WIRELESS SENSORS TECHNOLOGY

Overcome distances and obstacles with hassle-free wireless transmitters for all kind of industrial sensors outputs

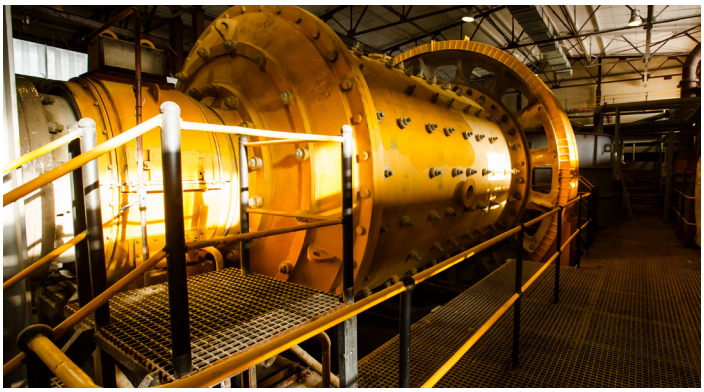
PLUS

WIRELESS SMART TRANSMITTERS

APPLICATIONS

Hot dip galvanizing
PORTUGAL

Application of an IIoT temperature monitoring solution in the various stages of steel and iron galvanizing process, enabling greater control and problem prevention.



Vibration monitoring
AUSTRALIA

Wireless solution for vibration monitoring in mining applications. Measurement of vibration in remote machinery using a vibration sensor with analog output and PLUS TWP-2AI transmitter with battery pack to provide a reliable and real-time measurement of vibration that will prevent machine downtime.

Biodegradable waste composting monitoring
PORTUGAL

Monitoring of the composting process of biodegradable waste to produce organic soil fertilizer. Analyze and monitor the fermentation process through the platform to ensure process compliance and registration.

Expelled lava from volcano
SPAIN

Wireless system to monitor the temperature of the cooling process of lava expelled from Cumbre Vieja volcano in La Palma island. Data is available in real time and provides valuable insights to geologists, as well as aiding authorities in the decision process of safely removing the lava.

Start your business Digitalization

Eliminate wired connections and lead your application to wireless communications

UP TO 4KM (LoS)

3RD PARTY DEVICES

Transmitters

- Analog, digital and temperature inputs
- Digital outputs - Generic, link lost indication and external power control
- Analog inputs with 15-bit resolution
- Digital inputs configuration - pulse counter or discrete
- Configurable communication period
- Multi-hop mesh network with self-forming, self-healing and self-optimizing features
- Long range wireless Communication

TWP-4AI

- 4 analog inputs (0..20 mA / 0..10 V)
- 3 digital outputs: generic, RF link lost and external power control
- Event trigger via digital input
- Dual operational mode (transmitter or transmitter/repeater)
- Site survey features
- IP65 protection

TWP-4AI4DI1UT

- 4 analog inputs (0..20 mA / 0..10 V)
- 4 digital inputs
- 1 universal temperature input (PT100 or Thermocouple)
- 3 digital outputs: generic, RF link lost and external power control
- Event trigger via digital input
- Dual operational mode (transmitter or transmitter/repeater)
- Site survey features
- IP65 protection

temperature · analog input · digital input · pulse counter · digital output

TWP-1AI / TWP-2AI

- 1 or 2 analog inputs (0..20 mA / 0..10 V)
- 1 digital output: remote control (NPN)
- Dual operational mode (transmitter or transmitter/ repeater)
- Site survey features
- IP65 protection

TWP-1UT / TWP-2UT

- 1 or 2 temperature inputs (PT100 / Thermocouples)
- 1 digital output: remote control (NPN)
- Dual operational mode (transmitter or transmitter/ repeater)
- Site survey features
- IP65 protection

TWP-1DI / TWP-2DI

- 1 or 2 digital inputs (Discrete / Pulse Counter)
- 1 digital output: remote control (NPN)
- Dual operational mode (transmitter or transmitter/ repeater)
- Site survey features
- IP65 protection

TWPH-1UT

- 1 Universal temperature input (PT100 and Thermocouples)
- 6 status LEDs
- Dual operational mode (transmitter or transmitter/ repeater)
- Site survey features
- IP40 protection

Transmitters Comparison

MODELS	TEMPERATURE	ANALOG INPUT	DIGITAL INPUT	PULSE COUNTER	DIGITAL OUTPUT	BATTERY POWERED BUILT-IN	BATTERY POWERED POWER BOX
TWP-1AI / TWP-2AI		●			●	●	
TWP-1DI / TWP-2DI			●	●	●	●	
TWP-1UT / TWP-2UT	●				●	●	
TWP-4AI4DI1UT	●	●	●		●		●
TWP4AI		●			●		●
TWPH-1UT	●					●	

Gateway

The main endpoint of PLUS wireless network is tasked to manage the communications between all the devices of PLUS wireless network

WGW420

- Scalable network up to 55 PLUS transmitters
- Up to 13 repeaters in one network
- Modbus RTU communication protocol
- 8 analog outputs (4..20 mA)
- IP40 protection

Repeater

Improve PLUS wireless network redundancy and robustness with repeaters to ensure a reliable communication between end points.

