



PRODUCT CATALOGUE

2 0 1 9



WIRELESS MONITORING SOLUTIONS



TRANSMITTERS

WIRELESS SENSORS

WIRED TRANSMITTERS

SOFTWARE

PLUS ONE

DUOS

INHEAD

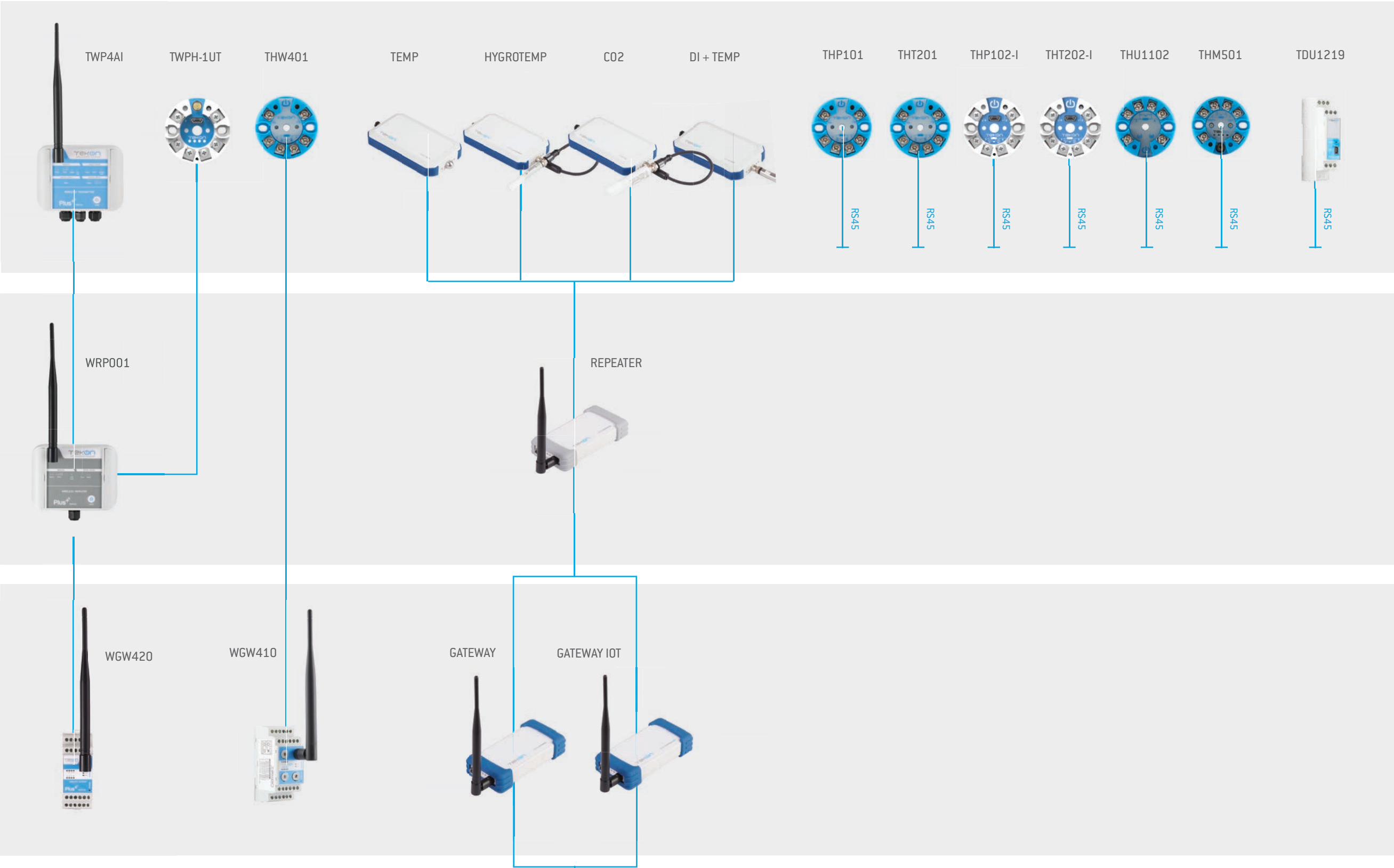
DINRAIL

IOT

TRANSMITTERS

REPEATERS

GATEWAYS



Tekon Electronics is a European brand based in Portugal, specialized in development and manufacture of innovative wireless sensors technology. It is a business unit of Bresimar Automação, S.A., a company with 35 years of experience in automation, industrial control solutions, and engineering.

Bresimar Automação began its activity in 1982 focusing in distribution of equipment and systems for industrial automation. Throughout the years, Bresimar Automação leveraged the knowledge by providing high-quality products and automation solutions, representing several valued brands. Specialized teams and dedicated professionals provide services in several fields of industrial automation and engineering projects.

Tekon Electronics develops and manufactures wireless solutions for measurement and monitoring applications, focusing in trending topics as Internet of Things and Industry 4.0. A skilled R&D team and a planned manufacture process are cornerstones of a full product

Tekon Electronics is a global, customer-oriented partner for reliable monitoring solutions.

Our product range covers Wireless Sensors, Wireless Transmitters, Wired Transmitters, Software, Probes and Accessories.

We are committed with the development of innovative solutions, delivering products of the highest quality, fulfilling the needs of each customer.

Along with our quality products and solutions, our brand is one of our most valuable assets. We also work with customized products and application solutions, frequently in close collaboration with our customers.

**Our passion is to work
together with our customers
to capture the opportunities
of tomorrow.**

CONCEPT
DEVELOPMENT
TESTING
MANUFACTURE
AFTER SALES SUPPORT



WIRELESS TRANSMITTERS

PLUS

system overview

- > Up to 55 transmitters
- > Up to 12 repeaters
- > 8 configurable analog outputs
- > 4 configurable analog inputs

Wireless systems PLUS is an easy-to-use system that allows wireless reception and transmission of any process variables that could be transformed into an analogue signal.

This system is composed by a transmitter and gateway, which is connected via MODBUS RTU to a PLC, SCADA, PC, HMI or by the replication of 8 analogue outputs, through a direct controller connection. PLUS wireless system was designed to monitor 4..20 mA / 0..10V signals, providing a secure communication, without cable requirements of a complex wired solution. Conductivity, PH, vibration, humidity, flow, level, pressure and temperature are some examples of industrial process variables, possible to be monitored and controlled.

1 Transmitter TWP4AI

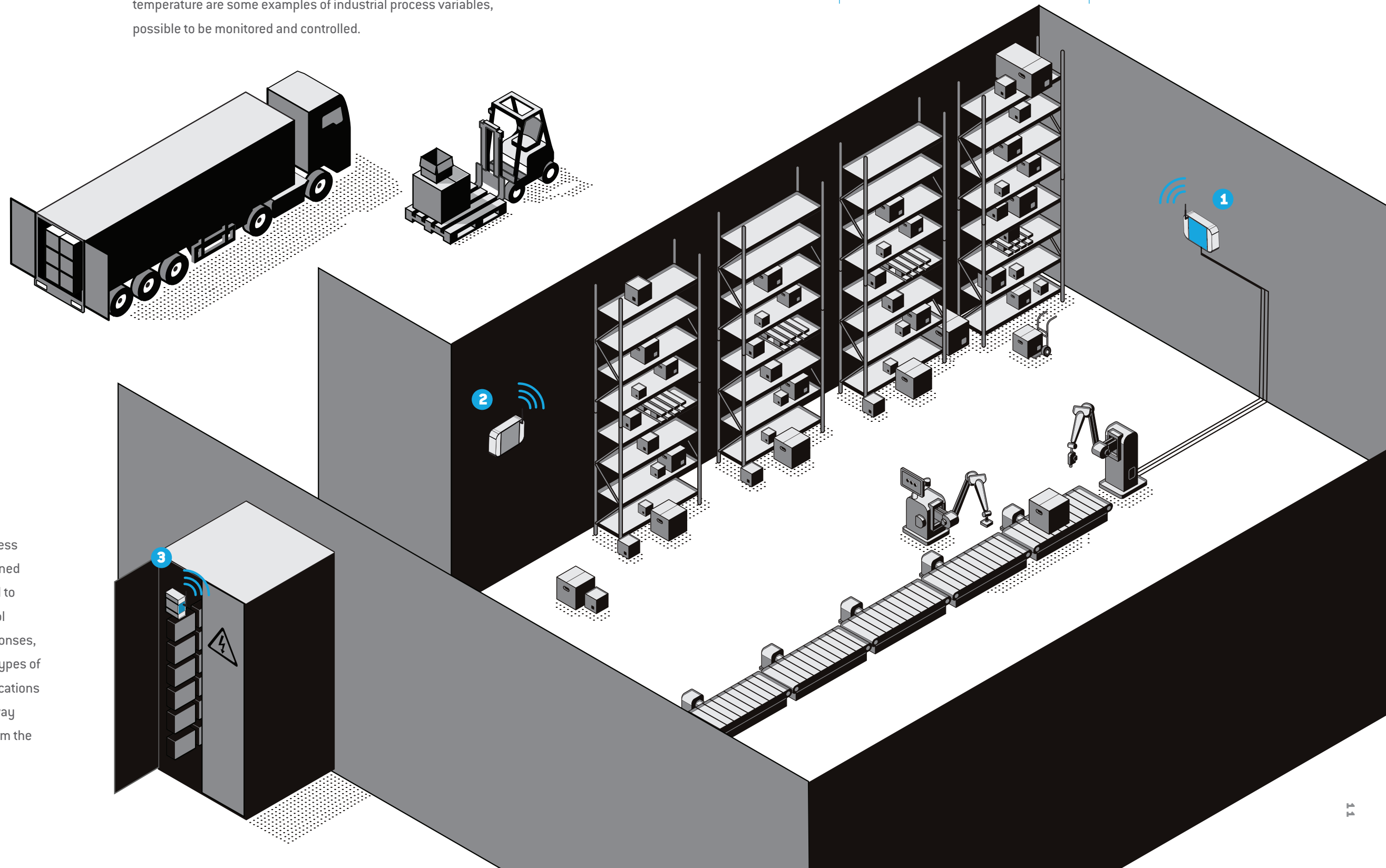
Featuring wireless mesh network technology performing up to 4 Km encrypted communication range, this device can turn any third-party sensor with an analog output into an IoT wireless smartsensor. PLUS Wireless Transmitter supports up to 4 configurable analog inputs (4..20 mA/0..10 V) for instantaneous cable replacement as well as digital inputs and outputs for basic remote interactions.

