WATTECO

DESIGNER AND MANUFACTURER OF
RADIO FREQUENCY TRANSMITTER SENSORS

We have the sensors
best suited to your uses

SMART METERING   **SMART BUILDING**   **SMART CITY**   **SMART INDUSTRY**

**WATTECO is a European leader in the design and manufacture
of intelligent IoT devices to fit to all remote reading
and data collection solutions**

Our leadership is backed by over 30 years of experience in the design, development,
industrialisation and manufacturing of electronic instruments
for harsh or highly secure environments.

CONCEPTION ET FABRICATION
MADE IN FRANCE

www.watteco.com

LoRaWAN® SENSORS RANGE

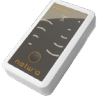| FUNCTIONS	VISUAL	DESIGNATION	REFERENCE	POWER SUPPLY and AUTONOMY - SF12 (Replaceable Battery or/and external supply)
QAI Temperature Cold Sun Humidity Gauge		**VAQA'O / VAQA'O+** Ambient temperature measurement, hygrometry, VOCs (volatile organic compounds) and CO_2. **In addition in Vaqa'O+:** ▪ Atmospheric pressure, lux, presence detection.	50-70-168 50-70-074	- Battery 3,6V / 7500mAh lithium - Autonomy: >4 years with 1 measurement/10 mn and 1 report/hr*
		INDOOR TEMPERATURE Indoor temperature measurement with detection of tearing off.	50-70-167	- Battery 3.6V - 2600mAh SAFT lithium - Autonomy: >8 years with 1 measure/10mn and 1 report/hr*
		INDOOR THR Indoor temperature and relative humidity measurement with detection of tearing off. ▪ Tropicalised version	50-70-162 50-70-191	- Battery 3.6V - 3600mAh SAFT lithium - Autonomy: >8 years with 1 measure/10mn and 1 report/h*
		MOVE'O Ambient temperature and relative humidity measurements with detection of presence.	50-70-220	- Battery 3.6V - 2600mAh SAFT lithium - Autonomy: >8 years with 1 measure/10mn and 1 report/hr*
		REMOTE THR Temperature and relative humidity measurement with a 3m cable SHT30F remote probe.	50-70-200	- Battery 3.6V - 3600mAh SAFT lithium - Autonomy: >8 years with 2 transmissions per day* - Emission of an alert if the threshold is exceeded
		REMOTE TEMPERATURE Temperature measurement to monitor hot spots, cold chain and hot water pipes. **Versions:** ▪ with 1 probe 2m ▪ with 2 probes 2m ▪ with PT1000 interface	50-70-043 50-70-163 50-70-126	- Battery 3.6V - 3600mAh SAFT lithium - Autonomy: >8 years with 1 measurement/10mn and 1 report/hr* or 12 years with 1 report/2hr
		OUTDOOR TEMPERATURE Outdoor temperature measurement.	50-70-164	- Battery 3.6V - 3600mAh SAFT lithium - Autonomy: > 8 years with 1 measurement/10mn and 1 report/hr*
