

Flex2-T-RH LWEU/LWNA

Transmitter

The Flex2 series is a multipurpose weatherproof LoRaWAN transmitter series with several input options for various needs of industrial measurement and monitoring. The LoRaWAN radio offers a long range, especially outdoors, and connectivity to all standard LoRaWAN systems.

Flex2-T-RH LWEU/LWNA measures the ambient temperature and relative humidity with a polymer sensor in the protruding black part.



Applications



Product highlights and features

High measurement accuracy and reliability

Weatherproof

The LoRaWAN radio offers a long range, especially outdoors, and connectivity to all standard LoRaWAN systems

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Environment

Operating temperature	-30...+60 °C
Operating humidity	0-100 %RH
Protection class	IP65
Enclosure material	Plastic (PC+ABS)

Measurements

Dimensions	Width 60 mm, depth 32.5 mm, height: 212.8 mm
Weight	Radio modules: 35g Measurement modules: 70g (slight variation between Flex2 models)
Cable gland	M12x1.5

Measuring and data transmission

Measure interval	Configurable: 0..14400s
Radio	LoRa radio technology with Murata ABZ-093 LoRaWAN modem
Antenna	Internal
Frequency band	EU868: 863-870 MHz / US915: 902-928 MHz
Transmission power	Max +14 dBm E.R.P.
Range, line-of-sight	Depends on installation location and environment, in good conditions 10 km

Power supply

Batteries	3.6V Lithium Thionyl battery pack
Typical battery life	With a good radio link and 5 min measurement interval, typically 5 years With an average radio link and 30 min measurement interval, typically 5 years With a bad radio link and 30 min measurement interval, typically 3 years

T-RH module

Temperature sensor type	Semiconductor based internal sensor
Measurement range	-40...+125 °C
Accuracy	±0.5 °C
Humidity sensor type	Capacitive polymer humidity sensor inside a sintered filter
Measurement range	0...100 %RH
Total error band	±5 %RH over 10...90 %RH and +5...+50 °C
Accuracy	Typically ±3 %RH over +0...+50 °C