2 Repeater WRP001

PLUS Wireless Repeater provides extra communication range by supporting up to 13 hops (12 repeaters in series). It also increases network redundancy and reliability with unlimited number of devices, taking advantage of mesh network topology and permanently providing the best wireless link.

3 Gateway WGW420

PLUS Wireless Gateway is the mesh network central device by collecting information from up to 55 devices simultaneously. It communicates via Modbus RTU with HMI/PLC for industrial applications, as well as 8 configurable analog outputs for direct cable replacement. Seamless IoT integration is possible using Tekon IoT Platform software for remote monitoring and analysis.



MESH NETWORKS

Mesh networks are a very compact, multi-hop, mesh protocol for bi-directional wireless communication. Mesh networks are designed for data acquisition applications that need to transport short, messages, such as control commands, instructions, conditional responses, metered data, measurements, and other types of information. Mesh networks excel in applications that have most data traffic up to the gateway and limited non time critical data down from the gateway and/or between nodes.

PLUS

TWP4AI WIRELESS TRANSMITTER

REF.: PA164510110

868MHz

915MHz

COMING SOON



KEY FEATURES

4 CONFIGURABLE ANALOG INPUTS

(0..20 mA OR 0..10 V) PROVIDING CABLE REPLACEMENT FEATURES

3 CONFIGURABLE DIGITAL OUTPUTS

GENERIC, RF LINK LOST INDICATION AND EXTERNAL POWER CONTROL

-30°C TO 80°C

TEMPERATURE MEASUREMENT SENSOR RANGE

UP TO 4 KM COMMUNICATION DISTANCE (LOS)

MULTI-HOP MESH NETWORK

WITH SELF-FORMING, SELF-HEALING AND SELF-OPTIMIZING FEATURES

OPERATING MODE

AS END DEVICE / AS REPEATER

SITE SURVEY FEATURE

IP65 PROTECTION

Dimensions 120 x 90 x 50 mm

Weight 314 g

Material ASA+PC-FR (UL 94 V-0) / Polycarbonate

Protection Index IP65

TECHNICAL SPECIFICATIONS Data applicable at 25°C

RADIO SPECIFICATIONS

Range	4Km LoS (2.5mi)
Frequency Band	868.050 a 869.950MHz
Number of Channels	16 (configurable)
Reception Sensitivity	-97 to -110 dBm ¹
Power	25 to 27 dBm ¹
Encryption method	AES 128 (Advanced Encryption Standard)
Antenna gain	+3dBi

WIRELESS NETWORK

Maximum Devices	55
Maximum Hops	13
Communication Period	1 to 43200 seconds (configurable)

ANALOG INPUT

	CURRENT	VOLTAGE
Range	0 a 12V DC	0 a 24mA
Resolution	0.38mV (15bit)	0.96uA (15bit)
Accuracy	<5mV (<0.05% FS)	<100uA (<0.5% FS)

DIGITAL INPUT - TRIGGER

Trigger

DIGITAL OUTPUT - COMMUNICATION LOSS

Communication Loss

Remote Output

External Supply

SUPPLY VOLTAGE

Range	5 to 24V DC
Accuracy	±100mV

OPERATING CONDITIONS

Operating Temperature	-30 a 80°C
-----------------------	------------

CERTIFICATIONS AND COMPLIANCE

RED - Directive 2014/53/EU

EN 300 220-2 V3.1.1 - Short range equipment (SRD)

EN 301 489-1 V2.2.0 - Electromagnetic compatibility and Radio spectrum Matters (ERM)

EN 301 489-3 V2.1.1 - Electromagnetic compatibility and Radio spectrum Matters (ERM)

¹ According to the channel

PLUS

TWPH-1UT
WIRELESS TRANSMITTER

REF.: PA164510510

868MHz

915MHz

COMING SOON



NEW

KEY FEATURES

-30°C TO 80°C

TEMPERATURE MEASUREMENT SENSOR RANGE

UP TO 4 KM COMMUNICATION DISTANCE (LOS)**UNIVERSAL SENSOR INPUT**

PT100, J, K, N, R, S, T

6 STATUS LEDS

HIGH MEASUREMENT ACCURACY

ULTRA LOW POWER MODE

LONG BATTERY LIFE

MULTI-HOP MESH NETWORK

WITH SELF-FORMING, SELF-HEALING AND SELF-OPTIMIZING FEATURES

OPERATING MODE

AS END DEVICE / AS REPEATER

SITE SURVEY FEATURE**Dimensions** 45ø x 23 mm**Weight** 50 g (aprox.)**Material** Nylon 66**Protection Index** IP40

TECHNICAL SPECIFICATIONS Data applicable at 25°C

RADIO SPECIFICATIONS

Range	4Km LoS (2.5mi)
Frequency Band	868.050 a 869.950MHz
Number of Channels	16 (configurable)
Reception Sensitivity	-97 to -110 dBm ¹
Power	25 to 27 dBm ¹
Encryption method	AES 128 (Advanced Encryption Standard)
Antenna gain	+3dBi

INPUT RESISTANCE THERMOMETER (RTD) THERMOCOUPLES (TC)

Sensor type	PT100	J, K, N, R, S, T
Open-circuit monitoring	Always active (cannot be disabled)	
Short-circuit monitoring	Always active (cannot be disabled)	Not available

WIRELESS NETWORK

Maximum Devices	55
Maximum Hops	13
Communication Period	1 to 43200 seconds (configurable)

SUPPLY VOLTAGE Range Accuracy

Range	5 to 24V DC	±100mV
-------	-------------	--------

OPERATING ENVIRONMENT

Operating Temperature	-20 a 80°C (-4 to 176°F)
-----------------------	--------------------------

DIGITAL MEASURING ACCURACY

RESISTANCE THERMOMETER (RTD)

SENSOR	RANGE °C (°F)	DIGITAL ACCURACY °C (°F)
PT100	-200 to 850 [-328 to 1562]	0,1 [0,18]

ACCURACY (ACCORDING TO IEC 61298-2)

INACCURACY	-0,093%; 0,317%
MAX. ERROR	0,292%
HYSTERESIS	-0,051%
NON-REPEATABILITY	0,054%

THERMOCOUPLES (TC)

SENSOR	RANGE °C (°F)	DIGITAL ACCURACY °C (°F)
J	-210 to 1200 [-346 to 2192]	0,5
K	-230 to 1370 [-382 to 2498]	0,5
N	-200 to 1300 [-328 to 2372]	0,5
R	-50 to 1760 [-58 to 3200]	0,5
S	-50 to 1760 [-58 to 3200]	0,5
T	-200 to 400 [-328 to 752]	0,5

CERTIFICATIONS AND COMPLIANCE

RED - Directive 2014/53/EU

EN 300 220-2 V3.1.1 - Short range equipment (SRD) Essential requirements article 3.2