		ATM'O Outdoor temperature, relative humidity and atmospheric pressure measurement.	50-70-099	- Battery 3.6V - 7200mAh SAFT lithium - Autonomy: >5 years with 1 measure and 1 report/10mn or >8 years with 2 measurements and 1 report/hr*
ATEX Gas State report Analog		**PULSE SENS'O ATEX** Pulse couting for energy meters. Up to 3 inputs for counting or report status change in the AtEx 1 sensitive zone. **Versions:** ▪ IP55 Pulse SENS'O AtEx zone 1 ▪ IP68 Pulse SENS'O AtEx zone 1 ▪ Accessories for gas meters Itron, Elster, Gazpar, etc.	50-70-123 50-70-152 On demand	- Battery 3,6V / 3600mAh SAFT lithium - Autonomy: >10 years with 1 report/day* - Ex II 2 GD - Ex ib IIB, IIC T4 Gb - Ex ib IIIC T135°C Db - -20 ≤ Tamb ≤ +50°C
		TORAN'O ATEX 3x pulse inputs for report status changes or pulse count values. 2×0-5V inputs and 1×4-20mA for analog measurements of equipment in the AtEx 1 sensitive zone to turn any gauge into a remote wireless sensor. **Versions:** ▪ IP55 ▪ IP68	50-70-124 50-70-150	- Battery 3,6V / 3600mAh SAFT lithium - Autonomy: > 10 years with 1 measurement/day and 1 report/day* - AtEx Zone I certified - Ex II 2 GD - Ex ib IIB, IIC T4 Gb - -20 ≤ Tamb ≤ +50°C
Water Gas Energy State report Analog		**PULSE SENS'O** Up/Down pulse counting for water/gas/electric/ energy meters or report status. Capability to monitor up to 3 meters simultaneously. **Versions:** ▪ IP55 Pulse SENS'O ▪ IP68 Pulse SENS'O	50-70-160 50-70-039	- Battery 3,6V / 3600mAh lithium - Autonomy: >10 years with 1 measurement/hr and 1report/4hr*
		IN'O Transforming any type of binary I/O sensor into a remote wireless sensor report from 10 inputs and 4 outputs.	50-70-016 50-70-087	- Battery 3,6V / 3600mAh lithium - or 9V-24V / 300mW external power supply - Autonomy: no limit or 10 years with 1 measurement/hr and 1 report/day*
Analog		**PRESS'O / PRESS'O+** Two analog inputs 0-10V, 4-20mA and gauge power supply. ▪ Basic version for remote wireless sensor. ▪ **Press'O+:** additional 1 pulse input and external antenna. ▪ Water network pressure measurement 0-16 bar.	50-70-017 50-70-189 50-70-216	- Battery 3,6V / 3600mAh lithium - 9V-24V / 300mW external power supply - Autonomy: 5 years for 24 measurements and 1 report/day
ATEX Gas Water		**LEV'O + LIQUID LEVEL** Based on Toran'O sensor. Measurement of the relative pressure of liquid (water, oil, diesel, fertilizer, …) to determine a level in a tank or a cavity.	50-70-209	- Battery 3.6V - 3600mAh lithium - Autonomy: >10 years with 1 measurement/day and report/day - Connected to a Toran'O the AtEx zone 1 certificate becomes: - Ex II 2 GD - Ex ib IIB, IIC T4 Gb - -20 ≤ Tamb ≤ +50°C

