

SURGE COUNTER

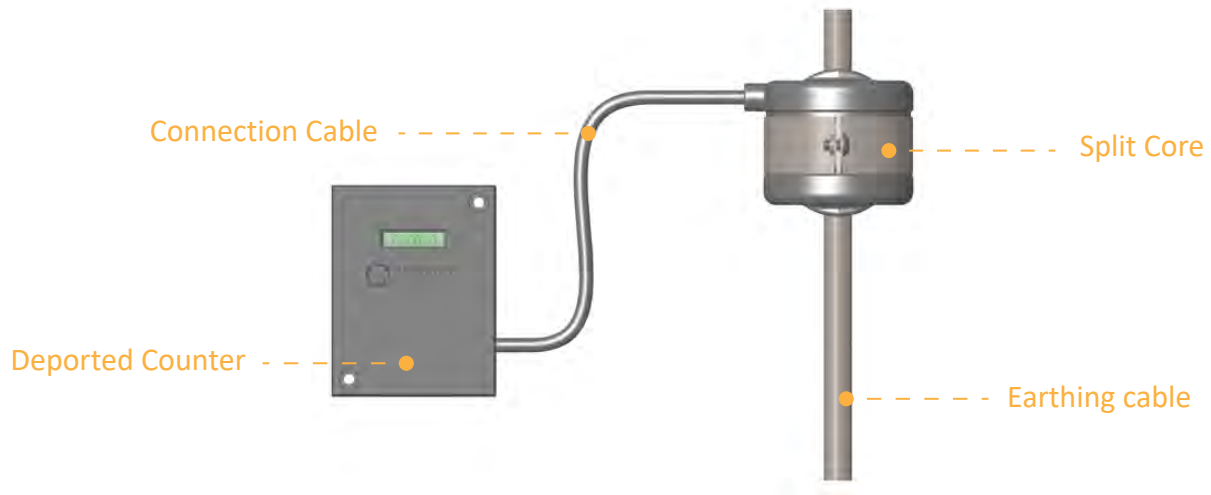
LSC lightning strike counter

- High sensitivity universal counter
- Monitoring of lightning protection equipment: lightning rod, surge arrester, EGLA, MOA, MOR, SPD, TLA, ground lead, ground rod...



- ◆ *High measurement performance: from 250A minimum to 100kA detection*
- ◆ *Outdoor device : IP67*
- ◆ *No maintenance : self powered device, no battery*

- ◆ *Easy cable installation : split core current transformer, 5 to 25mm cable diameter*
- ◆ *Easy counter installation : bottom, top, back or strap mounting. Up to 20m cable length.*
- ◆ *Durable device : glass window, stainless steel & HDPE plastic*



STREAMER Lightning Strike Counter is meant to count the number of lightning strikes based on the current flowing in a conductor .

The 250A high sensitivity Surge Counter can be installed easily on the ground leads even on existing installations thanks to its split core transformer.

The counter display can be mounted top, bottom, back, or strapped up to 20 m from the measurement point.

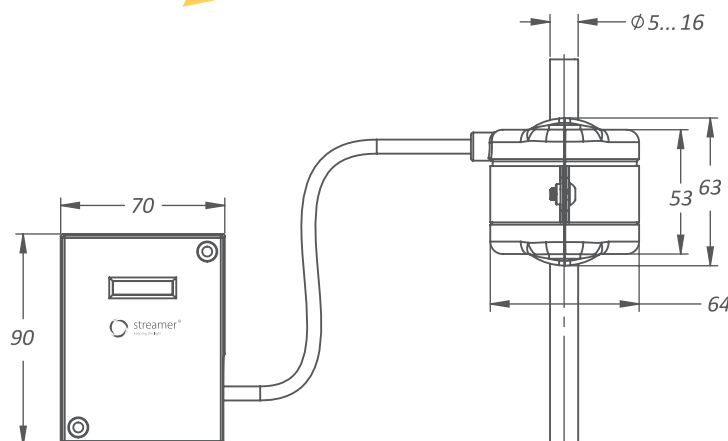
The device complies to the IEC 62561.

Thanks to its IP67, housing, rugged materials and self power, the LSC is suitable for outdoor and hazardous atmospheres.

FEATURES

- **Easy installation:**
any place on an earthing wire
- **Performance monitoring simplified:**
indication unit can be even at eyes level
- **High sensitivity:**
250 A minimum sensitive current

DIMENSIONS



KEY PERFORMANCE SPECIFICATION

| Parameters | Value |
|---|----------------------------------|
| Minimum discharge 8/20μs current counted, I _{nmin} | 250 A |
| Maximum discharge 8/20μs current counted, I _{nmax} | 100 kA |
| Maximum impulse 10/350μs discharge current counted, I _{impmin} | 200 A |
| Maximum impulse 10/350μs discharge current counted, I _{impmax} | 100 kA |
| Conductor diameter range (mm) | 5 to 16 mm > 16 mm contact us |

