconds
Test 100 kA	NFC 17102
Streamer	<ul style="list-style-type: none"> System technology with controlled priming technology® High impulse voltage
Structure	<ul style="list-style-type: none"> Electromagnetic cage, with electromechanical crimping 6 stainless steel 316 differential fins
Operation	
Ascending Tracer Detection	<ul style="list-style-type: none"> Continuous measurement of ambient natural electric field
Power Management	<ul style="list-style-type: none"> Totally autonomous No external power supply
Maintenance	<ul style="list-style-type: none"> Modular parts interchangeable in factory Dimension - \varnothing 101 x 204 mm - M20 thread Tightening torque
Test system (option)	<ul style="list-style-type: none"> Star Evolution Tester Specific remote control
Impact on the environment	<ul style="list-style-type: none"> 100% recyclable
Guarantee	► 5 years manufacturer
Conditioning	
Packaging	<ul style="list-style-type: none"> Adapted to the size of the STAR Dedicated custom cradles
Size of the box	<ul style="list-style-type: none"> 205 x 103 x 103 mm 100% recyclable
Net weight	1,505 Kgs
Gross weight	1,695 Kgs (with specific box)
Certifications	
Traceability / Control	<ul style="list-style-type: none"> Laser marking or specific engraving Indestructible self-labeling system Authentication by serial number Certified reference to the order
Conformity	<ul style="list-style-type: none"> NFC17102/1995 NFC17102/2009 NFC17102/2011
Customs code	85 36 90 85



Lightning Rod - Air Terminal STAR645®

Early Streamer Emission (ESE).

STAR® range. Lightning Protection.



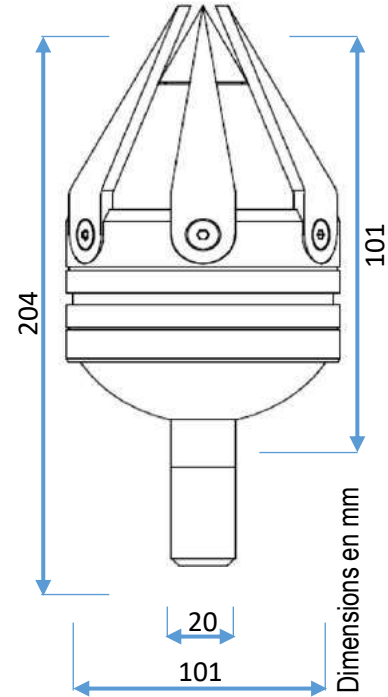
STAR® 645

Reference: STAR645

Description: **Lightning rod - Air Terminal
Early Streamer Emission**

Power: **($\Delta I = 45 \mu s$)**
▶ 6 stainless steel 316 differential fins

Net weight : 1.505 kgs
Gross weight : 1.695 kgs (Package included)
Dimensions : 204x101 mm



STAR® 645 - PROTECTION RADIUS EFFICIENCY **+45 μs**

H meters	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
2	25	32	34	36
3	38	48	51	55
4	51	65	70	73
5	62	80	83	89
10	64	83	91	94
20	65	86	97	99

Protection distances in meters





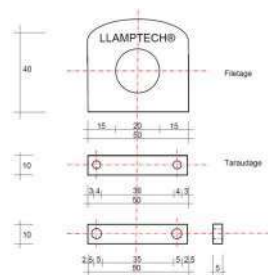
Fixing connection for STAR[®] air terminal and conductor plate or round

Reference: RAPC02

Use RAPC02 attachment fitting for lightning STAR[®], is essential to connect the STAR[®] lightning conductor at lightning protection system conductors.

The RAPC02 fitting is specifically manufactured for the STAR[®] lightning rod range.

The objective is to obtain optimal electrical conductivity between the STAR[®] early streamer emission and the lightning flow network. Easy installation.