Temperature   **Cold**   **Humidity**   **Water**   **Luminosity**   **Gas**   **Energy**   **State report and control**   **Analog**

LoRaWAN® SENSORS RANGE

FUNCTIONS	VISUAL	DESIGNATION	REFERENCE	POWER SUPPLY and AUTONOMY - SF12 (Replaceable Battery or/and external supply)
ATEX		**LEV'O+ LPG** Based on TORAN'O sensor and Rochester Gauge. Measurement of the level of LPG in a tank.	50-70-210 50-70-211	- Battery 3.6V - 3600mAh lithium - Autonomy: >10 years with 1 measurement/day and report/day - Connected to a Toran'O / Press'O 0-5V the AtEx zone 1 certificate becomes: - Ex II 2 GD - Ex ib IIB, IIC T4 Gb - -20 ≤ Tamb ≤ +50°C
Modbus		**MODBUS LoRaWAN® BRIDGE** Interfaces a RTU Modbus equipment and make it communicate through a LoRaWAN® network.	50-70-080 50-70-109	- Battery 3,6V / 3600mAh lithium or 9V-24V 100mW external power supply - Autonomy: no limit or >10 years* with 2 requests and 2 transmissions of 4 bytes/day
		FLASH'O Transmitting the accumulated flash LED blinks from electricity or energy meters. ▪ with 3 optical inputs	50-70-071 50-70-216	- Battery 3.6V - 3600mAh lithium - Autonomy: 10 years with 1 measurement and report/day*
⚡		**SMART PILOT WIRE** To control electric heater or relay. Actuator status report.	50-70-027	- 230VAC. +10%/-15% ; 50Hz - Autonomy: no limit
		INTENS'O Monitors electrical current and determines the state of the equipment.	50-70-098	- Battery 3,6V / 3600mAh lithium - Autonomy: 10 years with 1 measurement/mn and 1 report/hr or 7 years with 1 measurement/2 sec. and 1 report/4hr
		SMART PLUG Measures and reports the energy, controls the connected load, measures the quality of the power grid. ▪ Available with E, F and G type plug versions.	50-70-003 50-70-020 50-70-021	- 230VAC. +10%/-15% ; 50Hz - Autonomy: no limit
		TRIPHAS'O Measurements for active and reactive energies and power with Rogowski coil and split core current transformer: ▪ with 60 A toroid ▪ with 400 A toroid ▪ without Rogowski coil 4 000A ▪ with Rogowski coil 4 000A.	50-70-105 50-70-145 50-70-146 50-70-147	- 230VAC. - 400VAC +10%/-15% - Autonomy: no limit
		VENTIL'O Measures and transmits air depression in Continuous Mandatory Ventilation or Air Handling Unit. ▪ Also available with an optional pulse input.	50-70-101 50-70-166	- Battery 3,6V / 3600mAh lithium - Autonomy: >10 years: Pressure only with 1 measurement/hr and 1 report/day or > 10 years with 1 measurement/15 mn and 1 report/6hr
		CLOS'O Reports & alerts for doors and gates activit.	50-70-108	- Battery 3,6V / 3600mAh lithium - Autonomy: > 7 years with 1 report/day
		INCLIN'O Tilt sensor to measure and detect inclination variation, particularly on a roof window.	50-70-201	- Battery 3.6V - 3600mAh lithium - Autonomy: >8 years with 1 measurement /10 seconds and 1 report/day*
		MONIT'O Monitors the charge voltage and current of a 12V, 24V, 48V battery.	50-70-141	- Battery 3.6V - 3600mAh lithium - Autonomy: >12 years with 1 measurement and 1 report/day* or >6 years with 1 measurement /10mn and 1 report/hr
		BOB ASSISTANT Analyzes the vibration signature of an industrial equipment, ensuring its remote monitoring.	50-80-001	- Battery 3,6V - 2000mAh lithium - Autonomy: >2 years: 2 samples (low frequency and high frequency) every 5 minutes and 8 transmissions per day
		MOVEE Meets the needs of geolocation, operational assistance or industrial preventive maintenance.	50-80-002	- Battery 3,6V - 2000mAh lithium - Autonomy: > 5 years: 4 life frames per day
		NETW'O LoRaWAN® public and private networks tester. Includes a smartphone application for quick vizualisation of network quality and parameters.	50-70-136	- 2x Alcaline Battery 1.5V
⚙		**CONFIGURATION TOOL** Configures a fleet of WATTECO IoT devices.	50-70-174	- N/A

Level of liquid	Active and reactive energies	Air quality	Open/Close detection	Air depression	Meter reading	Pressure	Power	Hub

LoRaWAN® SENSORS RANGE

BOB ASSISTANT

SIMPLE PREDICTIVE MAINTENANCE

THE SOLUTION TO MONITOR YOUR MACHINES 24/7

BoB Assistant analyzes the vibration signature of an industrial equipment and ensures its remote monitoring.

A clever little box that can save machines from breakdowns and unexpected stops!

LEV'O+

LPG TANK LEVEL MEASUREMENT

A remote reading solution based on the Battery -powered Toran'O sensor associated with a Rochester probe. The measurement data is transmitted periodically over the public or private LoRaWAN® network to the remote application.

Thanks to remote tank level monitoring, distributors and maintainers are able to plan and optimise deliveries more efficiently!

NETW'O

LORAWAN® NETWORK TESTER

Install the Netw'O at the actual location of the sensor to be installed (closed door, window well,...).

Simple interface via LED for visualisation of transmission and reception qualities.

Includes a smartphone application for quick vizualisation of network quality and parameters.

