**WATTECO**

# We have the sensors
# best suited to your uses

**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.

**Smart Metering**

**Smart Building**

**Smart City**

**Smart Industry**

**MADE IN FRANCE**

**www.watteco.com**

# 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**

# Your **challenges**

### Industrial performance optimisation

Optimise your processes with comprehensive supervision. Use smart sensors for predictive maintenance, to monitor levels of liquids in tanks or for temperature control.

### Reducing energy consumption

Improve energy efficiency thanks to data monitoring. Get tracking impulse from water, gas, electricity or heat meters. Easily install your sensors, even in ATEX environments.

### Building renovation & performance

Improve your operations and building maintenance through our wide range of sensors. Detect presence, turn off water heater or superviee ventilation or air handling unit.

### Improving well-being in buildings

Use sensor data to enhance the comfort of occupants and users. Measure humidity and temperature to ensure a pleasant environment. In housing, public buildings and offices, improve the indoor air quality monitoring.

### Railway installations monitoring

Ensure safer railway conditions with frost detection on catenary wires. Monitor remotely escalators in train station. Ensure that train gates are closed throughout the journey.
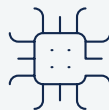
### Digitalising of your territory

Deploy your smart city by offering new metering services. Analyse the performance of public lighting, and detect lights or power failures in real time. Keep an eye on your public buildings' consumption.

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**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 Lanester (56), France, and we are an ISO 9001 certified company.

## BoB Assistant
**SIMPLE PREDICTIVE MAINTENANCE**

### The solution to monitor your machines 24/7

» BoB Assistant analyses 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!**

## CLIM'O
**ENERGY EFFICIENCY**

» The simplest IoT sensor for measuring ambiant temperature and relative humidity in your buildings. The CLIM'O will fit in perfectly with all your BMS deployments.

**Thanks to CLIM'O and your BMS you will reach objectives of your local Building Energy Act.**



## TORAN'O
**IOT SWISS ARMY KNIFE**

### The device to remotely monitor your sensors in hazardous areas

» A remote reading solution to be interfaced to your pressures, levels, temperature sensors or digital status report interfaces in ATEX zone 1 areas.

**At last, a reliable sensor that is easy to deploy in your ATEX and harsh zones!**

# Smart **Building**

LoRaWAN®

| FUNCTIONS | VISUAL | DESIGNATION | REFERENCE |
|---|---|---|---|
| | | **CLIM'O**<br>Indoor temperature and humidity measurements | 50 - 70 - 247 |
| | | **HYGROTEMP'O**<br>Indoor temperature and relative humidity measurements with detection of tearing off.<br>» available in tropicalised version<br>» **TEMP'O** - temperature measurement only | 50 - 70 - 205<br>50 - 70 - 232<br>50 - 70 - 231 |
| | | **MOVE'O**<br>Ambient temperature, relative humidity and luminosity measurements with detection of presence. | 50 - 70 - 225 |
| | | **VAQA'O Lite**<br>Ambient temperature, relative humidity and $CO_2$ measurements. | 50 - 70 - 223 |
| | | **VAQA'O+**<br>Ambient temperature, relative humidity, $CO_2$, VOCs, atmospheric pressure and lux measurements with presence detection. | 50 - 70 - 074 |
| | | **TEMP'O - 1 remote probe**<br>Temperature measurement with an external probe to be installed on the source. | 50 - 70 - 043 |
| | | **TEMP'O - 2 remote probes**<br>Temperature measurements with two external probes to be installed on monitored sources. | 50 - 70 - 163 |
| | | **HYGROTEMP'O - remote probe**<br>Measures temperature and relative humidity using SHT30F remote probe with 3-meter cable. | 50 - 70 - 200 |
| | | **TEMP'O Outdoor**<br>Outdoor temperature measurement. | 50 - 70 - 164 |
| | | **SMART PILOT WIRE**<br>Actuator for remote control of hot water tanks, electric radiators or any external relay. LoRaWAN® Class C device. | 50 - 70 - 027 |
| | | **VENTIL'O**<br>Measure difference of pressure to monitor Continuous Mandatory Ventilation or Air Handling Unit.<br>» exists with an optional pulse input | 50 - 70 - 101<br>50 - 70 - 166 |
| | | **INCLIN'O**<br>Monitors tilts and shocks up to 16g. | 50 - 70 - 201 |
| | | **Pulse SENS'O IP55**<br>Pulses counting for water/electricity/heat meters. Can also be configured to monitor digital report status. 3 inputs. | 50 - 70 - 160 |