EN 301 489-1 V2.2.0 - Electromagnetic compatibility and Radio spectrum Matters (ERM) Common technical requirements

EN 301 489-3 V2.1.1 - Electromagnetic compatibility and Radio spectrum Matters (ERM) Specific conditions

¹ According to the channel

PLUS

WGW420 WIRELESS GATEWAY

REF.: PA164510210

868MHz

915MHz

COMING SOON



KEY FEATURES

SCALABLE NETWORK

UP TO 55 PLUS TRANSMITTERS AND 12 REPEATERS

UP TO 4 KM COMMUNICATION DISTANCE (LOS)

WITH 868 MHz AND 128-BIT AES ENCRYPTION

MULTI-HOP MESH NETWORK

WITH SELF-FORMING, SELF-HEALING AND SELF-OPTIMIZING FEATURES

MODBUS RTU COMMUNICATION PROTOCOL

VIA RS-485 INTERFACE

8 ANALOG OUTPUTS

4..20 MA CURRENT LOOP

MULTI-HOP MESH NETWORK

WITH SELF-FORMING, SELF-HEALING AND SELF-OPTIMIZING FEATURES

Dimensions 36 x 90 x 56 mm

Weight 135 g

Material PA (UL 94 V-0) / Polycarbonate

Protection Index IP40

TECHNICAL SPECIFICATIONS Data applicable at 25°C

RADIO SPECIFICATIONS

Range ¹	4Km LoS (2.5mi)
Frequency Band	868.050 a 869.950MHz ²
Number of Channels	16 (configurable)
Receiver Sensitivity	-97 to -110 dBm ²
Transmit Power	25 to 27 dBm ²
Transmission Rate	19 a 76.8kbit/s ²
Encryption method	128-bit AES
Modulation	GFSK
Antenna	Articulated dipole antenna
Antenna gain	+3dBi
Antenna impedance	50Ω

WIRELESS NETWORK

Maximum Devices	55
Maximum Hops	13

RS-485 COMMUNICATION

Protocol	MODBUS RTU (Slave)
Isolation	1kV galvanic

ANALOG OUTPUT - CURRENT

Output Range	4 to 20mA
Out of range indication	[3.2;4.0]mA and [20.0;20.2]mA
Error indication	3.1mA and 20.4mA

POWER SUPPLY

External	12 to 24V DC ± 5%
----------	-------------------

OPERATING CONDITIONS

Operating Temperature	0 to 80°C
-----------------------	-----------

CERTIFICATIONS

RED - Directive 2014/53/EU
EN 300 220-2 V3.1.1 - Short range equipment (SRD)
EN 301 489-1 V2.2.0 - Electromagnetic compatibility and Radio spectrum Matters (ERM)
EN 301 489-3 V2.1.1 - Electromagnetic compatibility and Radio spectrum Matters (ERM)

¹ Range depends on the environment and line of sight. Always verify your wireless network's range by performing a Site Survey

² According to the radio channel selection

PLUS

WRP001 WIRELESS REPEATER

REF.: PA164510310

868MHz

915MHz

COMING SOON



KEY FEATURES

UP TO 12 REPEATERS IN SERIES
FOR EXTRA-LONG RANGE

WIRELESS SITE SURVEY FUNCTION
FOR EASY INSTALLATION AND FAST DEPLOYMENT

UP TO 4 KM COMMUNICATION DISTANCE (LOS)
WITH 128-BIT AES ENCRYPTION FOR DATA SECURITY

MULTI-HOP MESH NETWORK
WITH SELF-FORMING, SELF-HEALING AND SELF-OPTIMIZING FEATURES

SIMPLE AND INTUITIVE USB CONFIGURATION
VIA TEKON CONFIGURATOR (FREE SOFTWARE)

Dimensions 120 x 90 x 50 mm

Weight 312 g (11 oz)

Material ASA+PC-FR (UL 94 V-0) / Polycarbonate

Protection Index IP65

TECHNICAL SPECIFICATIONS Data applicable at 25°C

RADIO SPECIFICATIONS

Range ¹	4Km LoS (2.5mi)
Frequency Band	868.050 a 869.950MHz ²
Number of Channels	16 (configurable)
Receiver Sensitivity	-99 to -104 dBm ²
Transmit Power	0 to 27 dBm ²
Transmission Rate	19 a 76.8kbit/s ²
Encryption method	128-bit AES
Modulation	GFSK
Antenna	Articulated dipole antenna
Antenna gain	+3dBi
RF circuit impedance	50Ω

OPERATING ENVIRONMENT

Operating Temperature	-30 a 80°C
-----------------------	------------

CERTIFICATIONS AND COMPLIANCE

RED - Directive 2014/53/EU
EN 300 220-2 V3.1.1 - Short range equipment (SRD)
EN 301 489-1 V2.2.0 - Electromagnetic compatibility and Radio spectrum Matters (ERM)
EN 301 489-3 V2.1.1 - Electromagnetic compatibility and Radio spectrum Matters (ERM)

¹ Range depends on the environment and line of sight. Always verify your wireless network's range by performing a Site Survey.

² According to the radio channel selection.



APPLICATIONS

AGRO

Wide cultivation areas and long distances between measurement points and control rooms are key monitoring difficulties from Agro Industry. Soil or hydroponics, greenhouse or open-air cultivation farmers can benefit from wireless sensing technology.

MINING

The increasing need of automation in mining required a new generation of autonomous vehicles that need reliable and real-time data communication solutions between the vehicle and the control room.

MACHINE COMMISSIONING

Equipment commissioning is the process of ensuring that all systems and components are designed, installed, tested, operated, and maintained according to the operational requirements of the owner and tenants.

DIGITIZATION

Digitization offers enormous opportunities for growth across all industries, sectors, regions and company sizes. The move away from sequential value chains towards flexible value networks in which the value chains of the customer and partner are connected will be the cooperation model of the future.

INDUSTRY 4.0

Industry 4.0 is the transformation that makes it possible to gather and analyse data across machines, enabling faster, more flexible, and more efficient processes to produce higher-quality goods at reduced costs.



ONE

THW401

WIRELESS TRANSMITTER

REF.: PA123720200-PA123720200

868MHz

2.4GHz



KEY FEATURES

EXTREME LOW POWER

OPERATION MODE FOR LONG BATTERY LIFE

UP TO 2KM DISTANCE (LoS)

TRANSMISSION UP TO 2KM DISTANCE (LoS)

REAL TIME TRANSMISSION

PROCESS AND AMBIENT TEMPERATURE, RF SIGNAL STRENGTH AND BATTERY STATUS

WIDE RANGE SUPPLY VOLTAGE

UNIVERSAL SENSOR INPUT

RESISTANCE THERMOMETERS, THERMOCOUPLES, RESISTANCE-BASED SENSORS AND DC VOLTAGE SOURCES

COMPACT DESIGN

DIN FORM B CONNECTION HEAD MOUNTING

Dimensions 120 x 90 x 50 mm

Weight 314 g

Material ASA+PC-FR (UL 94 V-0) / Polycarbonate

Protection Index IP65

TECHNICAL SPECIFICATIONS

INPUT

RESISTANCE THERMOMETER (RTD) / THERMOCOUPLES (TC)

Sensor type	PT100, PT500, PT1000/ E, J, K, N, R, S, T
Connection	1 Resistance thermometer (RTD) in 2-wire, 3-wire or 4-wire system Resistance compensation in 2-wire systems available through software / 1 Thermocouple (TC)
Open-circuit monitoring	Always active (cannot be disabled)
Short-circuit monitoring	Always active (cannot be disabled) / Not available
Cold junction compensation (CJC)	Integrated resistance thermometer

OUTPUT RF TRANSMISSION

Transmission frequency	2.4GHz [2400; 2483] MHz
Transmission interval	Adjustable from 1s to 24h
Maximum output power	18 dBm
Sensitivity	-110dBm
Range	2 Km LoS
Modulation	GFSK
Output signals	
Temp probe (RTD or TC)	Temperature °C (°F)
Internal Temp	Temperature °C (°F)
RSSI	Absolute value
Power supply level	Voltage V
Configurable parameters	Sensor type, Transmission interval

OPERATING ENVIRONMENT

Ambient temperature range	-20 to 80°C [-4 a 176°F]
---------------------------	--------------------------

DIGITAL MEASUREMENT ACCURACY mV

Sensor	Range °C [°F]	Accuracy (mV)
mV	-8 to 100 mV	<40 µV

DIGITAL MEASUREMENT ACCURACY · RESISTANCE THERMOMETER (RTD)

Sensor	Range °C [°F]	Digital accuracy °C [°F]
PT100	-200 to 850 [-328 to +1562]	0.1 [0.18]
PT500	-200 to 850 [-328 to +1562]	0.2 [0.40]
PT1000	-200 to 350 [-328 to +662]	0.2 [0.40]

