
## Key Features

- *Quarter-wave stub technology*
- *Integrated high-pass filter*
- *Broad-band design*
- *Space saving inline design*
- *Compliant to IEC 61643-21*

# BAT-ANT-Protector m-f

## 943 903-373

### Overvoltage protector

***Increased Protection:*** *Increased protection of WLAN equipment against over-voltages*

***Ease of installation:*** *The protected side pointing towards the WLAN equipment is clearly marked*

## Separately available Documentation

- *Mounting Instructions*
- *3D Model (STP)*

## Contents

# Technical Specifications

## Product Description

| | |
|---|---|
| **Description** | This EMP protector increases protection of WLAN equipment from electrostatic discharges, especially in outdoor environments. For example, in trackside installations above ground as well as inside tunnels. |
| **Part Number** | 943 903-373 |
| **Product Name** | BAT-ANT-Protector m-f |

## Electrical Data

| | |
|---|---|
| **Frequency (MHz)** | 2000 – 6000 |
| **Impedance (Ohm)** | 50 |
| **Return loss** | ≥ 20 dB |
| **Insertion loss** | ≤ 0.2 dB |
| **RF CW power** | ≤ 300 W |
| **PIM 3rd order** | Not specified |
| **Surge current handling capability** | 50 kA (test pulse 8/20 µs) |
| **Residual pulse energy** | 0.0001 µJ typically (test pulse 4 kV 1.2/50 µs / 2 kA 8/20 µs) main path - protected side |

## Ports


| | Port 1 | Port 2 |
|---|---|---|
| **Connector** | N, plug (male) | N, jack (female) |
| **Protection** | Unprotected | Protected |

## Mechanical Data

| | |
|---|---|
| **Weight (kg)** | 0.108 |
| **Number of matings** | 100 |

## Environmental Data

| | |
|---|---|
| **Operating temperature (°C)** | **-40…+85** |
| **RoHS 2011/65/EU (including 2015/863 and 2017/2102)** | Compliant |

| | |
|---|---|
| **Ingress protection** | IP68 (according to IEC 60529 in coupled state) |
| **IEC 61643-21** | Compliant |

# Material Data

| | Material | Surface Plating |
|---|---|---|
| **Housing** | Aluminium | Chromatized |
| **Port 1 center contact** | Brass | Gold plating (without Nickel underplating) |
| **Port 2 center contact** | Copper Beryllium Alloy | Gold plating (without Nickel underplating) |

# Disclaimer

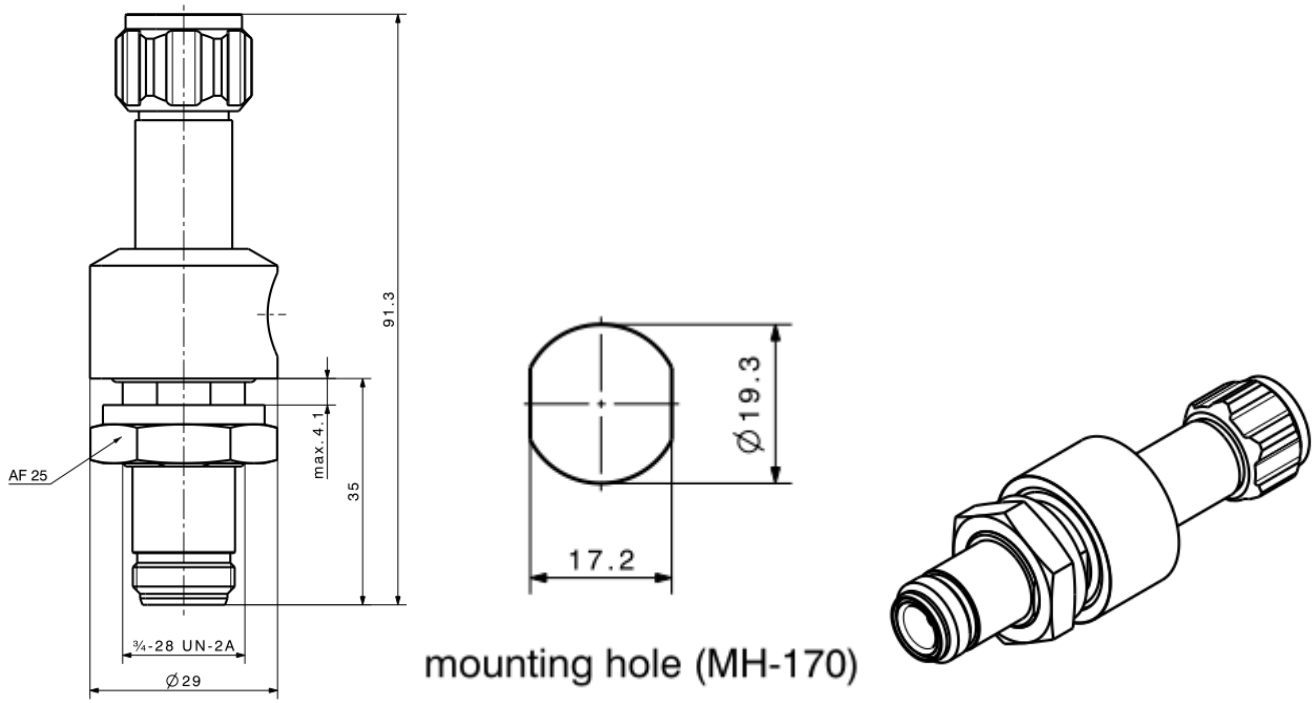
## Recommendation

If this protector is mated with connectors made of copper-alloy base material and tri-metal or nickel plating the connector area must be taped to improve long-term durability.

## Maintenance

Quarter-wave lightning EMP protectors are basically maintenance-free. However, the inspection activities shall be carried out on the basis of the standard and the technical principles of IEC 62305-3. We recommend to check the condition of the grounding and bonding system, connection of the interface and the functionality of the QWS. QWS protectors which are heavily damaged by lightning current overload (in excess of specification) will lead to increased reflections and will be detected by the return loss tracing circuit of the transmitter or by an ohmic test. Pass criteria is: zero ohm between inner conductor to ground.

# Outline Drawings



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