WRP001

- Up to 12 repeaters in series for extra-long range
- Multi-hop mesh network with self-forming, self-healing and self-optimizing features
- Site survey features
- IP65 protection

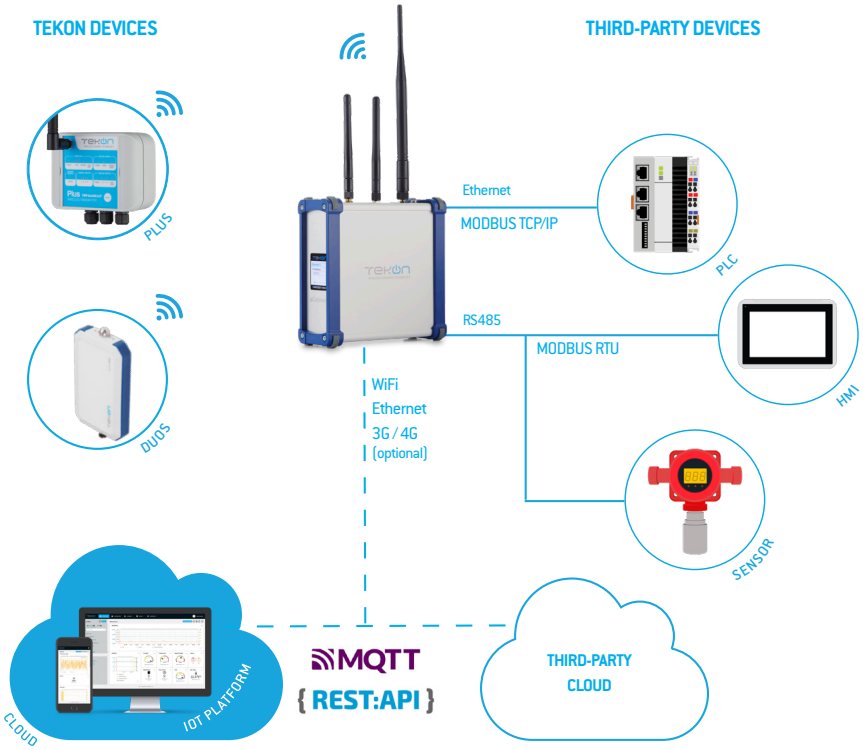
uGateway

Smart Industrial IoT Gateway

UNIVERSAL IoT GATEWAY

IIoT MADE SIMPLE!

COLLECT, RECORD, SEND AND ANALYSE



TECHNICAL SPECIFICATIONS

Processor : Arm Quad Core Cortex-A72 64-bit SoC

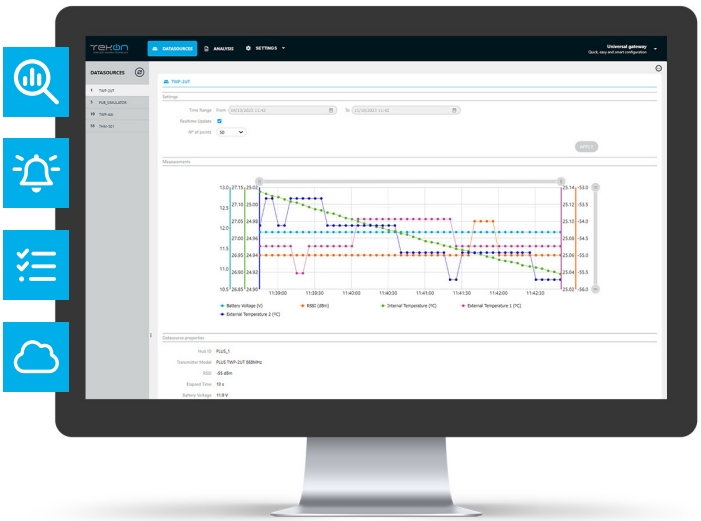
I/O: WiFi LAN: 2.4 GHz
Radio wireless interface 868/915MHz (used by Tekon transmitters)
Mobile: 3G/4G cellular Modem (optional)
Serial: RS-485
Ethernet: 100/1000 Mbps

Memory: 16 GB eMMC flash

Protocols: Modbus RTU, Modbus TCP/IP, MQTT

User interface

Through the browser-based user interface, the transmitted data offers users the highest level of transparency. Accessing product data during development enables rapid planning and reduces timelines. Processes become measurable, enhancing production flexibility.



Data analysis

Real-time alarms and notifications

Device management

IoT platform connectivity

Open solution for third-party systems

Modbus MQTT Node-RED

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