DIGITAL MEASUREMENT ACCURACY THERMOCOUPLES (TC)

Sensor	Range °C [°F]	Digital accuracy °C [°F]
E	-200 to 1000 [-328 to 1832]	1
J	-210 to 1200 [-346 to 2192]	1
K	-230 to 1370 [-382 to 2498]	1
N	-200 to 1300 [-328 to 2372]	1
R	-50 to 1760 [-58 to 3200]	2
S	-50 to 1760 [-58 to 3200]	2
T	-200 to 400 [-328 to 752]	1

POWER SUPPLY

Voltage Range	[5; 24] VDC
Power Consumption (Sleep)	< 0.2 mA
Battery Life	For a 9V battery, with 1200 mAh with a transmission interval of 2 minutes, the battery life is higher than 2 years

ONE

WGW410

WIRELESS MODBUS GATEWAY

REF.: PA123730100 / PA123710100

868MHz

2.4GHz



KEY FEATURES

SUPPORTS UP TO 16 THW401
TEMPERATURE TRANSMITTERS

UP TO 2 KM LINE OF SIGHT (LoS)
LONG DISTANCE RANGE COMMUNICATION

REAL TIME TRANSMISSION
PROCESS AND AMBIENT TEMPERATURE, RF SIGNAL
STRENGTH AND BATTERY LEVEL

1 SECOND NETWORK REFRESH TIME

RS-485 INTERFACE WITH MODBUS PROTOCOL

8 X ANALOG OUTPUTS (4...20mA)

ON SITE BATTERY AND RF SIGNAL STRENGTH
VERIFICATION

Dimensions 98mm x 66,22mm x 35,80mm

Weight 120g

Material PA – UL 94 V0

Protection Index IP40

TECHNICAL SPECIFICATIONS

POWER SUPPLY

Voltage supply	12 VDC to 24 VDC +/- 10%
Current consumption	70 mA @ 12 VDC / 45 mA @ 24 VDC (@ 25 °C)
Power consumption	0.85 W @ 12 VDC / 1.1 W @ 24 VDC (@ 25 °C)
Power up time	900 ms

RF TRANSMISSION

Transmission frequency	2.4 GHz (worldwide)
Transmission interval	60 ms per remote node
Sensitivity	-108 dBm
Range	2 Km LoS

RS-485 INTERFACE

Protocol	Modbus RTU
Galvanic isolation	1KV

ANALOG OUTPUTS

Output signal	8 x 4 to 20 mA
Max. load	360 Ω @ 12VDC / 1 KΩ @ 24VDC
Out of range	[3.2;4.0] mA and [20.0;20.2] mA
Fault signal (e.g. sensor fault)	3.1.mA or 20.4 mA
Sample cycle	1s to 24h (configurable)
Protection	Against reversed polarity Surge protection
Power on or reset initial value	Last written value

CERTIFICATIONS AND APPROVALS

EN 61326	Electrical equipment for measurement, control and laboratory use. EMC requirements.
IEC 61000-4-2	Electrostatic discharge immunity test
IEC 61000-4-3	Radiated, Radio-Frequency, Electromagnetic Field Immunity test
IEC 61000-4-4	Electrical fast transient/brust immunity test
IEC 61000-4-5	Surge Immunity Test
EN 300 228	Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive
EN 300 440	Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices; Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive

¹ According to the channel

ACCESSORIES

PLUS / ONE

PA123772100



ANTENNA
• Cable Extension 868MHz SMA 2.0m

PA160410005



ANTENNA
• Cable Extension 2.4GHz SMA-RP 2.0m

PA123790200



BUZ CONNECTION HEAD
For wireless transmitters

PA160410006



PROBE HEAD ANTENNA FIXING

PA123790400



RS485 TO USB CONVERTER CABLE
Cable to connect WGW410 Gateway to an USB port.

STARTER KITS

PLUS

PA164510410



PLUS TWP4AI 868MHZ STARTER KIT
• PLUS TWP4AI Wireless Transmitter 868 MHz;
• PLUS WGW420 Wireless Gateway 868 MHz;
• Antennas and accessories;
• RS485-USB Converter Cable;
• Suitcase.
* batteries not included

ONE

PA144010300 (A)
PA144010100 (B)



THW401 STARTER KIT - 868 MHZ (A) / 2.4 GHZ (B)
• THW401 Wireless Transmitter;
• WGW410 Wireless Gateway;
• BUZ head including 6X50 mm "K" thermocouple probe;
• Antennas and accessories;
• RS485 to USB configuration cable;
• Suitcase.

WIRELESS SENSORS

DUOS

system overview

- > Up to 55 transmitters
- > Up to 12 repeaters
- > Serial or TCP/IP connection

Wireless System DUOS is a solution developed with the highest standards regarding measurement and signal transmission. Suitable for monitoring applications of temperature, humidity, and CO2 variables. With a long power and battery life, also present long-range communications (up to 4 Km LoS).

With IP67 protection, the transmitter support temperature range from -40 to +80 Celsius degrees. Designed to operate in extremely cold environments or submerge in water, the DUOS could also be connected to an external digital input or a cable adapter in order to adapt to different probe connection configurations.

1 Transmitter

DUOS Wireless Transmitter supports various external sensors for temperature, humidity or CO2 monitoring. It encloses an extra internal temperature sensor for product thermal inertia simulation and optionally, an external Digital Input for event detection.

2 Repeater

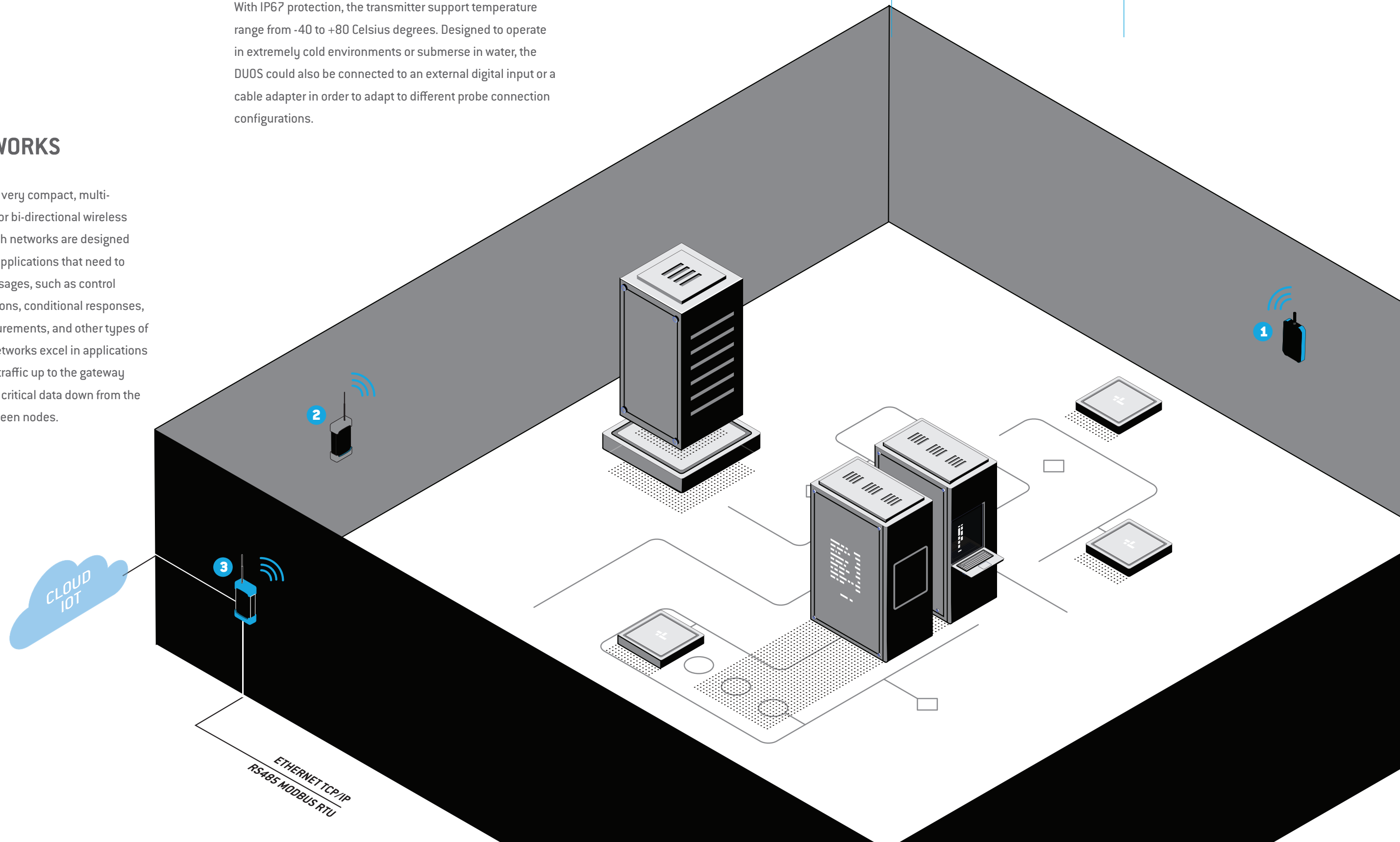
DUOS Wireless Repeater provides extra communication range by supporting up to 13 hops (12 repeaters in series). It also adds network redundancy with unlimited devices taking advantage of mesh network topology and permanently discovering the best wireless link.

