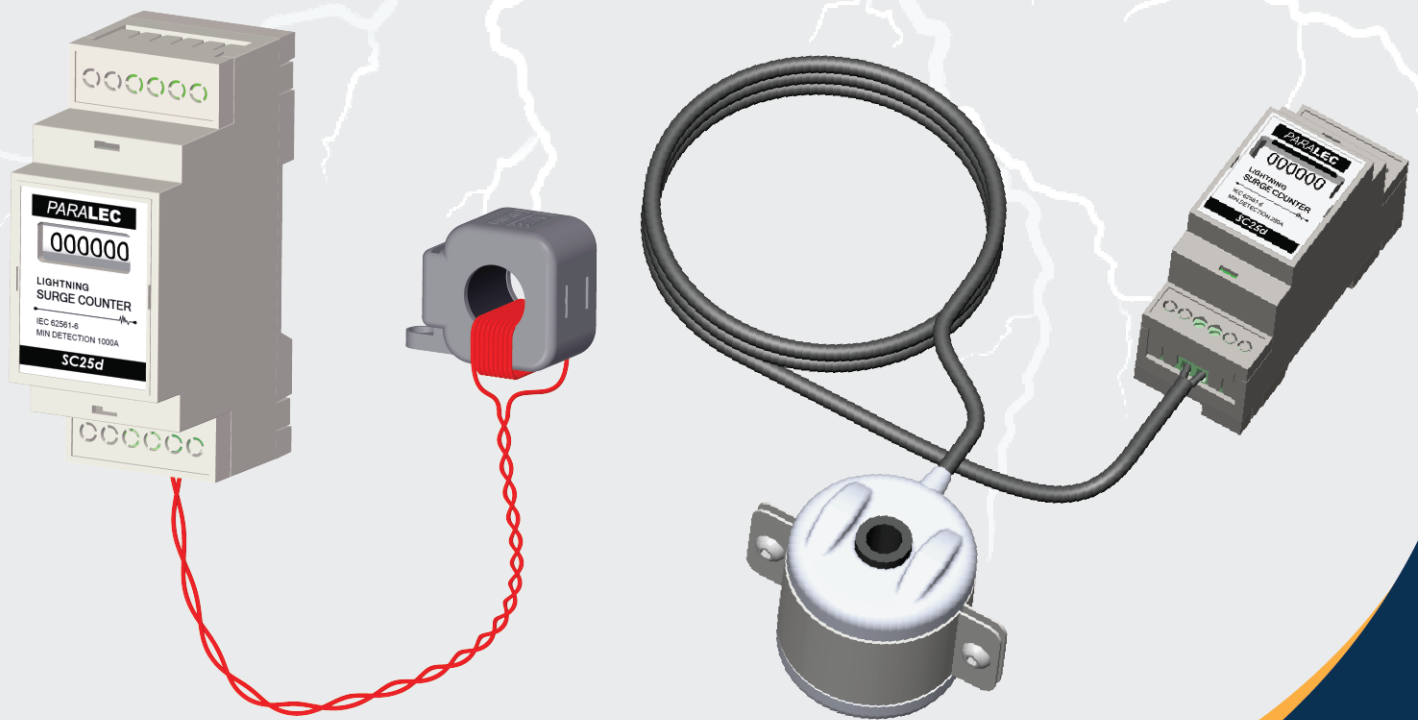


SURGE counter

LSC lightning strike counter



High sensitivity universal counter

- Monitoring of lightning protection equipment: lightning rod, surge arrester, SPD, ground lead, ground rod...
- High measurement performance: from 250A minimum to 100kA detection
- Counts lightning impulse separated by more than 50ms
- Indoor device : IP42
- Outdoor and rugged version of split core current transformer IP68
- No maintenance : self powered device, no battery
- Easy cable installation : 5 to 25mm cable diameter
- Up to 20m cable length

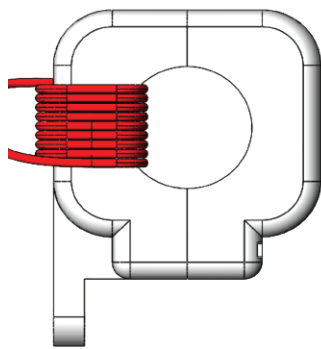
PARALEC Lightning Strike Counter is meant to count the number of lightning strikes based on the current flowing in a conductor.

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

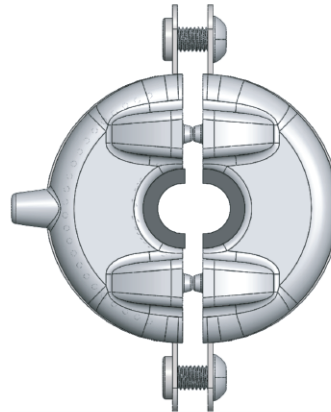
The DIN frame counter shall be back mounted on a DIN rail, up to 20m from the measurement point.

