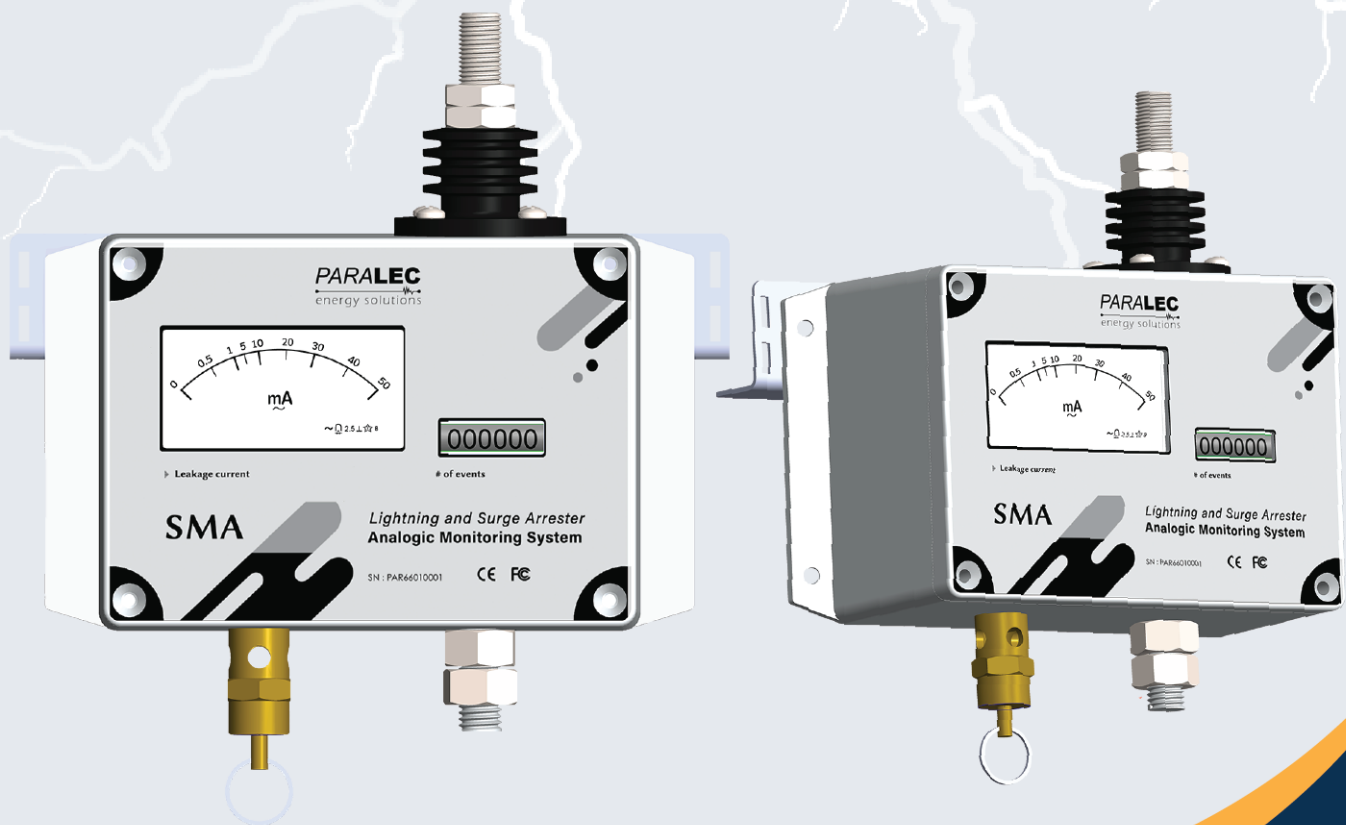


Surge & Lightning Monitoring Device

For Metal Oxide Surge Arresters from 6 to 800kV AC



Monitoring of surge arrester, MOA, MOR, SPD, TLA.

- Analogic total leakage current measurement from 0 to 50 mA
- Surge counting from 100 A minimum to 100 kA detection
- Outdoor and durable device : IP65, glass window, stainless steel, aluminium
- No maintenance : self powered device, no battery
- Easy counter installation : bottom, top, back or strap mounting.