Vibration   Geolocation   Network   Charge monitoring   Configuration   Tilt

Visit **www.watteco.com** for all product information

sigfox SENSORS RANGE

FUNCTIONS	VISUAL	DESIGNATION	REFERENCE	POWER SUPPLY and AUTONOMY - SF12
		INDOOR TEMPERATURE Measures and transmits indoor temperature over long distances in buildings or houses.	50-09-037	- 3.6V - 3600mAh lithium battery - Autonomy: >10 years with 1 measurement/hr and 1 report/day or 9 years with 1 measurement/hr and 1 report/day
		INDOOR THR Indoor temperature and relative humidity measurement in buildings or houses.	50-09-036	- 3,6V - 3600mAh lithium battery - Autonomy: 9 years with 1 measurement/hr and 1 report/day
		OUTDOOR TEMPERATURE Transmits accurate temperature measurements over long distances and in real time accurate temperature measurements; measures HDD (min, max, average).	50-09-039	- 3.6V - 3600mAh lithium battery - Autonomy: >10 years with 1 measurement/hr and 1 report/day or 9 years with 1 measurement/hr and 1 report/day
		REMOTE TEMPERATURE Temperature measurement with a remote probe (5 meters) in buildings, temperature-controlled rooms, and cooling towers.	50-09-065	- 3.6V - 3600mAh lithium battery - Autonomy: >10 years with 1 measurement/hr and 1 report/day or 9 years with 1 measurement/hr and 1 report/day

		PULSE S0
		Transmits data from any pulse meters: water, gas, electricity, energy.
		Versions:
		  ▪ Outdoor Pulse S0
		  ▪ Outdoor Pulse S0 AtEx
		  ▪ Waterproof Pulse S0
			50-09-038
			50-09-041
			50-09-063
				- 3.6V - 3600mAh lithium battery
				- Autonomy: 9 years with 1 measurement/hr and 1 report/day

		FLASH'O Counts and measures light pulses from any electronic meter: water, gas, electricity, energy.	50-09-072	- 3.6V - 3600mAh lithium battery - Autonomy: >10 years with 1 measurement and 1 report/day or 8 years with 1 measurement and 1 report/hr
		ALARM REPORT Transforms any dry contact sensor into a remote wireless sensor that monitors industrial equipment status.	50-09-046	- 3.6V - 3600mAh lithium battery - Autonomy: >10 years with 1 input state change reporting/day
		VMC GAS VENTILATION Measures air depression and temperature in CMV or AHU with a remote probe.	50-09-080	- 3.6V - 3600mAh lithium battery - Autonomy: >8 years with 1 measurement/hr and 1 report/day
		SANITARY VENTILATION Detects the On/Off position of the equipment by depression measurement.	50-09-034	- 3.6V - 3600mAh lithium battery - Autonomy: >8 years with 1 measurement/hr and 1 report/day
		SKYDOME Verifies that a roof window is properly closed and detects a change of position thanks to an onboard inclinometer.	50-09-078	- 3.6V - 3600mAh lithium battery - Autonomy: > 8 years with 1 measurement / 10 secondes and 1 report/day

WATTECO, YOUR IoT PARTNER

OVER 30 YEARS OF EXPERIENCE
in the design, development, industrialisation and manufacturing of electronic products.

IN-HOUSE ENGINEERING AND DESIGN DEPARTMENT
for the development of new concepts in accordance with your constraints.

MADE IN FRANCE
our production workshop is based in Hennebont (56), France, and we are an ISO 9001 certified company.

Visit **www.watteco.com** for all product information

OUR SERVICES

CUSTOM PRODUCTS

Our project teams are able to mobilise their resources to develop a new product that takes into account all the constraints of your future application. To succeed in designing reliable, high performance products, WATTECO relies on a team that possesses skills and know-how in the fields of electronics, industrial data processing and plastics engineering.

Our leadership is based on being attentive to your needs and on the design of market-leading products!

SUPPORT WEBSITE

Refer to our **assistance page** where you will find all the technical information about our products: support website, installation notices, datasheets, RED directives...

Codecs available online: easy access to the source code of our codecs available on Github.

TECHNICAL ASSISTANCE

The technical assistance is provided by our **product engineers** by email or phone. We supply on-premise support on demand.

TECHNICAL TRAINING

We design tailor-made training sessions.

SENSORS CONFIGURATION

- Custom provisionning on-demand: we can configure your sensors in batches with an identical configuration for all of them just before they are shipped from our manufacturing facility.
- With our configuration tool, you can configure and customise your sensors onsite.

www.watteco.com/assistance

THEY TRUST US

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Contact us for your IoT projects!

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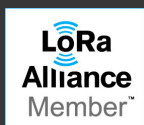
R3 IMPACT — Committed to a CSR approach with R3 impact

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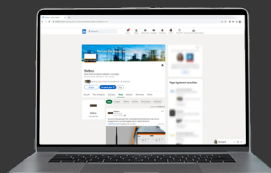
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