



## PRESS'O



**PRESS'O** is a LoRaWAN® Class A transceiver designed to transfer data collected from 0-10V and 4-20mA analog interfaces. It allows to transform an existing sensor or gauges to a wireless sensor.

### APPLICATIONS

- Water resource management – Monitor and measure water level (water tower, water tank, rainwater tank, groundwater, retention pond...).
- Building management – Monitor and measure fluid level (buried oil tank, aboveground oil tank, gas tank...).
- Temperature, Humidity, air quality, pressure sensors.

### BENEFITS & KEY FEATURES

- LoRaWAN®, Class A
- Easy to use and deploy
- 0-10V and 4-20mA analog input
- Stabilised and switched 10V or 14V power supply, to manage the power supply of the gauge connected to the sensor
- Differential data compression
- Battery operated or 9-24V external power supply
- 5-year battery life (data compression mode)
- IP55

### CERTIFICATION

- RED, RoHS



The **PRESS'O** sensor from Watteco is a long range, low power consumption, high performance and high quality LoRaWAN® Class A device that transforms any type of 0-10V, 4-20mA analog sensor into a wireless sensor.

A specific embedded electronic system is used to manage the power supply of the gauge connected to the sensor.

**PRESS'O** can operate either from a 3.6V lithium battery or from an external 9V-24V/500mV power supply.




The measured parameters can be locally stored, concatenated and compressed. This unique batch mechanism significantly reduces the amount of data transmitted for demanding applications and drastically increases the autonomy up to 5 years (24 measurements per day & 1 transmission per day) when operating on battery.

## THE LARGEST IOT PRODUCTS RANGE FOR YOUR PROJECT

WATTECO is a European leader in the design and manufacture of smart IoT devices to suit all remote reading and data collection solutions.

WATTECO is a LoRa Alliance® member.

## TECHNICAL DATA

RF TRANSCEIVER	
Frequency (MHz)	EU: 863-870
Transmit Power (dBm)	+14
Receiver Sensitivity (dBm)	-140
FIRMWARE	
Protocol	LoRaWAN®, Class A
Transmission cycles	Configurable from 10 minutes to 24 hours
Data compression	Yes (differential coding)
Activation method	Activation by Personalization (ABP) or Over-The-Air Activation (OTAA)
Data encryption	AES128
INPUT CHARACTERISTICS	
Number of inputs	1x 4-20mA 1x 0-10Vdc
OUTPUT CHARACTERISTICS	
4-20mA gauge voltage supply (Vdc)	10
0-10V gauge voltage supply (Vdc)	14
POWER SUPPLY	
Voltage	3.6V / 3600mAh – Replaceable lithium battery 9V-24V / 500mW – External power supply
Autonomy in a range of +10°C to +25°C	5 years with 24 measurements & 1 transmission per day
INTERFACE	
Buzzer Indicator	Network pairing & configuration
Magnetic switch	Reset, ON/OFF
ENCLOSURE	
Size (mm)	92 x 92 x 56
IP Rating	IP55
ENVIRONMENT	
Operating temperature (°C)	-20 to +50
Storage temperature (°C)	-10 to +30
DIRECTIVES & STANDARD	
Radio Equipment Directive 2014/53/EU, RoHS	  

## PRODUCT NUMBER

REFERENCE	DESCRIPTION
50-70-017	LoRaWAN® PRESS'O Sensor