Surge & Lightning Monitoring

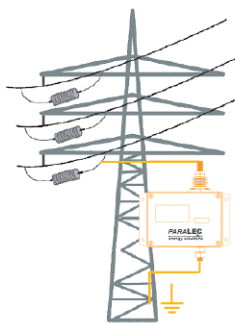
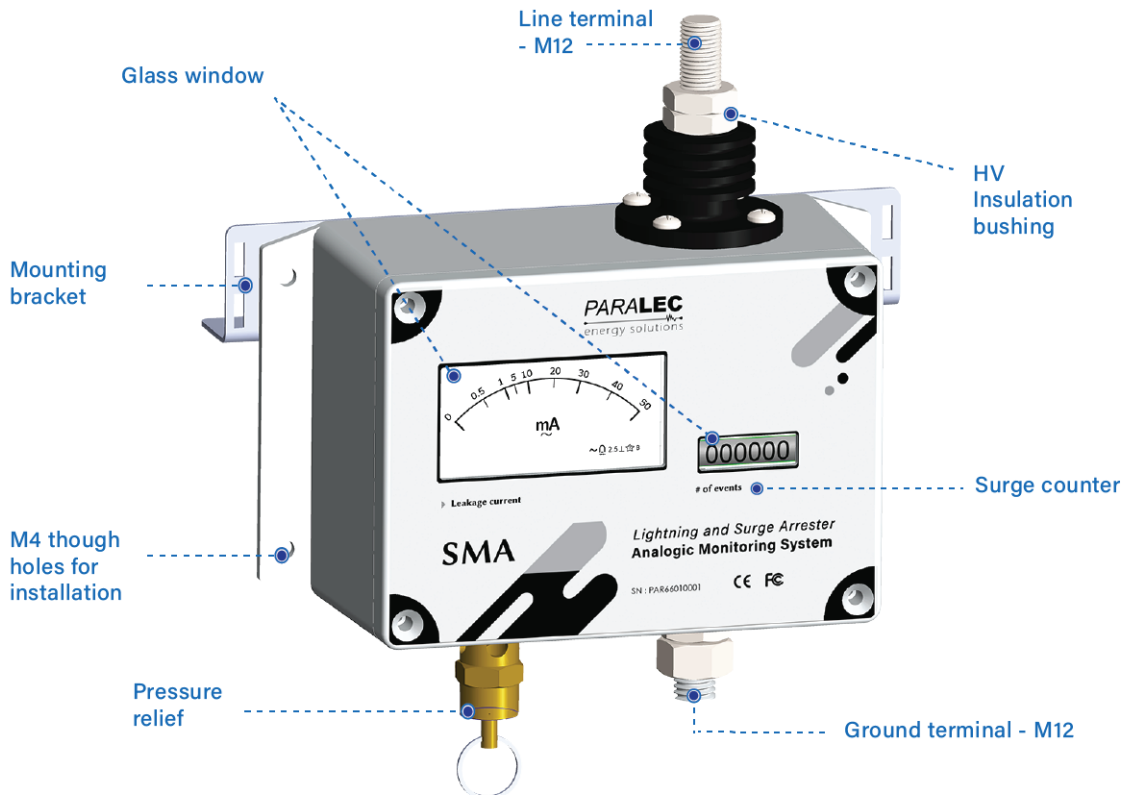


Paralec has dedicated its research activities to lightning surge qualification and protection. This new range of products aims at helping our customers to understand the origin of surges, their parameters and impact on equipment.

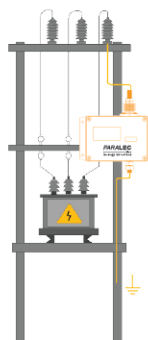
PARALEC SMA is an electro-mechanical leakage measurement device and surge counter. The leakage meter provide the value of the total leakage current flowing through the ground conductor from 0 to 50 mA. The surge counter is meant to count the number of lightning strikes based on the current flowing in a conductor.

The SMA shall be installed in series on the ground leads, at the ground terminal of the metal surge arrester. It can be mounted from the top, the bottom or strapped. Terminals are used either way. The device complies to the IEC 62561-6.

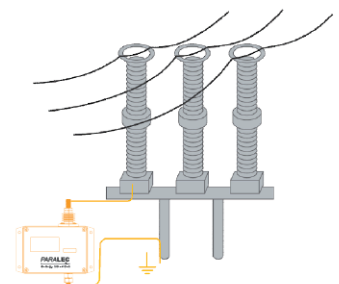
Thanks to its IP65, housing, rugged materials and self power, the SMA is suitable for outdoor and hazardous environment.