3 Gateway

DUOS Wireless Gateway is the mesh network central device collecting information from up to 55 DUOS Transmitters simultaneously. It communicates via Modbus RTU with any PLC or HMI for industrial applications. Seamless PC integration is possible using Tekon IoT Platform software for remote monitoring.

MESH NETWORKS

Mesh networks are a very compact, multi-hop, mesh protocol for bi-directional wireless communication. Mesh networks are designed for data acquisition applications that need to transport short, messages, such as control commands, instructions, conditional responses, metered data, measurements, and other types of information. Mesh networks excel in applications that have most data traffic up to the gateway and limited non time critical data down from the gateway and/or between nodes.



DUOS

TEMP

WIRELESS SENSOR

REF.: PA160410110 / PA160411810

868MHz

2.4GHz



AVAILABLE COLOURS

- white / blue
- black / blue

KEY FEATURES

−40 °C TO 125°C
TEMPERATURE SENSOR MEASUREMENT RANGE

AGRIFOOD INDUSTRY COMPATIBILITY
COMPATIBLE WITH AGRIFOOD INDUSTRY STANDARDS

DUAL TEMPERATURE PROBE
INTERNAL AND EXTERNAL PROBE

WIRELESS LINK STRENGTH (RSSI)
AUTO DISCOVERY OF THE BEST WIRELESS LINK

LOW POWER AND LONG BATTERY LIFE
MEASUREMENT AND TRANSMISSION OF BATTERY VOLTAGE

WATER RESISTANT
IP67 PROTECTION

- Dimensions 162 x 88.5 x 25 mm
- Weight 100 g
- Material ABS UL94HB
- Protection Index IP67

TECHNICAL SPECIFICATIONS

RADIO SPECIFICATIONS	868MHZ	2.4GHZ
Range ¹	Up to 4 Km LoS, 868MHz, 27 dBm (500mW)	Up to 2 Km, 2.4GHz, 10dBm (10mW)
Radio Transmit Power	0 to 27 dBm ²	-10 a 17dBm ²
Radio Receiver Sensitivity	-97 to -110 dBm ²	-91 até -108dBm ²
Frequency Band	868.050 to 869.575 MHz ²	2400.75 até 2482.75 Mhz ²
Radio Channels	16, 868MHz	83, 2.4GHz
Encryption method	AES 128 (Advanced Encryption Standard)	

WIRELESS NETWORK	
Maximum Devices	55
Maximum Hops	13
Communication Period	1 to 43200 seconds (configurable)

TEMPERATURE MEASUREMENT	EXTERNAL PROBE	INTERNAL PROBE
Range	-40 to 125°C	From -40 to 80 °C
Resolution	0.1 °C	0.1 °C
Accuracy	Typical: ± 0.25 °C / Maximum: ± 0.5 °C	Typical: ± 0.25 °C / Maximum: ± 0.5 °C

TEMPERATURE MEASUREMENT INTERNAL PROBE	868MHZ	2.4GHZ
Range	-40 to 80 °C	-20 to 80°C
Resolution	0.1 °C	
Accuracy	Typical: ± 0.25 °C / Maximum: ± 0.5 °C	

SUPPLY VOLTAGE
3x3.6 AA lithium batteries (PN EVE ER14505M) ³
3 years of estimated battery life ⁴
External power supply with 12 VDC ± 5%

OPERATING ENVIRONMENT
From −40 °C to 80 °C

CERTIFICATIONS AND COMPLIANCE
EN 61326 Electrical equipment for measurement, control and laboratory use. EMC requirements.
IEC 61000-4-2 Radiated, Radio-Frequency, Electromagnetic Field Immunity Test
IEC 61000-4-3 Electrical fast transient/burst immunity Test
IEC 61000-4-4 Surge Immunity Test
IEC 61000-4-5 Electrostatic discharge immunity test

¹ Range depends on the environment and line of sight. Always verify your wireless network's range by performing a Site Survey.
² Dependent on radio channel selection.
³ Batteries not included.
⁴ Considering a communication period of 10 minutes, and maximum transmit power (27dBm) at 25 °C, with PN EVE ER14505M batteries.

DUOS

HYGROTEMP
WIRELESS SENSOR

REF.: PA164520110 / PA164520510

868MHz

2.4GHz



KEY FEATURES

0% TO 100%

HUMIDITY SENSOR MEASUREMENT RANGE

-40 °C TO 80 °C

TEMPERATURE SENSOR MEASUREMENT RANGE

DUAL PROBE

FOR TEMPERATURE AND HUMIDITY MEASUREMENT

WIRELESS LINK STRENGTH (RSSI)

AUTO DISCOVERY OF THE BEST WIRELESS LINK

LOW POWER AND LONG BATTERY LIFE

MEASUREMENT AND TRANSMISSION OF BATTERY VOLTAGE

WATER RESISTANT

IP67 PROTECTION

AVAILABLE COLOURS



white / blue



black / blue

Dimensions 162 x 88.5 x 25 mm

Weight 100 g

Material ABS UL94HB

Protection Index IP67

TECHNICAL SPECIFICATIONS

RADIO SPECIFICATIONS	868MHZ	2.4GHZ
Range ¹	Up to 4 Km LoS, 868MHz, 27 dBm (500mW)	Up to 2 Km, 2.4GHz, 10dBm (10mW)
Radio Transmit Power	0 to 27 dBm ²	-10 a 17dBm ²
Radio Receiver Sensitivity	-97 to -110 dBm ²	-91 até -108dBm ²
Frequency Band	868.050 to 869.575 MHz ²	2400.75 até 2482.75 Mhz ²
Radio Channels	16, 868MHz	83, 2.4GHz
Encryption method	AES 128 (Advanced Encryption Standard)	

WIRELESS NETWORK

Maximum Devices	55
Maximum Hops	13
Communication Period	1 to 43200 seconds (configurable)

INTERNAL TEMPERATURE

Range	From -40 to 80 °C
Resolution	0.1 °C
Accuracy	Typical: ± 0.25 °C / Maximum: ± 0.5 °C

SUPPLY VOLTAGE

3x3.6 AA lithium batteries (PN EVE ER14505M) ³
3 years of estimated battery life ⁴
External power supply with 12 VDC ± 5%

INTERFACE

2 blue LED for wireless network address identification and general operation status
1 red LED and 1 green LED for wireless network operation status
1 magnetic reed switch for system reset
1 M8 female socket with 5 poles for device configuration through host computer

OPERATING ENVIRONMENT

From -40 °C to 80 °C

CERTIFICATIONS AND COMPLIANCE

EN 61326 Electrical equipment for measurement, control and laboratory use. EMC requirements.
IEC 61000-4-2 Radiated, Radio-Frequency, Electromagnetic Field Immunity Test
IEC 61000-4-3 Electrical fast transient/burst immunity Test
IEC 61000-4-4 Surge Immunity Test
IEC 61000-4-5 Electrostatic discharge immunity test

¹ Range depends on the environment and line of sight. Always verify your wireless network's range by performing a Site Survey.² Dependent on radio channel selection.³ Batteries not included.⁴ Considering a communication period of 10 minutes, and maximum transmit power (27dBm) at 25 °C with PNEVEER14505M batteries.