The CT and the connecting cables exists in 2 versions Indoor and outdoor IP68 rugged.

Indoor CT



Outdoor CT



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

Don't miss a thing!

Lightning events are composed of up to 10 strokes (impulses) and 3 in average. The interval between lightning stroke is in average 50ms, the SC25d is able to count every stroke/impulse during a lightning event down to 250A so you won't miss a thing.

Minimum discharge 8/20 μ s current counted, I_{nmin}	250 A
Maximum discharge 8/20 μ s current counted, I_{nmax}	100 kA
Minimum impulse 10/350 μ s discharge current counted, I_{impmin}	250 A
Maximum impulse 10/350 μ s discharge current counted, I_{impmax}	100 kA
Conductor diameter range (mm)	a) 5-16 mm with maximum sensitivity b) 17-26 mm reduced sensitivity (check page 5)
Counts lightning impulse separated by more than 50ms	



EARTHING CONNECTION	
EARTHING CONDUCTOR DIAMETER RANGE, mm	Outdoor version : 5 to 16 mm Indoor version : 2 to 12 mm
MAXIMUM DISTANCE BETWEEN DISPLAY AND SENSOR	20 m
INSTALLATION ON THE CONDUCTOR	in parallel - clamped
LIGHTNING EVENT COUNTER	
INDICATION OF COUNTER	6 digits
TYPE OF DISPLAY	Mechanical
MINIMUM DISCHARGE PEAK CURRENT DETECTED - 8/20us waveform - IEC 62561-6	Outdoor version : 250 A Indoor version : 300 A
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	50 ms
VOLTAGE DROP ON TERMINAL	< 1 V
LONG DURATION CURRENT WITHSTAND CAPABILITY	2500 A for 4 ms
HIGH CURRENT WITHSTAND CAPABILITY	100 kA
FREQUENCY , Hz	47 to 63
BATTERY POWER SUPPLY	NO
SELF POWERED	YES
RESET COUNTER METHOD	NO
MEMORY ROM - Storage of last counter value	NO
WEIGHT, kg	0.5
ENVIRONMENTAL CONSTRAINTS	
TEMPERATURE °C	Class C2: -40 to +70
PROTECTION CLASS	Outdoor version : IP68 Indoor version : IP65
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
TYPE OF SURGE COUNTER as per IEC 62561-6:2018	Type 1 and Type 2

MAINTENANCE

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

The 2 versions of split core are suitable to clamp with the earthing cable or ground rod with different diameters.

The tables below provide each CT type's current detection performance and the supported diameter of the conductor.

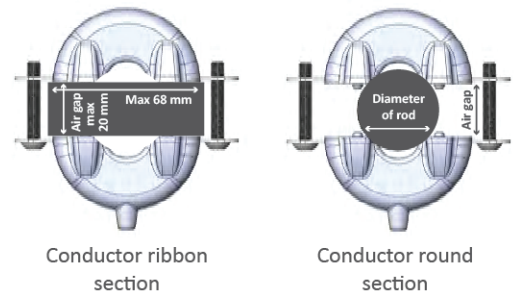
	Indoor CT	Outdoor CT
Supported diameter of conductor	< 13 mm	< 25.6 mm
Air gap adjustment	No	For clamping with conductor >16 mm diameter

Minimum discharge peak current detection/conductor length

Conductor length	Minimum discharge current, 8/20us, A	
	Indoor CT	Outdoor CT
3m	300	250
10m	400	250
20m	1000	320

The outdoor split core is suitable for ground lead with diameters from 5 to 26 mm. 250A minimum detection is achieved for outdoor type split core diameters from 5 to 16 mm

For diameters or air gaps above, the table below provides minimum detection current



