LoRaWAN™ Pulse Sens'O

PULSE SENS'O is a LoRaWAN™ sensor radio transmitting data from any pulse meters: water, gas, electricity, energy.

APPLICATIONS

- Wireless AMR – Smart metering
- Infrastructure: all meters with pulse interface can be integrated quickly and cost-effectively into a LoRaWAN™ network without expensive and time-consuming cabling.

BENEFITS & KEY FEATURES

- LoRaWAN™, Class A
- Easy to use and deploy
- Up to 3 pulse inputs
- Data compression for batch report
- IP55, IP68 available
- Up to 12 years autonomy

QUALITY & RELIABIITY

- CE Compliant
- RoHS compliant
- Radio-equipment directive 2014/53/UE

The Class A LoRaWAN™ PULSE SENS'O from nke Watteco is a long range, low power consumption, high performance and high quality wireless up or down pulse sensor transmitting data from water, gas, electricity & energy meters.

PULSE SENS'O operates with any commercial meter products and provides connection to any wireless network using the LoRaWAN™ protocol.

PULSE SENS'O is available in 2 versions:
- Outdoor (IP55)
- Waterproof (IP68)

Three meters can be supported by a single LoRaWAN™ PULSE SENS'O allowing a significant reduction of installation and deployment costs.

The measured parameters can be locally stored, concatenated and compressed. This unique batch mechanism significantly reduce the amount of data transmission for demanding applications and drastically increase the autonomy.

Powered through a 3Lithium battery, it allows an autonomy up to 12 years when transmitting data one time per day.

NKE WATTECO, YOUR PARTNER IN SMART SENSORS & ACTUATORS

We are a European leader in designing and manufacturing highly reliable and low power consumption smart sensors, actuators and multiprotocol remote data solutions.

nke Watteco is an adopter member of the LoRa® Alliance

TECHNICAL CHARACTERISTICS

RF TRANSCEIVER	
Frequency (MHz)	EU: 863-870 US: 902-928 (On demand)
Transmit Power (dBm)	+14
Receiver Sensitivity (dBm)	-140
FIRMWARE	
Protocol	LoRaWAN™, Class A
Transmission cycles	10mn, 1h, 12h or defined by network
Data history	available
Activation method	Activation by Personnalization (ABP) Over-The-Air Activiation (OTAA)
Data encryption	AES128
SENSOR INPUT	
Number of inputs	3
Impedance (MΩ)	>1
Capacitance (nF)	1; typical
Voltage (V)	0 - 30
Current (μA)	3.5
Frequency (Hz)	1 - 100
POWER	
Power supply	3,6V / 3600mAh 3,6V lithium battery - ATEX certified (option)
Autonomy	12 years for 1 measurement & 1 transmission per day
INTERFACE	
LED Indicator	3 LEDs for Configuration, Network pairing & Activity on inputs
Magnetic Switch	Reset, ON/OFF
MECHANICAL FEATURES	
Dimension (mm)	84x82x85
IP Class	IP55 and IP68 available
ENVIRONMENTAL	
Operating temperature (°C)	-20 / +50
Storage temperature (°C)	-10 / +60
DIRECTIVES & STANDARD	
EN, 61000-4-2 EN 300-220-1 V2-4-1, EN 301 489 V1-6-1 CE and RoHS recommendation compliant	CE ☒ RoHS

ORDERING INFORMATION

REFERENCE	PACKAGE	MODEL DESCRIPTION
50-70-014	IP55	PULSE SENS'O , Outdoor
50-70-039	IP68	PULSE SENS'O , Waterproof (48h/1m water) with 1.5m cable mounted in factory