DUOS

DI+TEMP

WIRELESS SENSOR

REF.: PA160411210 / PA160412510

868MHz

2.4GHz



DI



AVAILABLE COLOURS

- white / blue
- black / blue

KEY FEATURES

−40 °C TO 125°C
 TEMPERATURE MEASUREMENT SENSOR RANGE

DIGITAL INPUT EVENT TRIGGER COMMUNICATION

AGRIFOOD INDUSTRY COMPATIBILITY
 COMPATIBLE WITH AGRIFOOD INDUSTRY STANDARDS

DUAL TEMPERATURE PROBE
 INTERNAL AND EXTERNAL PROBE

WIRELESS LINK STRENGTH (RSSI)
 AUTO DISCOVERY OF THE BEST WIRELESS LINK

LOW POWER AND LONG BATTERY LIFE
 MEASURING AND TRANSMITTING BATTERY VOLTAGE

WATER RESISTANT
 IP67 PROTECTION

- Dimensions 162 x 88.5 x 25 mm
- Weight 100 g
- Material ABS UL94HB
- Protection Index IP67

TECHNICAL SPECIFICATIONS		
RADIO SPECIFICATIONS	868MHZ	2.4GHZ
Range ¹	Up to 4 Km LoS, 868MHz, 27 dBm (500mW)	Up to 2 Km LoS, 2.4GHz, 10dBm (10mW)
Radio Transmit Power	0 to 27 dBm ²	-10 to 17dBm ²
Radio Receiver Sensitivity	-97 to -110 dBm ²	-91 to -108dBm ²
Frequency Band	868.050 to 869.575 MHz ²	2400.75 to 2482.75 Mhz ²
Radio Channels	16, 868MHz	83, 2.4GHz
Encryption method	AES 128 (Advanced Encryption Standard)	
WIRELESS NETWORK		
Maximum Devices	55	
Maximum Hops	13	
Communication Period	1 to 43200 seconds (configurable)	
TEMPERATURE MEASUREMENT – EXTERNAL PROBE		
Range	-40 to 125°C	
Resolution	0.1 °C	
Accuracy	Typical: ± 0.25 °C / Maximum: ± 0.5 °C	
TEMPERATURE MEASUREMENT INTERNAL PROBE		
Range	-40 to 80°C	
Resolution	0.1 °C	
Accuracy	Typical: ± 0.25 °C / Maximum: ± 0.5 °C	
DIGITAL INPUT		
SUPPLY VOLTAGE		
3x3.6 AA lithium batteries (PN EVE ER14505M) ³		
3 years of estimated battery life ⁴		
External power supply with 12 VDC ± 5%		
OPERATING ENVIRONMENT		
From –40 °C to 80 °C		
CERTIFICATIONS AND COMPLIANCE		
EN 61326 Electrical equipment for measurement, control and laboratory use. EMC requirements.		
IEC 61000-4-2 Radiated, Radio-Frequency, Electromagnetic Field Immunity Test		
IEC 61000-4-3 Electrical fast transient/burst immunity Test		
IEC 61000-4-4 Surge Immunity Test		
IEC 61000-4-5 Electrostatic discharge immunity test		

¹ Range depends on the environment and line of sight. Always verify your wireless network's range by performing a Site Survey.
² Dependent on radio channel selection.
³ Batteries not included.
⁴ Considering a communication period of 10 minutes, and maximum transmit power (27dBm) at 25 °C, with PN EVE ER14505M batteries and Digital Input OFF.

DUOS

CO₂

WIRELESS SENSOR

REF.: PA160411210 / PA160412510

868MHz

2.4GHz

CO₂



AVAILABLE COLOURS

- white / blue
- black / blue

KEY FEATURES

MULTIPLE CO2 MEASUREMENT RANGES

2.000PPM, 5.000PPM, 10.000PPM, 3% AND 5%

−40 °C TO 60°C

TEMPERATURE SENSOR MEASUREMENT RANGE

DUAL PROBE

INTERNAL TEMPERATURE AND EXTERNAL CO2 PROBE

WIRELESS LINK INDICATION (RSSI)

AUTO DISCOVERY OF THE BEST WIRELESS LINK

WATER RESISTANT

IP67 PROTECTION (TRANSMITTER)

IP65 PROTECTION (CO2 PROBE)

Dimensions 162 x 88.5 x 25 mm

Weight 100 g

Material ABS UL94HB

Protection Index IP67

TECHNICAL SPECIFICATIONS

RADIO SPECIFICATIONS	868MHZ	2.4GHZ
Range ¹	Up to 4 Km LoS, 868MHz, 27 dBm (500mW)	Up to 2 Km, 2.4GHz, 10dBm (10mW)
Radio Transmit Power	0 to 27 dBm ²	-10 a 17dBm ²
Radio Receiver Sensitivity	-97 to -110 dBm ²	-91 até -108dBm ²
Frequency Band	868.050 to 869.575 MHz ²	2400.75 até 2482.75 MHz ²
Radio Channels	16, 868MHz	83, 2.4GHz
Encryption method	AES 128 (Advanced Encryption Standard)	

WIRELESS NETWORK

Maximum Devices	55
Maximum Hops	13
Communication Period	16 to 3600 seconds (configurable)

CO2 MEASUREMENT – EXTERNAL PROBE

Operating Temperature	-40°C to 60°C (0-100%RH non-condensing)
Acquisition Range ³	0-5000ppm
Precision at 25°C and 1013 mbar	0 to 5000ppm: +- 50ppm + 3% measured value

TEMPERATURE MEASUREMENT

INTERNAL PROBE	
Range	From -40 to 80 °C
Resolution	0.1 °C
Accuracy	Typical: ± 0.25 °C / Maximum: ± 0.5 °C

SUPPLY VOLTAGE

3x3.6 AA lithium batteries (SAFT LS14500) ⁴
External power supply with 12 VDC ± 5%

OPERATING ENVIRONMENT

Probe	From −40 °C to 60 °C
Transmitter	From −40 °C to 80 °C

CERTIFICATIONS AND COMPLIANCE

EN 61326 Electrical equipment for measurement, control and laboratory use. EMC requirements.
IEC 61000-4-2 Radiated, Radio-Frequency, Electromagnetic Field Immunity Test
IEC 61000-4-3 Electrical fast transient/burst immunity Test
IEC 61000-4-4 Surge Immunity Test
IEC 61000-4-5 Electrostatic discharge immunity test

¹ Range depends on the environment and line of sight. Always verify your wireless network's range by performing a Site Survey.

² Dependent on radio channel selection.

³ CO2 acquisition range available upon probe selection. Probe sold separately.

⁴ Batteries not included.

DUOS

WIRELESS GATEWAY



REF.: PA160410210 / PA160411910

868MHz

2.4GHz



AVAILABLE COLOURS

-  white / blue
-  black / blue

KEY FEATURES

SCALABLE NETWORK

SCALABLE UP TO 55 DUOS TRANSMITTERS

MULTIPLE NETWORKS SIMULTANEOUSLY

UP TO 12 REPEATERS IN SERIES

UP TO 4KM OR 2KM DISTANCE (LoS)

RANGE OF 868MHZ, 27 DBM (500mW) OR 2.4GHZ, 10 DBM (10mW)

AUTOMATIC MESH NETWORK MANAGEMENT

AES KEY DATA ENCRYPTION 128 BITS

SERIAL MODBUS RTU COMMUNICATION

EASY TO CONFIGURE

SIMPLE, INTUITIVE AND FREE CONFIGURATION SOFTWARE

Dimensions 142 x 73 x 34,5 mm

Weight 100 g

Material ABS UL94HB / Silicone

Protection Index IP40

TECHNICAL SPECIFICATIONS

RADIO SPECIFICATIONS	868MHZ	2.4GHZ
Range ¹	Up to 4 Km LoS, 868MHz, 27 dBm (500mW)	Up to 2 Km, 2.4GHz, 10dBm (10mW)
Radio Transmit Power	0 to 27 dBm ²	-10 to 17dBm ²
Radio Receiver Sensitivity	-97 to -110 dBm ²	-91 to -108dBm ²
Frequency Band	868.050 to 869.575 MHz ²	2400.75 to 2482.75 Mhz ²
Radio Channels	16, 868MHz	83, 2.4GHz ²
Encryption method	AES 128 (Advanced Encryption Standard)	

WIRELESS NETWORK

Maximum Devices	55
Maximum Hops	13

SUPPLY VOLTAGE

External power supply with 12 VDC ± 5%

SERIAL COMMUNICATION (RS-485)

Protocol	Modbus RTU (Slave)
Interface	2-wire RS-485

OPERATING ENVIRONMENT

−10 °C to +60 °C

CERTIFICATIONS AND COMPLIANCE

EN 61326 Electrical equipment for measurement, control and laboratory use. EMC requirements.

IEC 61000-4-2 Radiated, Radio-Frequency, Electromagnetic Field Immunity Test

IEC 61000-4-3 Electrical fast transient/burst immunity Test

IEC 61000-4-4 Surge Immunity Test

IEC 61000-4-5 Electrostatic discharge immunity test

¹ Range depends on the environment and line of sight. Always verify your wireless network's range by performing a Site Survey.

² Dependent on radio channel selection.

