

Antenna, model AN-F1

For partial discharge detection using UHF

WIKA data sheet SP 63.26

Applications

- Condition monitoring for medium-voltage switchgear in conjunction with the reader (AMS01), the passive SAW wireless temperature sensor (TSA-EV11) and the environmental sensor (EXT-ENV-SENS)
- Measurement and monitoring of partial discharges
- Compatible with ANSI and IEC medium-voltage standards
- New installation or retrofitting of medium-voltage switchgears

Special features

- Easy to install and commission
- Maintenance-free
- Automatic PD calibration
- Comprehensive data communication (local, remote, Modbus®, SCADA, IIoT PD service)

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Description

The advanced monitoring solution for monitoring partial discharge and temperature in medium-voltage switchgear uses surface acoustic wave and ultra high frequency sensing technology. It features an integrated IIoT platform to improve the safety, efficiency and durability of medium-voltage switchgear.

By using condition monitoring systems, approx. 75 % of disruptions can be prevented through early fault detection, thus reducing both maintenance costs and intervals.

The AN-F1 antenna is available with different cable lengths and is connected to the AMS01 reader. It uses UHF to detect partial discharges in medium-voltage switchgear.

The antenna can only be used in metal cavities such as control cabinets.

It is IEC 62271 compliant and can therefore be used in switchgear worldwide without a licence.

Specifications

Operating conditions	
Place of use	Indoor
Temperature of use / Operating temperature	-25 ... +85 °C [-13 ... +185 °F]
Mounting type	2 x M5 screws (not included)
Ingress protection of the complete instrument	IP54
Case	ABS, black
Weight	Approx. 0.22 kg [0.47 lb]

Interface	
Female connector	Female SMB

Characteristics	
Mode	Passive
Radiation characteristics	Omnidirectional
Requirements	The antenna must be fixed to a metal ground plane such as the walls of the chamber. No metal parts must be within 100 mm [3.94 in] around the antenna.

Approvals

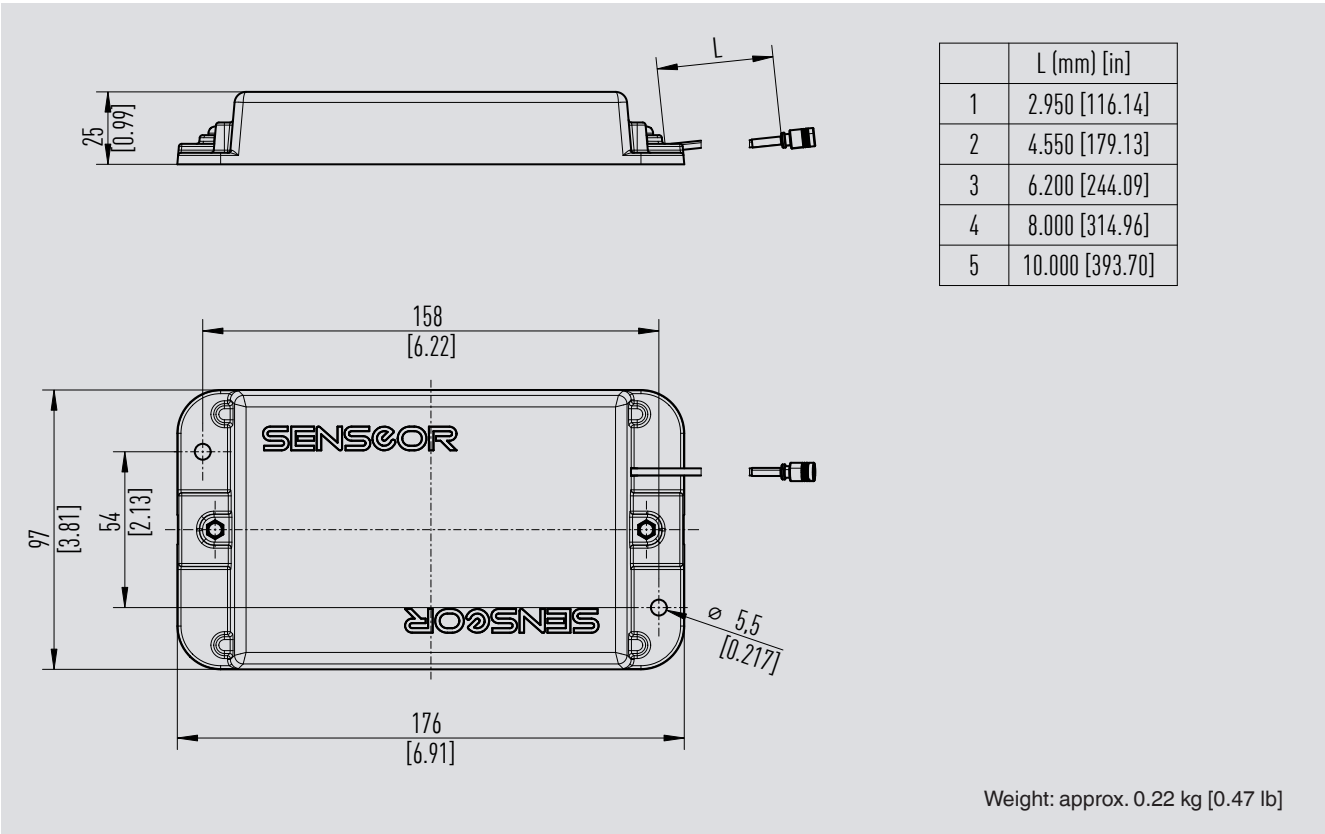
Logo	Description	Region
	EU declaration of conformity	European Union
	RED – Radio Equipment Directive EN 300328, harmonised frequency band 2,400 ... 2,500 MHz is used; Bluetooth® 5.2 Low Energy (BLE), max. transmission power 3.3 mW. The instrument may be used without restrictions in the EU and in the EFTA countries.	
	RoHS directive	
-	NCC - CCAM Radio approval	Taiwan
-	WPC Radio certification	India

Optional approvals

Logo	Description	Region
	UL Safety (e.g. electrical safety, overpressure, ...)	USA and Canada

→ For approvals and certificates, see website

Dimensions in mm [in]



Accessories and spare parts

Model	Description	Order number
	2.95 m [116.14 in] extension cable for antenna	14604256

Cable length	Order number
AN-F1-295	14578124
AN-F1-455	14578134
AN-F1-620	14578136
AN-F1-800	14578139
AN-F1-1000	14614807

Ordering information

To order the described product the order number is sufficient.

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