

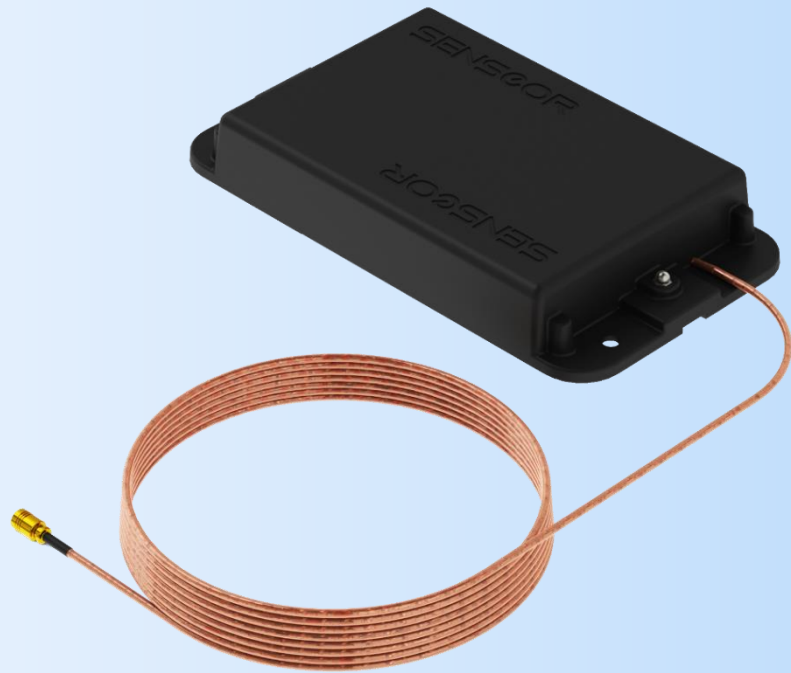
# 24/7 ASSET MONITORING SOLUTION ENERGY

## AN-F1 SPECIFICATIONS

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## APPLICATION

This datasheet describes the specifications of the *AN-F1 low profile antenna*. Connected to an **HTR02-2AWS** or **HTR02-6AWS(-PDD)** transceiver, this last generation of antenna is designed for the *SENSeOR* temperature and partial discharge monitoring system.

It is common to two use cases:

- The measurement of temperature SAW sensors
- The partial discharge detection

This antenna has been designed specifically to measure inside a switchgear cubicle and operation under high current and voltage.

This datasheet covers the following products:

- **AN-F1-295**: Antenna with *295 cm* cable length.
- **AN-F1-455**: Antenna with *455 cm* cable length.
- **AN-F1-500**: Antenna with *504 cm* cable length.
- **AN-F1-620**: Antenna with *620 cm* cable length.
- **AN-F1-800**: Antenna with *800 cm* cable length.

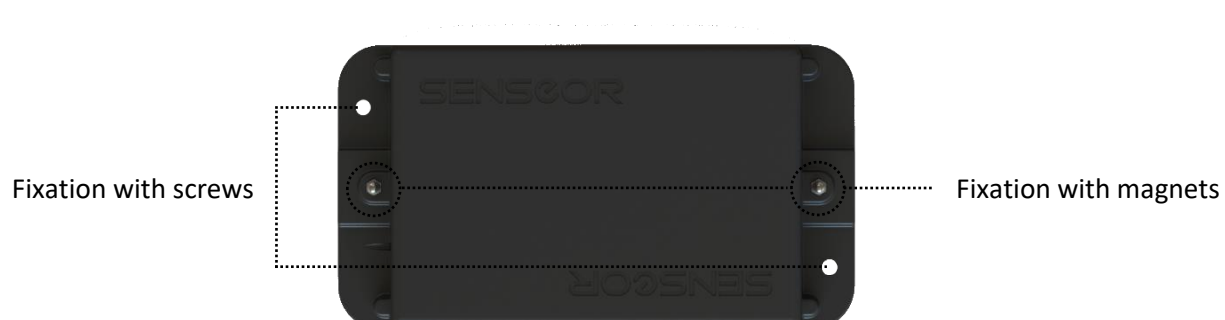
The standard coaxial cable length is *295 cm* (reference *AN-F1-295*).

A *620 cm* coaxial cable specific model (reference *AN-F1-620*) is also available when antennas are installed in the cable compartment of the cubicle. In case of multi-cubicle configurations, the same transceiver is used for the three adjacent cubicles.

For specific needs, other coaxial cable lengths are available: *455 cm*, *504 cm* and *800 cm* (antenna references *AN-F1-455*, *AN-F1-500*, *AN-F1-800*). The *800 cm* length is available only for temperature monitoring. The *AN-F1-800* antenna is not compatible with the partial discharge detection.

## FIXATION MODES

The antenna can be mounted either with two screws (not included) on the surface of a metallic wall (left configuration), or with the two magnets integrated in the antenna basis (right configuration).



