



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)

Key Features

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

Contents

Technical Specifications.....	2
Product Description.....	2
Electrical Data.....	2
Ports	2
Mechanical Data	2
Environmental Data	2
Material Data	3
Disclaimer.....	3
Outline Drawings	3
Package contents.....	4



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

All Rights Reserved. Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with all applicable environmental programs as listed in the product specification. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.



Ingress protection
IEC 61643-21

IP68 (according to IEC 60529 in coupled state)
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

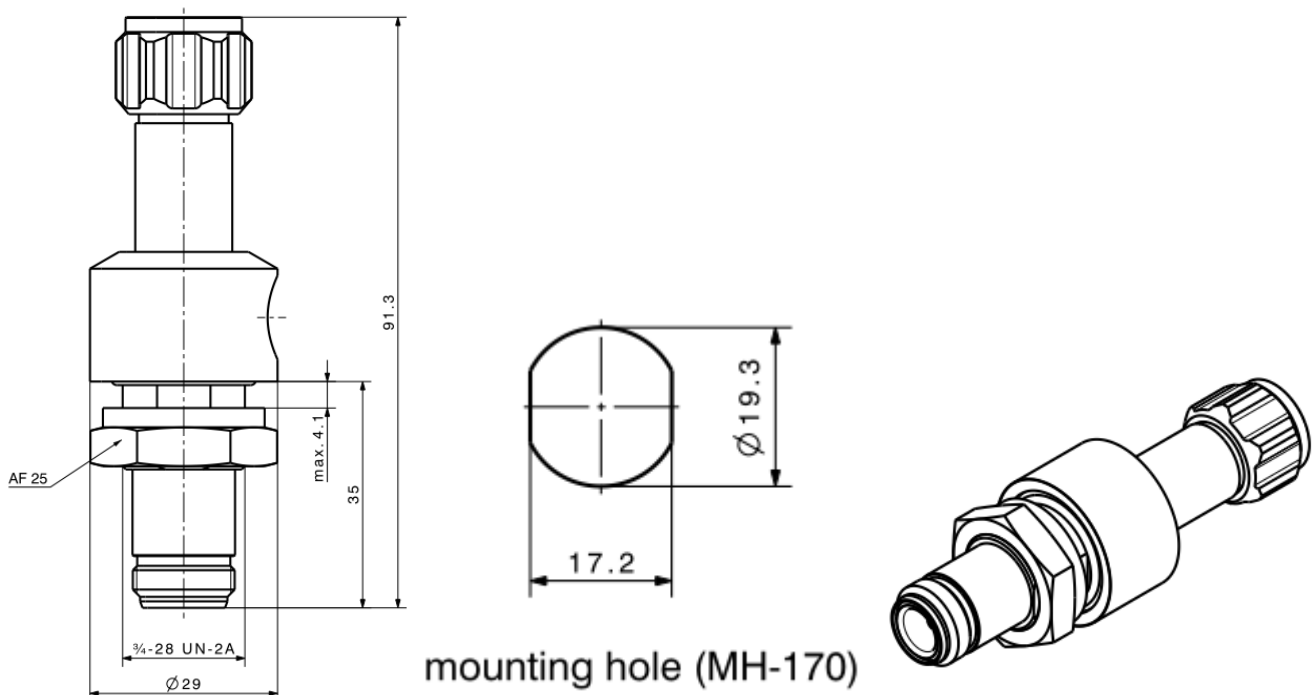
Recommendation

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.

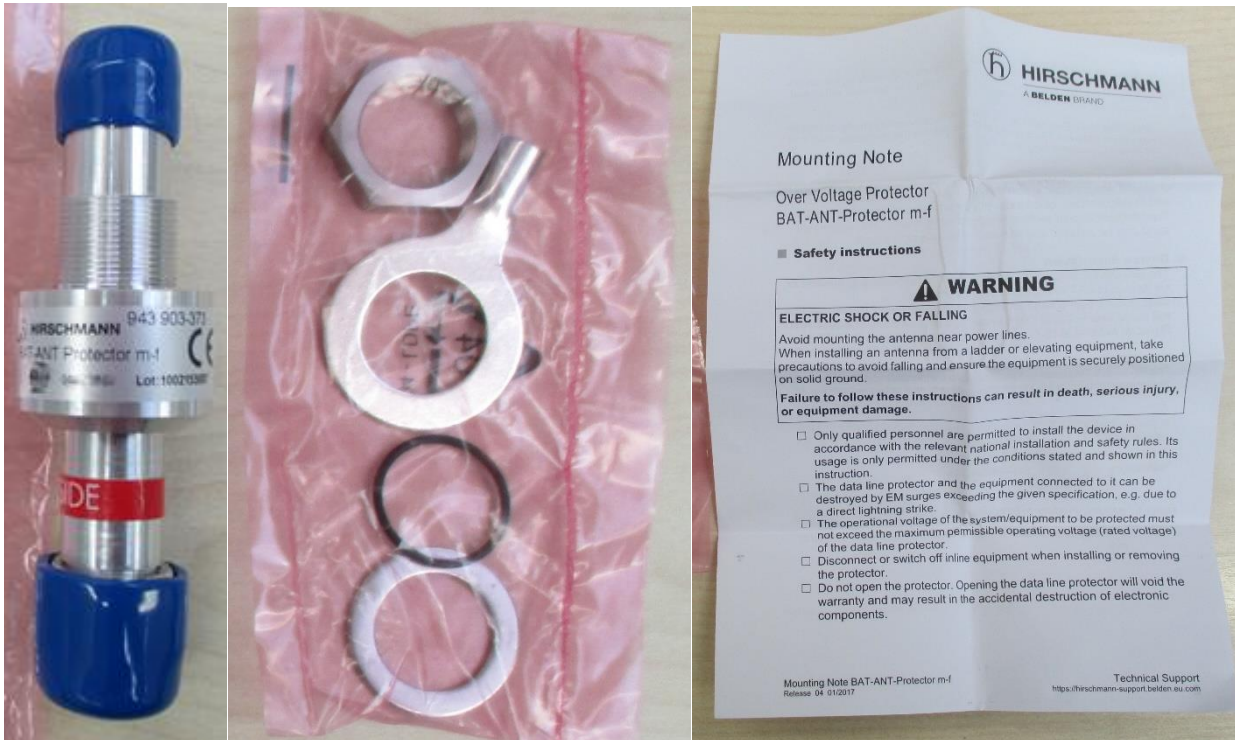
Outline Drawings



All Rights Reserved. Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with all applicable environmental programs as listed in the product specification. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.



Package contents



All Rights Reserved. Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with all applicable environmental programs as listed in the product specification. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.