# Energy **Efficiency** & Smart **Metering**

**LoRaWAN®**

| FUNCTIONS | VISUAL | DESIGNATION | REFERENCE |
|---|---|---|---|
| | | **Pulse SENS'O IP68**<br>Pulses counting for water/energy meters. Can also be configured to monitor digital report status. 3 inputs. Can be deployed in humid areas thanks to its IP68 protection. | 50 - 70 - 039 |
| | | **Pulse SENS'O ATEX zone 1** 〈Ex〉<br>Pulses counting for gas or energy meters. Can also be configured to monitor digital report status. 3 inputs.<br>» available with external antenna connector<br>» available in IP68 version<br>» Ready to plug cables on demand | 50 - 70 - 123<br>50 - 70 - 228<br>50 - 70 - 152<br>on demand |
| | | **FLASH'O**<br>Counting LEDs flashes on electricity meters.<br>» available with external antenna connector | 50 - 70 - 071<br>50 - 70 - 245 |
| | | **FLASH'O - 3 optical probes**<br>3 optical probes for counting LEDs flashes on electricity meters. | 50 - 70 - 206 |
| | | **Modbus/LoRaWAN bridge**<br>Interfaces a RTU Modbus equipment and make it communicate through a LoRaWAN® network. LoRaWAN® Class A version.<br>» available in LoRaWAN® Class C version | 50 - 70 - 080<br>50 - 70 - 109 |
| | | **TRIPHAS'O**<br>Measures voltages, currents, cos φ, active and reactive energies. 3P + N, 3P or 1P+1 installations.<br>» 60 A version including 3 toroids<br>» 400 A version including 3 toroids<br>» 4000 A Rogowski version without coil | 50 - 70 - 105<br>50 - 70 - 145<br>50 - 70 - 146 |
| | | **SMARTPLUG**<br>Remotely power On/Off connected equipment and measures energy consumed.<br>» type F socket (Europe version)<br>» type G socket (UK version) | 50 - 70 - 020<br>50 - 70 - 021 |

# **Tools** & Accessories

| FUNCTIONS | VISUAL | DESIGNATION | REFERENCE |
|---|---|---|---|
| | | **NETW'O**<br>tests and measures the LoRaWAN network coverage and quality. Can compare up to 3 different networks. | 50 - 70 - 136 |
| | | **USB Dongle**<br>This is the tool to configure a fleet of WATTECO devices during the deployment phase of the project. | 50 - 70 - 174 |
| | | **Cables, connectors, antennas, batteries**<br>WATTECO offer a wide range of accessories to facilitate and improve your installations. | on demand |

# Smart Industry & Asset Monitoring

LoRaWAN®

| FUNCTIONS | VISUAL | DESIGNATION | REFERENCE |
|---|---|---|---|
| | | **IN'O**<br>10 digital inputs and 4 outputs to remotely read or control digital I/O. LoRaWAN® Class A version.<br>» available in LoRaWAN® Class C version | 50 - 70 - 016<br>50 - 70 - 087 |
| | | **PRESS'O**<br>1x 0-10 V and 1x 4-20 mA input interfaces to remotely read any analog sensors.<br>» PRESS'O+ offers an external antenna and 1 pulse input | 50 - 70 - 017<br>50 - 70 - 189 |
| | | **TORAN'O ATEX zone 1** ⟨Ex⟩<br>3x digital inputs, 2x 0-5 V and 1x 4-20 mA analog inputs to remotely read any sensors.<br>» available in IP68 version<br>» Ready to plug cable on demand | 50 - 70 - 124<br>50 - 70 - 150<br>on demand |
| | | **LEV'O+ Liquid level** ⟨Ex⟩<br>External gauge to be interfaced on TORAN'O device to offer a full liquid (water, oil, fertilizer ...) level measurement solution. | 50 - 70 - 209 |
| | | **PRESS'O 0-5V ATEX zone 1** ⟨Ex⟩<br>2x 0-5 V analog inputs to remotely read external sensors. | 50 - 70 - 246 |
| | | **LEV'O+ LPG** ⟨Ex⟩<br>External Rochester gauge to be interfaced on PRESS'O 0-5V or TORAN'O device to offer a full LPG level measurement solution. Junior and Senior sizes available. | 50 - 70 - 210<br>50 - 70 - 211 |
| | | **TEMP'O PT1000**<br>Offers PT1000 interface to collect temperature from any external PT1000 sensor (not included). | 50 - 70 - 126 |
| | | **ATM'O**<br>Outdoor temperature, relative humidity and atmospheric pressure measurements to calculate the dew point. | 50 - 70 - 099 |
| | | **INTENS'O**<br>Monitors electrical current to offer condition monitoring service. | 50 - 70 - 098 |
| | | **MONIT'O**<br>0-70 V and 0-100mV input interfaces to monitor cathodic protection rectifiers or to measure battery status. | 50 - 70 - 141 |
| | | **CLOS'O**<br>Monitors and reports outdoor doors and gates activity. | 50 - 70 - 108 |
| | | **BoB Assistant**<br>Monitors the vibrations of industrial equipment and alarms in the event of drift to offer predictive maintenance services.<br>» availabe in ATEX zone 1 version ⟨Ex⟩ | 50 - 80 - 004<br>50 - 80 - 006 |
| | | **MOVEE**<br>Monitors and alarms on equipment shocks. | 50 - 80 - 002 |

# WATTECO

## Our **certifications**

**R3** IMPACT
Committed to a CSR approach with R3 impact

LR CERTIFIED **ISO 9001**

**Ɛx** ATEX

**LoRa Alliance®** Member

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

## WATTECO RELIES ON A QUALITY DISTRIBUTION CHANNEL

### Contact us for your IoT projects!

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