

EMP/Lightning Protectors for LF and GPS

For protection against lightning strikes, Time & Frequency Solutions provide an optional EMP/Lightning Protector for use with corresponding LF or GPS antennas.



Features

- Fitted in line between the corresponding LF or GPS Antenna and the Timing System, and can be easily mounted to an earthed panel.
- Almost no attenuation loss so it will not affect the reception performance of the Timing System.
- Lightning strikes to the antennas are safely discharged to earth via the internal gas capsule.
- Replacement Gas Capsules are available from Time & Frequency Solutions and are simple to replace.

EMP/Lightning Protector Specifications

Product Configuration

Main path Connector:

Unprotected Side 50 Ω N (female)

Protected Side 50 Ω N (female), bulkhead

Mounting:

Easily mounted to an earthed bulkhead

Electrical Data:

RF Impedance:

LF
50 Ω

GPS
50 Ω

Frequency Range:

0 MHz to 1,000 MHz

0 MHz to 2,500 MHz

Return Loss*:

>26.00 dB

>26.00 dB

Insertion Loss*:

<0.10 dB

<0.20 dB

*with gas capsule 73 Z-0-0-47 (230 V)

Protection:

Surge-current-handling capability:

40 kA once and 20 kA multiple (test pulse 8/20 μ Seconds)

Residual Pulse Energy:

LF: 550 μ Joules typical; GPS: 600 μ Joules typical. (test pulse 4 kV 1.2/50 μ Seconds / 2 kA 8/20 μ Seconds)

Environmental Data:

Temperature:

LF
-40°C to 85°C

GPS
-40°C to 100°C

Weight:

87g

126G

Water Ingress:

IP 65 according to IEC 60529, data refers to the coupled state

Please quote relevant part number when ordering:

Source/Version	Part No.
LF	HLFEMPFILTER
GPS	HGPSEMPFILTER_2