## SPECIFICATIONS

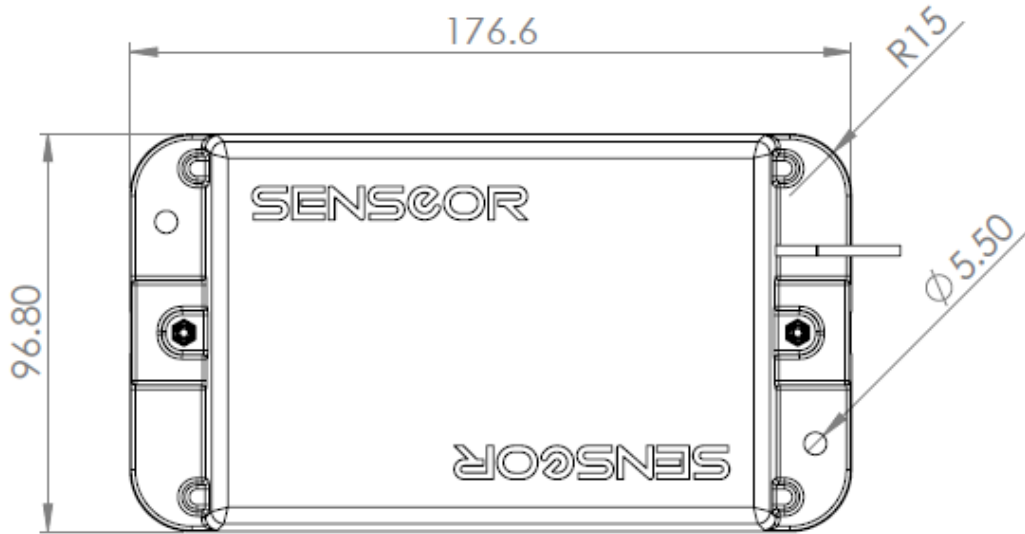
### AN-F1 ANTENNA

Product references	AN-F1-295 (standard model) AN-F1-455 (specific model) AN-F1-500 (specific model) AN-F1-620 (specific model) AN-F1-800 (specific model only for temperature monitoring)
Temperature measurements frequency range	From 430 to 450 MHz
Partial discharge selectable channels (center frequency)	LFB (360 MHz), MFB (576 MHz), HFB (1 199 MHz)
Nominal impedance	50 Ohms
Radiation pattern	Omnidirectional
Polarization	Vertical
Recommended environments	Medium voltage panel Metallic ground plane No metallic parts or planes within 10 cm of the antenna
Operating temperature range	From -25 to +85°C
Ingress protection code	IP54
Dimensions	177 x 97 x 26 mm
Weight	215 g (without the cable)
Fixation modes	Two magnets inserted in the basis Two screws (M5 x 16 mm minimum – not included – stable position on long term only guaranteed with the screws)
Cable RF connector	Female SMB
Cable length	295 cm for AN-F1-295 455 cm for AN-F1-455 504 cm for AN-F1-500 620 cm for AN-F1-620 800 cm for AN-F1-800
Certifications	RoHS 2011/65/EU and 2015/863/EU IEC 62271-1: Switchgear – lightning impulse voltage, power frequency voltage, partial discharge measurement tests IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-30 IEC 60068-2-6, IEC 60068-2-78 IEC 60255-21-1, IEC 60255-21-3 CEPRI-EETC06-2019-0023 / CCAM19LP1860T6

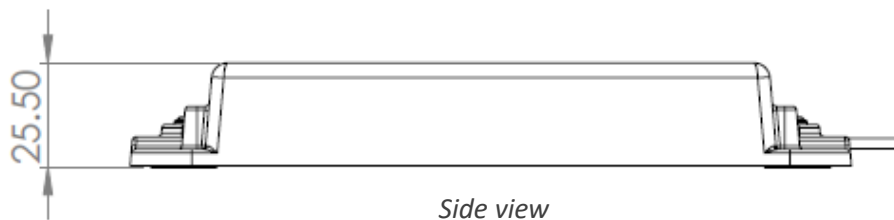
## PRODUCT LABEL



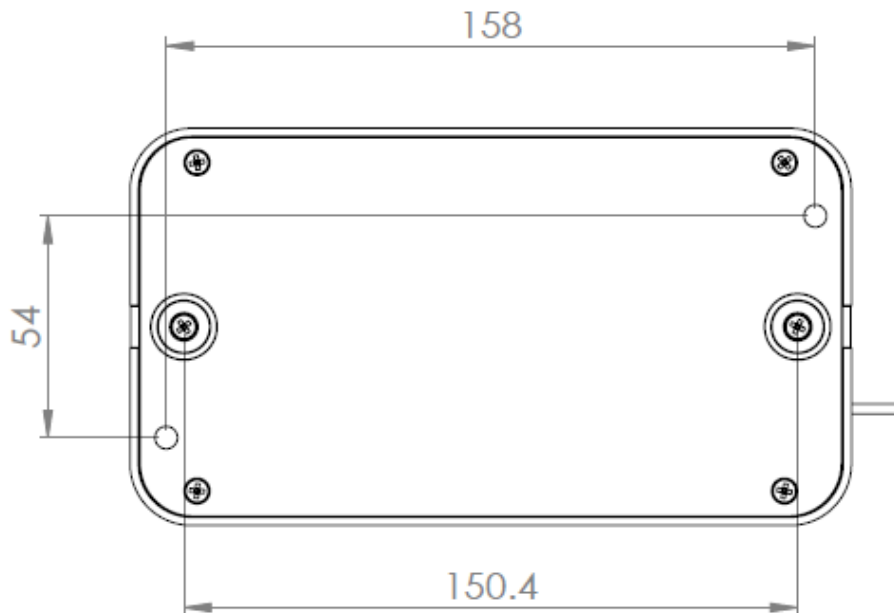
## PHYSICAL DIMENSIONS



Top view



Side view



Bottom view

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