TECHNICAL CHARACTERISTICS

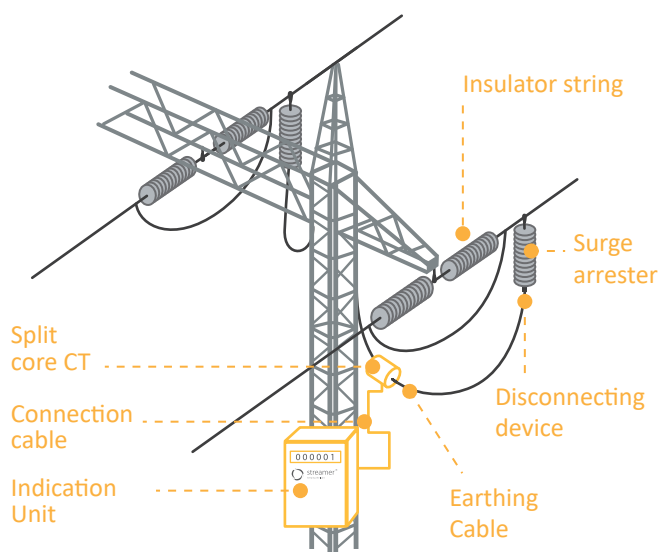
| REFERENCE | VALUE |
|---|------------------------------------|
| CONDUCTOR DIAMETER RANGE, mm | 5 to 16 35 to 150mm ² |
| MAXIMUM DISTANCE BETWEEN DISPLAY AND SENSOR | 3m |
| INSTALLATION ON THE CONDUCTOR | in parallel – clamped |
| MINIMUM DISCHARGE PEAK CURRENT DETECTED - 8/20us waveform - IEC 62561-6 | 250A |
| MAXIMUM DISCHARGE PEAK CURRENT DETECTED - 10/350us waveform - IEC 62561-6 | 100 kA |
| MINIMUM NUMBER STROKE REGISTRATION RATE | ≥ 2 counts/sec. |
| MINIMUM TIME BETWEEN 2 STROKE FOR REGISTRATION, RESPONSE TIME | 20ms |
| VOLTAGE DROP ON TERMINALS | < 1 V |
| LONG DURATION CURRENT WITHSTAND CAPABILITY | 2500A for 4ms |
| HIGH CURRENT WITHSTAND CAPABILITY | 100 kA |
| FREQUENCY, Hz | 47 to 63 |
| NUMBER OF DIGITS ON DISPLAY | 6 |
| TYPE OF DISPLAY | MECHANICAL |
| BATTERY POWER SUPPLY | NO |
| SELF POWERED | YES |
| RESET COUNTER METHOD | NO |
| MEMORY ROM - Storage of last counter value | NO |
| WEIGHT, kg | 1Kg |

TECHNICAL CHARACTERISTICS

ENVIRONMENTAL CONSTRAINTS

| | |
|---|---|
| TEMPERATURE - °C | Class C2: -40 to +70 |
| PROTECTION CLASS | IP67, NEMA 4X |
| TEMPERATURE CHANGE RATE - °C/min | Class C2: 1,0 |
| RELATIVE HUMIDITY - % | Class C2: 10 to 100 |
| MAX ABSOLUTE HUMIDITY - g/m3 | Class C2: 35 |
| MAX ALTITUDE - m | 2000 |
| ATMOSPHERIC PRESSURE - kPa | 70 to 106 |
| STANDARDS/TEST | IEC 62561-6:2018 |
| LABEL INCLUDES | Hardware version number, serial number, manufacturing batch |
| UV STABILIZED HOUSING | YES |
| STAINLESS METAL | YES |
| TYPE OF SURGE COUNTER as per IEC 62561-6:2018 | Type 1 and Type 2; outdoor |

MAINTENANCE

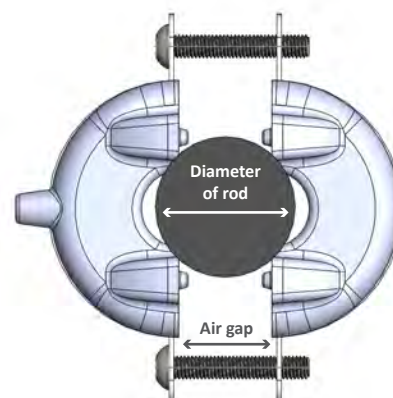


The STREAMER Lightning Strike Counter requires no maintenance and its life expectancy is above 10 years.

SPLIT CORE CHARACTERISTICS

Two versions of the split core exist, up to 16mm (standard) and up to 20 (on request). The 16mm split core is suitable for ground lead with diameters from 5 to 26 mm.

250A minimum detection is achieved for diameters from 5 to 16mm. For diameters or airgaps above, the table below provides minimum detection current.