On overhead lines with TLA



PMT MOA



On substation MOA

TECHNICAL CHARACTERISTICS



PARALEC
energy solutions

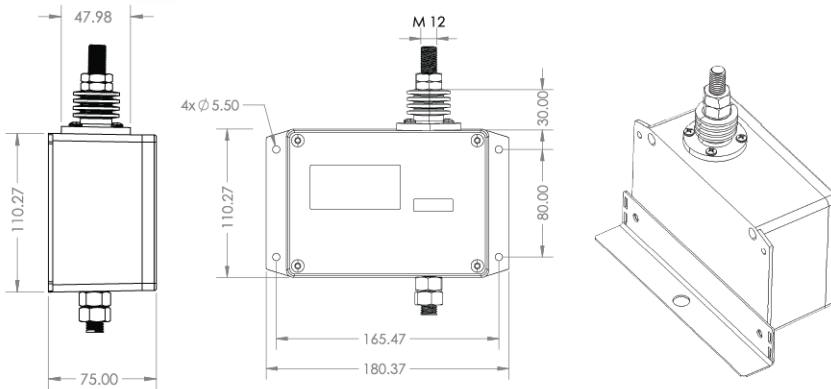
MODEL	SMA01
PART NUMBER	LL.SM.A0.S1.01.WW
EARTHING CONNECTION	
CONDUCTOR DIAMETER RANGE	5 to 25 35 to 300 mm ²
INSTALLATION ON THE CONDUCTOR	Terminals, M12 threads, in series
LIGHTNING EVENT COUNTER	
INDICATION OF COUNTER	6 digits
MINIMUM DISCHARGE PEAK CURRENT DETECTED - 8/20us waveform - IEC 62561-6	100 A
MAXIMUM DISCHARGE PEAK CURRENT DETECTED - 10/350us waveform - IEC 62561-6	100 kA
RESPONSE TIME	≥ 2 counts/sec
MINIMUM TIME BETWEEN 2 STROKE FOR REGISTRATION, RESPONSE TIME	20 ms
LONG DURATION CURRENT WITHSTAND CAPABILITY	2500 A for 4 ms
HIGH CURRENT WITHSTAND CAPABILITY	100 kA
LEAKAGE CURRENT MEASUREMENT	
AMMETER SCALE	0-50 mA
READING CURRENT	peak current value/√2
ACCURACY CLASS	2.5
FREQUENCY, Hz	47 to 63
OTHERS	
BATTERY POWER SUPPLY	NO
SELF POWERED	YES
RESET COUNTER METHOD	NO
WEIGHT, kg	1.3 kg
ENVIRONMENTAL CONSTRAINTS	
TEMPERATURE - °C	Class C2: -40 to +70
PROTECTION CLASS	IP65, NEMA 4X
TEMPERATURE CHANGE RATE - °C/min	Class C2: 1,0
RELATIVE HUMIDITY - %	Class C2: 10 to 100
MAX ALTITUDE - m	2000
ATMOSPHERIC PRESSURE - kPa	70 to 106
STANDARDS/TEST	IEC 62561-6
LABEL INCLUDES	Serial number, manufacturing batch
UV STABILIZED HOUSING	YES
STAINLESS METAL	YES
TYPE OF SURGE COUNTER as per IEC 62561-6	Type 1 and Type 2; outdoor

DIMENSIONS

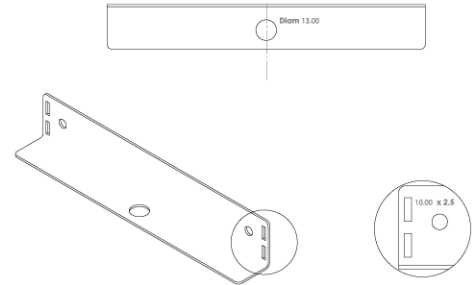


PARALEC
energy solutions

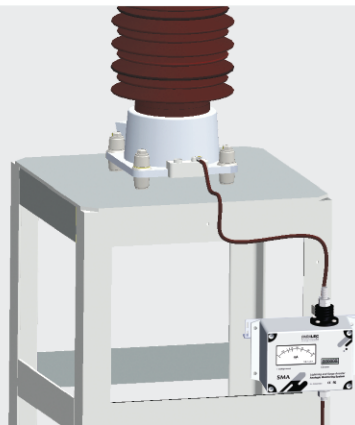
SMA



Mounting bracket (included)



On MOA in Substation



PRODUCT RANGE

1,2,3	4	5	6	7	8
102	1	1	1	1
SMA	Scale	N/A	N/A	N/A	N/A

4	50mA scale	
1		
2		30mA scale
3		10mA scale



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