DUOS

WIRELESS GATEWAY IOT

REF.: PA160410220 / PA160411920



868MHz

2.4GHz

NEW



AVAILABLE COLOURS

-  white / blue
-  black / blue

KEY FEATURES

ETHERNET TCP/IP MODBUS COMMUNICATION

INTEGRATION WITH TEKON IOT PLATFORM

CONNECTION TO MICROSOFT AZURE
AND IBM BLUEMIX IOT PLATFORMS
REST API FOR SYSTEM INTEGRATION

SCALABLE NETWORK

SCALABLE UP TO 55 DUOS TRANSMITTERS

MULTIPLE NETWORKS SIMULTANEOUSLY

UP TO 12 REPEATERS IN SERIES

UP TO 4KM OR 2KM DISTANCE (LoS)

RANGE OF 868MHZ, 27 DBM (500mW) OR 2.4GHZ, 10 DBM (10mW)

AUTOMATIC MESH NETWORK MANAGEMENT

AES KEY DATA ENCRYPTION 128 BITS

EASY TO CONFIGURE

SIMPLE, INTUITIVE AND FREE CONFIGURATION SOFTWARE

Dimensions 142 x 73 x 34,5 mm

Weight 100 g

Material ABS UL94HB/Silicone

Protection Index IP40

TECHNICAL SPECIFICATIONS

RADIO SPECIFICATIONS	868MHZ	2.4GHZ
Range ¹	Up to 4 Km LoS, 868MHz, 27 dBm (500mW)	Up to 2 Km, 2.4GHz, 10dBm (10mW)
Radio Transmit Power	0 to 27 dBm ²	-10 to 17dBm ²
Radio Receiver Sensitivity	-97 to -110 dBm ²	-91 to -108dBm ²
Frequency Band	868.050 to 869.575 MHz ²	2400.75 to 2482.75 Mhz ²
Radio Channels	16, 868MHz	83, 2.4GHz ²
Encryption method	AES 128 (Advanced Encryption Standard)	

WIRELESS NETWORK

Maximum Devices	55
Maximum Hops	13

SUPPLY VOLTAGE

External power supply with 12 VDC ± 5%

SERIAL COMMUNICATION (RS-485)

Protocol	Modbus RTU (Slave)
Interface	2-wire RS-485

NETWORK COMMUNICATION (ETHERNET)

Protocol	TCP / IP Modbus RTU
Interface	Ethernet

IOT CONNECTIVITY

Tekon IoT Platform
REST API

OPERATING ENVIRONMENT

-10 °C to +60 °C

CERTIFICATIONS AND COMPLIANCE

EN 61326 Electrical equipment for measurement, control and laboratory use. EMC requirements.
IEC 61000-4-2 Radiated, Radio-Frequency, Electromagnetic Field Immunity Test
IEC 61000-4-3 Electrical fast transient/burst immunity Test
IEC 61000-4-4 Surge Immunity Test
IEC 61000-4-5 Electrostatic discharge immunity test

¹ Range depends on the environment and line of sight. Always verify your wireless network's range by performing a Site Survey.

² Dependent on radio channel selection.

DUOS

WIRELESS REPEATER

REF.: PA160410310 / PA160412010

868MHz

2.4GHz



AVAILABLE COLOURS

- white / blue
- black / blue

KEY FEATURES

EASY TO CONFIGURE
SIMPLE, INTUITIVE AND FREE CONFIGURATION SOFTWARE

UP TO 4KM OR 2KM DISTANCE (LoS)
RANGE OF 868MHZ, 27 DBM (500mW) OR 2.4GHZ, 10 DBM (10mW)

AUTO DISCOVERY OF BEST WIRELESS LINK
AUTOMATIC FORWARDING OF COMMUNICATION

MESH NETWORK
IMPROVEMENT OF THE MESH NETWORK RELIABILITY

IMPROVEMENT OF THE NETWORK COVERAGE
IMPROVEMENT OF THE SIGNAL STRENGTH

- Dimensions** 142 x 73 x 34.5 mm
- Weight** 100 g
- Material** ABS UL94HB/Silicone
- Protection Index** IP40

TECHNICAL SPECIFICATIONS

RADIO SPECIFICATIONS	868MHZ	2.4GHZ
Range ¹	Up to 4 Km LoS, 868MHz, 27 dBm (500mW)	Up to 2 Km LoS, 2.4GHz, 10dBm (10mW)
Radio Transmit Power	0 to 27 dBm ²	-10 to 17dBm ²
Radio Receiver Sensitivity	-97 to -110 dBm ²	-91 to -108dBm ²
Frequency Band	868.050 to 869.575 MHz ²	2400.75 to 2482.75 Mhz ²
Radio Channels	16, 868MHz	83, 2.4GHz
Encryption method	AES 128 (Advanced Encryption Standard)	

WIRELESS NETWORK	
Maximum Devices	55
Maximum Hops	13

SUPPLY VOLTAGE	
External power supply with 12 VDC ± 5%	

INTERFACE	
1 blue LED for general operation status	
1 red LED signaling radio data transmission	
1 green LED signaling radio data reception	
1 M8 female socket with 5 poles for power supply and device configuration trough host computer	

OPERATING ENVIRONMENT	
-10 °C to 60 °C	

CERTIFICATIONS AND COMPLIANCE	
EN 61326 Electrical equipment for measurement, control and laboratory use. EMC requirements.	
IEC 61000-4-2 Radiated, Radio-Frequency, Electromagnetic Field Immunity Test	
IEC 61000-4-3 Electrical fast transient/burst immunity Test	
IEC 61000-4-4 Surge Immunity Test	
IEC 61000-4-5 Electrostatic discharge immunity test	

¹ Range depends on the environment and line of sight. Always verify your wireless network's range by performing a Site Survey.
² Dependent on radio channel selection.

ACCESSORIES

DUOS	<div>PA160410004</div>  <div>DUOS RS485-USB CONVERTER<ul style="list-style-type: none">• DUOS gateway configuration cable (to use with Tekon Configurator);</div>	<div>PA160410008</div>  <div>DUOS EXTERNAL POWER CABLE<ul style="list-style-type: none">• DUOS repeater and DUOS transmitter power supply cable;</div>	
	<div>PA160410005</div>  <div>DUOS TRANSMITTER SARC<ul style="list-style-type: none">• DUOS transmitter configuration cable (to use with Tekon Configurator).</div>	<div>PA160410910</div>  <div>DUOS TRANSMITTER MOUNTING CLIP<ul style="list-style-type: none">• Stainless steel wall mounting clip;</div>	
	<div>PA160410006</div>  <div>DUOS POWER SUPPLY<ul style="list-style-type: none">• DUOS 110-230 VAC / 50-60 Hz EU plug power supply;</div>	<div>PA160410810</div>  <div>DUOS TRANSMITTER MOUNTING BRACKET<ul style="list-style-type: none">• Stainless steel wall mounting bracket;</div>	
	<div>PA160410007</div>  <div>DUOS GATEWAY EXTERNAL CABLE<ul style="list-style-type: none">• DUOS gateway communication (via RS-485) and power supply cable.</div>	<div>PA160411010</div>  <div>DUOS GATEWAY/REPEATER MOUNTING CLIP<ul style="list-style-type: none">• Stainless steel wall mounting clip;</div>	
TEMP	<div>PA160410001</div>  <div>DUOS DIGITAL TEMPERATURE PROBE<ul style="list-style-type: none">• ±0.25°C typical accuracy with 0.1°C resolution digital sensor;• -40°C to +80°C operating temperature;</div>	<div>PA160410002 (A) PA160410003 (B)</div>  <div>DUOS DIGITAL TEMPERATURE PROBE WITH 2M (A) OR 5M (B) CABLE<ul style="list-style-type: none">• ±0.25°C typical accuracy with 0.1°C resolution digital sensor;• -40°C to +125°C operating</div>	
HYGROTEMP	<div>PA164520001 (A) PA164520004 (B)</div>  <div>DUOS HUMIDITY + TEMPERATURE PROBE TK07-PFT5 (A) WITH 2M CABLE (B)<ul style="list-style-type: none">• 0..100 % RH and -40..80 °C T measurement ranges;</div>		
CO2	<div>PA160410010 (A) PA160410011 (B)</div>  <div>DUOS TK871-HR5000J2 CO2 PROBE (A) WITH 2M CABLE (B)<ul style="list-style-type: none">• Measurement range: 0..5000 ppm;• Accuracy: ±50 ppm @ 25 °C;• Operating conditions:-40..60 °C /</div>		
DI+TEMP	<div>PA160410009</div>  <div>DUOS DI+TEMP EXTERNAL CABLE<ul style="list-style-type: none">• DUOS DI+TEMP digital input cable.• 2 meter cable with snap-in industrial connector.</div>		