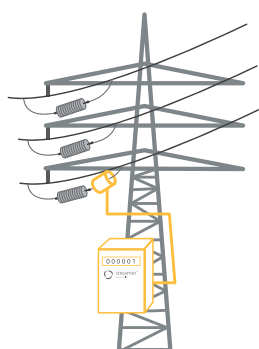
| Air gap | 0 | 2 | 4 | 6 | 10 | 15 | 20 |
|---------------------------|-----|------|------|------|------|------|------|
| Diameter of rod/conductor | <16 | 16.1 | 16.5 | 17.1 | 18.8 | 21.9 | 25.6 |

Minimum discharge current, 8/20us, A

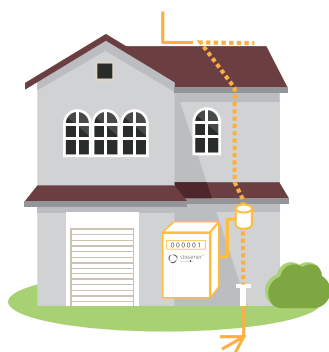
| Conductor length | 3 m | 250 | 350 | 450 | 500 | 600 | 650 | 700 |
|------------------|------|-----|-----|-----|-----|-----|------|------|
| | 10 m | 250 | 370 | 500 | 600 | 700 | 800 | 900 |
| | 20 m | 320 | 400 | 600 | 700 | 900 | 1000 | 1000 |

*Table for 16mm split core diameter. For 20mm split core, please consult us.

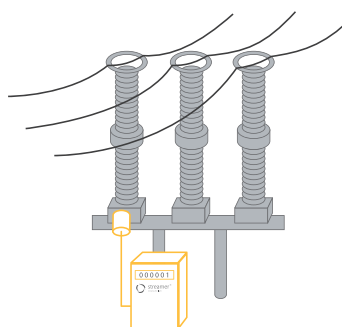
INSTALLATION



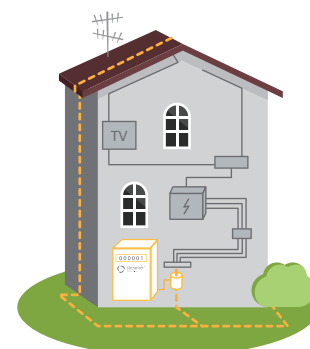
On overhead lines with LLPD, TLA or ECLA



On buildings ground lead



On substation MOA



On building SPD



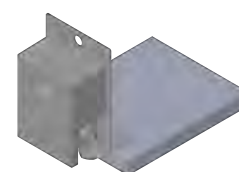
Top mounted



Strapped

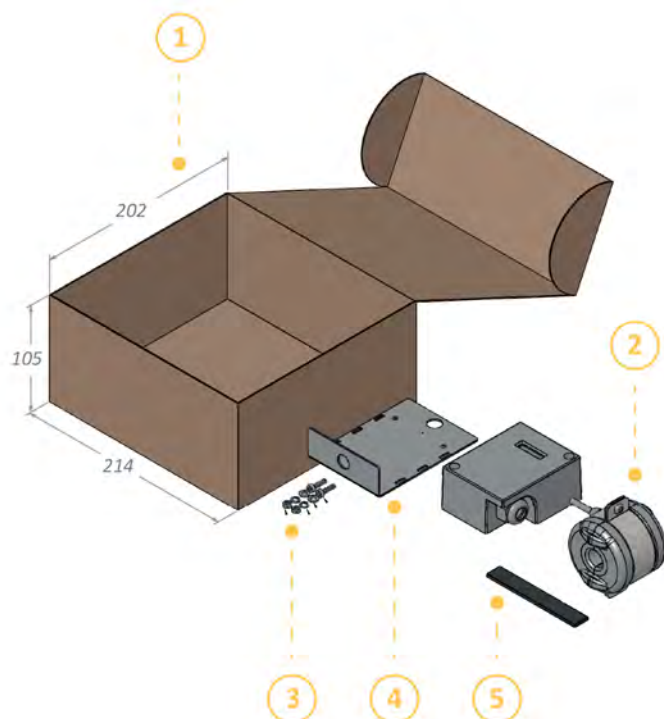


Back mounted



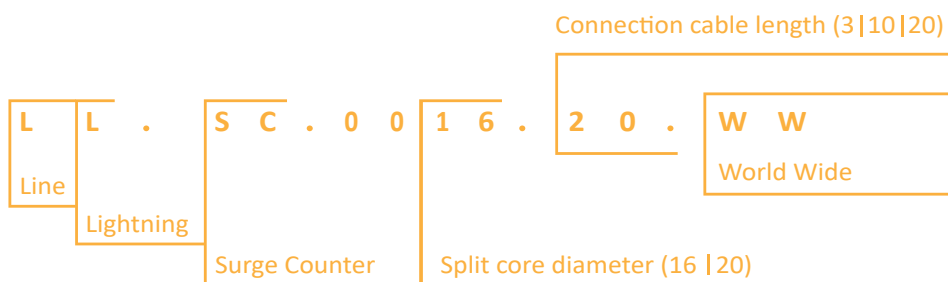
Bottom mounted

PACKAGING



| No. Item | Description | |
|----------|-------------------------------|----------|
| 1 | Box | |
| 2 | Surge counter with split core | Included |
| 3 | Screws for the mounting plate | Included |
| 4 | Mounting plate | Included |
| 5 | Rubber sheet | Included |

REFERENCES



Example: LL.SC.0016.20.WW



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