

LPWAN Gateway Antenna

TECHNICAL DATA SHEET

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QUALITY TESTING



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Description:

The **LPWAN gateway antenna** is ideal for use with smart meter gateways, LoRa, SigFox and smart home solutions to improve wireless M-Bus reception. The antenna features an integrated bandpass filter tuned to 868-876 MHz, which suppresses unwanted signals from adjacent cellular bands (e.g. 800 MHz and 900 MHz). This enhances reception performance, particularly in environments with strong cellular activity, such as when the antenna is installed near smart meter gateways. This helps to ensure robust and reliable LPWAN communication in the field.

Installation can be both indoors and outdoors as the antenna is IP66 certified. Magnetic mounting on the control cabinet is also possible.

Technical details:

Part number	15E-A030-AJ-01 (3m, FAKRA) 15E-A015-AD-01 (1.5m, SMA) 15E-A030-AB-01 (3m, SMA) 15E-A015-AJ-01 (1.5m, FAKRA)
Frequency range	868-876 MHz
Antenna gain	2 dBi
Filter	791-821 MHz: Rejection > 13 dB 925-960 MHz: Rejection > 14 dB
Standing wave ratio¹ (VSWR)	<2:1
Impedance	50 Ω
Efficiency¹	868-876 MHz: > 50%
Polarization	Linear
Antenna type	Ceramic Radiator
Radiation pattern	omnidirectional (in free space)
Power (max.)	10 W
Cable	Low loss (AA100 type, attenuation < 0.75 dB/m at 900 MHz)
Cable length	1,5 m / 3 m
Connector	FAKRA C / SMA
Isolation rating²	> 6000 V
Temperature range	-40 °C to +85 °C
Humidity	max. 95 % RH (non-condensing)
Wind resistance	> 150 km/h

IP class	IP66
Flammability	V1
UV resistance	min. 10 years
Product lifetime	min. 15 years
Dimensions	160 x 48 x 48 mm
Weight	147 g / 129 g / 149 g
Mounting	2-hole mounting, adhesive
Color	grey
Conformity	ROHS, WEEE, CE
HS Code	8529.10
Country of origin	People's Republic of China

¹ The standing wave ratio (VSWR) and the efficiency of the antenna depend on the materials used in the vicinity.

² Applies to the cable only. Test of the complete cable between inner conductor and outer sheath in accordance with EN 50395:2005 Sect. 6

Notes:

- Mounting instructions can be found on our website <https://enqt.de/en> under Support/Downloads.
- In addition to the variants listed above, the antenna can be manufactured with numerous different connector types, customized cable types and cable lengths. Please contact us for a quote.