Technical specifications

Dimensions	40X50X5mm M20 thread
Material	Aluminum Grey (Colorized anodization optional)
Supply included	Supplied assembled with stainless steel screws
Typical applications	Fixing the conductors (tape or round) at the foot of the STAR [®] lightning conductor
Adaptable products	STAR [®] , STAR [®] Evolution, MAN-R01, MAT-IE range
Standard packaging	1 unit
Unit weight	0.50 kg
Material to standards	EN NF 62305, NFC 17102
Reference	RAPC02



RESEARCH AND DEVELOPEMENT



MANUFACTURE



TECHNICAL AND COMMERCIAL



SALE EXPORT



INSTALLATION



MAINTENANCE



Adaptation sleeve for STAR® air terminal

Reference: MAN-R01

The MAN-R01 adaptive sleeve is specially designed for the **STAR® early streamer emission** range. The objective is to simplify the installation of our lightning rods on all types of supports. The sleeve also allows the leveling of the STAR® lightning conductor. Easy installation, leveling by three-dimensional tightening.



Technical specifications

Dimensions	Useful length 150mm Ø32mm inside, Ø40mm outside M20 thread
Material	Aluminum - Grey (Colorized anodization optional)
Supply included	Supplied assembled with stainless steel screws
Typical applications	Adaptation on all supports by sleeving Three-way clamping for leveling Stainless steel screws supplied
Adaptable products	STAR®, STAR® Evolution, RAPC02, MAT-IE range...
Standard packaging	1 unit
Unit weight	0.100 kg
Material to standards	EN NF 62305, NFC 17102
Reference	MAN-R01



RESEARCH AND DEVELOPEMENT



MANUFACTURE



TECHNICAL AND COMMERCIAL



SALE EXPORT



INSTALLATION



MAINTENANCE



Lightning strike counter - Series type

Reference: ED-CMPT



Lightning strike counter adapts to flat and round down conductors, and installs easily on all buildings. Its operation is compatible with Early streamer emission STAR, single lightning rod tips, mesh cages and faraday cages.

Mechanical counter without any maintenance

- ✓ Display by mechanical total,
- ✓ Direct mounting on flat or round conductors,
- ✓ Sensitivity threshold 1 kA (8/20 degrees),
- ✓ Current maximum 100 kA (10/350 degrees),
- ✓ Counters insensitive to external influences.



Reference:	ED-CMPT
Type of installation	Lightning rod, lightning conductor lightning protection
It threshold current (8/20 degrees)	1 Ka
Maximum current held 10/350	100 Ka
Measure	By magnetic coupling
Autonomy	Nothingness
Number event memory	99
Service temperature	-20C / '80 C'
Case material	Polycarbonate UL94 5V
Degree of protection	IP66
UV resistance	UL508
Mounting	Stainless bridle on 30x2mm flat conductor or Ø8mm round
Size	Case 50x50x35mm
Weight	210g/ -
Standards	NF C 17-106 / NFEN 50164-6



RESEARCH AND DEVELOPMENT



MANUFACTURE



TECHNICAL AND COMMERCIAL



SALE EXPORT



INSTALLATION



MAINTENANCE



Test clamp for lightning rod installation

Reference: ED-JC01

The test clamp facilitates periodic maintenance of the lightning protection system.

The test clamp makes it possible to measure the impedance of the lightning earth, by separating the lightning protection installation. Its installation is validated for installations with Early streamer emission STAR®, single tip lightning rods, mesh cages and faraday cages. It must be installed at 2.00m in height.



Technical specifications

Dimensions	70x52x10mm (length x width x thickness) "Lightning rod" in the mass and earth acronym in the mass
Material	Steel
Color	Grey
Supply included	Supplied with stainless steel clamping screws
Typical applications	For lightning conductor descent in: - flat conductor from 30x2mm up to 30x3.5mm max - round dia conductor. Ø8mm or Ø10mm max
Adaptable products	COND- range, ED-GP01
Standard packaging	1 unit
Unit weight	0.47 kg
Material to standards	EN NF 62305, NFC 17102, NF EN 62561
Reference	ED-JC01



RESEARCH AND DEVELOPEMENT



MANUFACTURE



TECHNICAL AND COMMERCIAL



SALE EXPORT



INSTALLATION



MAINTENANCE