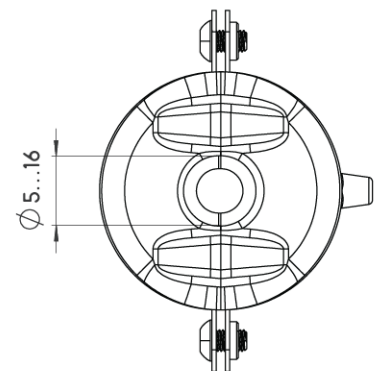
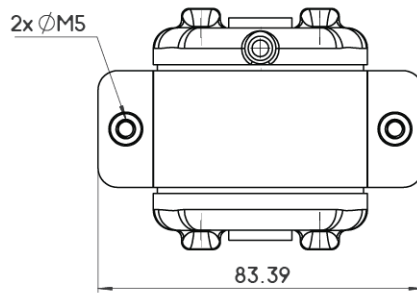
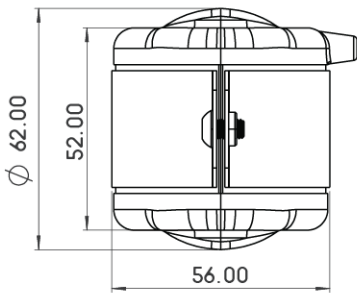
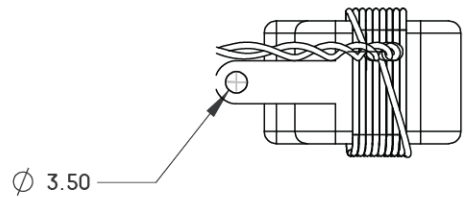
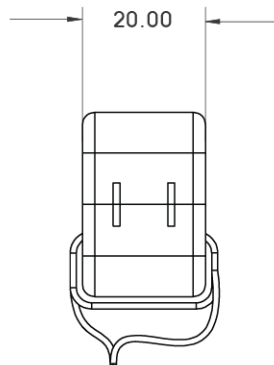
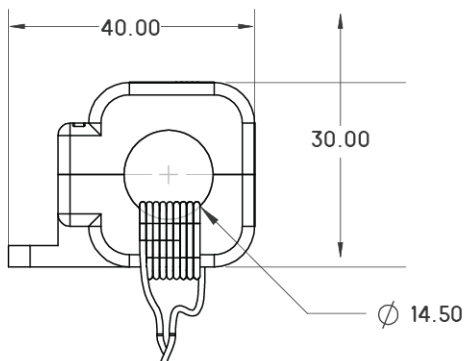
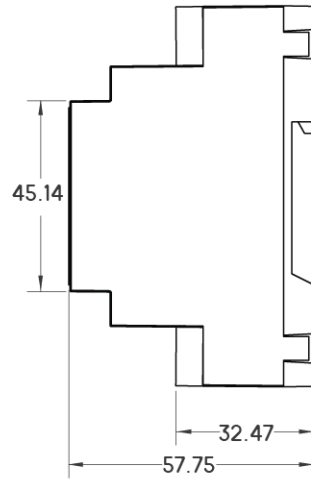
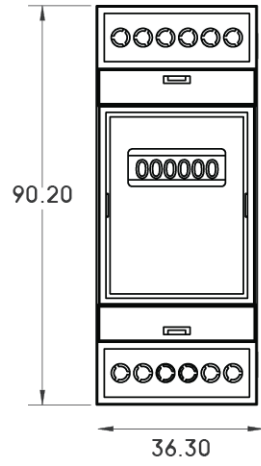
Minimum discharge current, 8/20us, A							
Airgap (mm)	0	2	4	6	10	15	20
Diameter of rod/conductor (mm)	<16	16.1	16.5	17.1	18.8	21.9	25.6

Conductor length	Minimum discharge current, 8/20us, A							
	3m	250	350	450	500	600	650	700
	10m	250	370	500	600	700	800	900
	20m	320	400	600	700	900	1000	1000

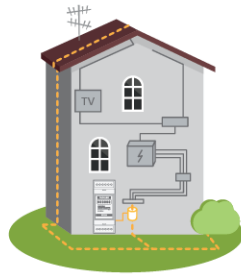
DIMENSIONS & PARTS



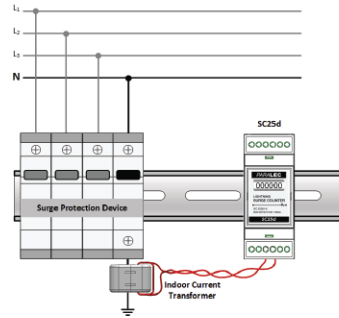
PARALEC
energy solutions



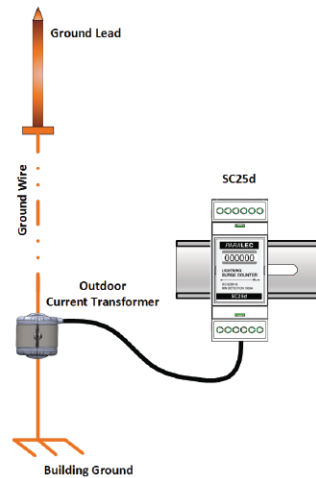
INSTALLATION



On building SPD



On building ground lead



PRODUCT RANGE

	CURRENT TRANSFORMER	CONNECTION CABLE	REFERENCE
SC25d	WITH Indoor CT	3 meters	10111111
		10 meters	10113111
		20 meters	10114111
	WITH outdoor rugged IP68 CT and cable	3 meters	10111211
		10 meters	10113211
		20 meters	10114211



PARALEC ENERGY CO., LTD.

Europe
Le Mathis, 204 avenue de Colmar, 67100 Strasbourg
FRANCE
TEL : +33 7 85 71 90 63

www.paralec.com
www.surge-lightning-arrester-monitoring.com

Asia
1000/5-6 Liberty Plaza, 20th Floor, Soi.Thonglor,
Sukhumvit 55 Rd., Kongtun Nua, Wattana, Bangkok
THAILAND
TEL : +66 (0)2 381 5886

Email : info@paralec.com
LINE : @paralec