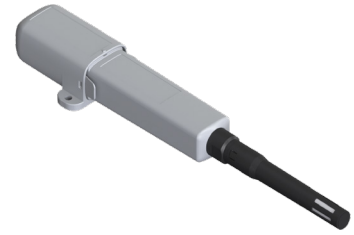# Nokeval

# Flex2-nSens 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-nSens LWEU/LWNA measures temperature and humidity using a Novasina nSens probe. The probe is not included.

## Applications

⚙ **Industry**

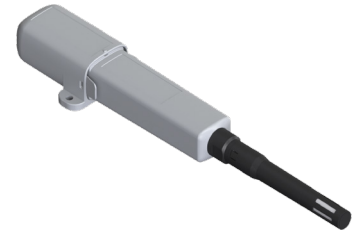## Product highlights and features

**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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# Flex2-nSens LWEU/LWNA
## Transmitter



## 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: height: 292.8 mm (probe attached) |
| **Weight** | Radio modules: 35g<br>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<br>With an average radio link and 30 min measurement interval, typically 5 years<br>With a bad radio link and 30 min measurement interval, typically 3 years |

## nSens module

| | |
|---|---|
| **Sensor type** | Novasina nSens-HT-ENS or nSens-HT-CSS, not supplied |
| **Cable length** | max 2 m |
| **Measurement range** | See Novasina's documentation; max temperature 60 °C for the meas. module |
| **Accuracy** | See Novasina's documentation |