

TECHNICAL DATA SHEET

# Lightning protection

## ESP LSC Lightning strike counter



The Furse ESP LSC lightning strike counter detects and counts lightning strikes (to IEC/BS EN 62561-6) as part of a structure's Lightning Protection System (LPS).

### Features & benefits

- Suitable for both indoor and outdoor installation
- Virtually maintenance free, with all key components stored in a robust weatherproof (IP65) housing
- Anticipated battery design life up to 4 years, for reliable, long-standing performance
- Straightforward mounting around down conductors utilising the mounting plate and screws without the need to remove the down conductor
- Records lightning strikes regardless of the polarity of the discharge current

### Application

The ESP LSC unit is typically located on the down conductors of the LPS, to record the number of direct lightning strokes received to the structure.

The ESP LSC unit also records the time and date of the event, which is displayed on the LCD screen.

### Installation

Connect the counter to the conductor using the mounting plate and screws provided. Mounting plates are provided for flat tape, and also circular conductor.

For simplicity of installation, particularly on existing installations, the ESP LSC unit is best sited in a suitable position above the test clamp of the down conductor (for convenient periodic inspection). The test clamp point is where the conductor can be easily disconnected.

Ensure the conductor is reconnected to the test clamp after installation of the ESP LSC unit.

For additional security, install down conductor clips 25 cm either side of the unit. Contact Furse for advice on suitable clips.



Note: Illustration above shows the unit mounted using the mounting bracket for flat tape.

ESP LSC - Technical specification

Electrical specification		ESP LSC
<b>ABB order code</b>		7TCA085410R0054
Threshold current $I_{ic}$ (minimum)		1 kA
Maximum counting withstand current $I_{mcw}$ (10/350 $\mu$ s)		100 kA
Power source:	- Battery type	2 x CR17335SE Lithium batteries (user replaceable)
	- Battery life (normal operation)	4 years approx
Display specification		
Maximum display reading		999
Memory capacity		Last 999 events data stored
Time and date format		hh:mm:ss (24 hr format) dd/mm/yy
Clock stability		Typically $\pm$ 30 s/month
Mechanical specification		
Temperature range		-20 to +60 °C
Connection type		Stainless steel mounting plate, screw mounted
Conductor size: <sup>(1)</sup>	- Flat tape	30 x 6 mm
	- Solid circular / stranded	6 - 10 mm $\varnothing$
Case material		Polycarbonate, ingress rated to IP65
Weight		0.45
Dimensions		140 x 89 x 44 mm

<sup>(1)</sup> Conductor size includes any outer PVC sheathing.