STARTER KITS

<div>PA160410610 (A) / PA160412110 (B) PA160410620 (C) / PA160412120 (D)</div> 	DUOS TEMP HW STARTER KIT 868 MHz (A) / 2.4 GHz (B) / 868 MHz IoT Version (C) / 2.4 GHz IoT Version (D) <ul style="list-style-type: none">• DUOS TEMP Wireless Transmitter;• DUOS Wireless Gateway;• Temperature probe;• Antennas and accessories;• Power Supply and Ethernet Cable (only in (C) and (D) versions);
<div>PA164520410 (B) PA164520420 (D) PA164520210 (A) / PA164520220 (C) / PA164520420 (D)</div> 	DUOS HYGROTEMP HW STARTER KIT 868 MHz (A) / 2.4 GHz (B) / 868 MHz IoT Version (C) / 2.4 GHz IoT Version (D) <ul style="list-style-type: none">• DUOS HYGROTEMP Wireless Transmitter;• DUOS Wireless Gateway;• Temperature and humidity probe (TK07-PFT5);• Antennas and accessories;• Power Supply and Ethernet Cable (only in (C) and (D) versions);
<div>PA160411310 (B) PA160411320 (D) PA160411310 (A) / PA160412310 (B) PA160411320 (C) / PA160412320 (D)</div> 	DUOS CO2 STARTER KIT 868 MHz (A) / 2.4 GHz (B) / 868 MHz IoT Version (C) / 2.4 GHz IoT Version (D) <ul style="list-style-type: none">• DUOS CO2 Wireless Transmitter;• DUOS Wireless Gateway;• DUOS CO₂ Probe TK871-HR5000J2;• Antennas and accessories;• Power Supply and Ethernet Cable (only in (C) and (D) versions);
<div>PA160411410 (A) / PA160412210 (B) PA160411420 (C) / PA160412220 (D)</div> 	DUOS DI + TEMP STARTER KIT 868 MHz (A) / 2.4 GHz (B) / 868 MHz IoT Version (C) / 2.4 GHz IoT Version (D) <ul style="list-style-type: none">• DUOS DI + TEMP Wireless Transmitter;• DUOS DI+TEMP External cable;• DUOS Wireless Gateway;• DUOS Digital Temperature Probe;• Antennas and accessories;



APPLICATIONS

FOOD

Food production processes are extremely sensitive, especially due to demanded temperature precautions during preparation and conservation stages.

Monitor your food storage temperature and humidity in real-time and avoid huge losses due to unnoticed cooler malfunctioning.

AGRO

Wide cultivation areas and long distances between measurement points and control rooms are key monitoring difficulties from Agro Industry. Soil or hydroponics, greenhouse or open-air cultivation farmers can benefit from wireless sensing technology.

PHARMA

Pharmaceutical industry processes are critical and one of the most accuracy demanding applications. Tekon Electronics provides solutions for most challenging storage environment parameters measurement.

MEDICAL

Medical processes are extremely sensitive and the causes of error must be mitigated. Monitoring systems provide valuable information to avoid losses and failures in the process.

COLD CHAIN

Cold chain is one of the most demanding applications regarding temperature monitoring and control and subjected to rigorous norms with legal implications. Besides economic reasons, product quality plays a major role in this area where an ever-growing customer knowledge demands for fresh and good quality products.

RETAIL

Retail facilities demand for an accurate environment condition measurement solution. From cooler storage to shopping shelves and final customer sale, product status must be monitored and guaranteed. Manual temperature readings are prone to human error and cheating leading to unnecessary risks and asset loss.



WIRED TRANSMITTERS

DINRAIL

TDU1219
ISOLATED UNIVERSAL
TEMPERATURE TRANSMITTER
REF.: PA121800100



KEY FEATURES

UNIVERSAL SENSOR INPUT
RTD, THERMOCOUPLE, ETC

HIGH PRECISION AND ACCURACY
WITH LOW OPERATING TEMPERATURE DRIFT

**INSTALLATION IN THE CONNECTION HEAD
TYPE DIN B**

CONFIGURABLE OVER PC
TEKON CONFIGURATOR FREE SOFTWARE

NAMUR NE43 COMPLIANT
FOR FAULT DETECTION AND SIGNALING

**COLD-JUNCTION, SENSOR CABLE RESISTANCE
AND OUTPUT CURRENT COMPENSATION**

Dimensions 17.5 x 98 x 56.4 mm

Weight 50 g (aprox.)

Material Nylon 66

Protection Index IP40

TECHNICAL SPECIFICATIONS

INPUT	RESISTANCE THERMOMETER (RTD)	RESISTANCE-BASED SENSORS (R)	INPUT THERMOCOUPLES (TC)	INPUT THERMOCOUPLES (MV)
Sensor type	PT100, PT500, PT1000	Resistance, potentiometers	E, J, K, N, R, S, T	DC Voltage source
Open-circuit monitoring	Always active (cannot be disabled)			
Short-circuit monitoring	Always active (cannot be disabled)			Not available

OUTPUT	
Output signal	4 to 20 mA
Power Supply (Uaux)	9 to 30 V DC
Max. load	(Uaux - 9) / 0.022 A
Overrange	3 to 22 mA
Error signal (e.g. following sensor fault) [conforming to NE43]	Software configurable ≤3,6 mA ou ≥21 mA
Sample cycle	<1 s

OPERATING ENVIRONMENT	
Room temperature range	-20 to 80°C (-4 to 176°F)

DIGITAL MEASUREMENT ACCURACY RESISTANCE THERMOMETER (RTD)		
Sensor	Range °C (°F)	Digital accuracy °C (°F)
PT100	-200 to 850 [-328 to 1562]	0,1 [0,18]
PT500	-200 to 850 [-328 to 1562]	0,2 [0,40]
PT1000	-200 to 350 [-328 to 662]	0,2 [0,40]

DIGITAL MEASUREMENT ACCURACY THERMOCOUPLES (TC)		
Sensor	Range °C (°F)	Digital accuracy °C (°F)
E	-200 to +1000 [-328 to +1832]	1
J	-210 to +1200 [-346 to +2192]	1
K	-230 to +1370 [-382 to +2498]	1
N	-200 to +1300 [-328 to +2372]	1
R	-50 to +1760 [-58 to +3200]	2
S	-50 to +1760 [-58 to +3200]	2
T	-200 to +400 [-328 to +752]	1

DIGITAL MEASUREMENT ACCURACY RESISTANCE-BASED SENSORS (R)		
Sensor	Range	Digital accuracy Ω
Resistance	0 to 2200	0,25
mV	-100 to 1100	0,4

CERTIFICATES AND APPROVALS	
EN 61326	Electrical equipment for measurement, control and laboratory use. EMC requirements.
IEC 61000-4-2	Electrostatic, discharge immunity test
IEC 61000-4-3	Radiated, Radio-Frequency, Electromagnetic Field Immunity Test
IEC 61000-4-4	Electrical fast transient/burst immunity test
IEC 61000-4-5	Surge Immunity Test

INHEAD

THM501 PT100 TEMPERATURE TRANSMITTER

REF.: PA160410310 / PA160412010

KEY FEATURES

PT100 SENSOR INPUT
2W, 3W AND 4W

MODBUS SERIAL RTU SLAVE PROTOCOL

**INSTALLATION IN THE CONNECTION HEAD
TYPE DIN B**

CONFIGURABLE OVER PC
TEKON CONFIGURATOR FREE SOFTWARE

**CONTINUOUS OPERATING STATUS MONITORING
AND SELF-DIAGNOSTIC**

HIGH PRECISION AND ACCURACY

WIDE MEASUREMENT RANGE



Dimensions 45Ø x 23 mm

Weight 50 g (aprox.)

Material Nylon 66

Protection Index IP40

TECHNICAL SPECIFICATIONS

INPUT RESISTANCE THERMOMETER (RTD)

Sensor type	PT100
Open-circuit monitoring	Always active (cannot be disabled)
Short-circuit monitoring	Always active (cannot be disabled)
Measuring range	-200°C to 850°C (-328°F to 1562°F)

OUTPUT MODBUS

Physical Layer	RS-485
----------------	--------

POWER SUPPLY

Power Supply	12 a 24 V DC ±10%
--------------	-------------------

OPERATING ENVIRONMENT

Ambient temperature range	-20 to 80°C (-4 a 176°F)
---------------------------	--------------------------

CERTIFICATES AND APPROVALS

EN 61326	Electrical equipment for measurement, control and laboratory use. EMC requirements.
IEC 61000-4-2	Electrostatic discharge immunity test
IEC 61000-4-3	Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-4	Electrical fast transient/brust/immunity test
IEC61000-4-5	Surge immunity test

INHEAD

THT201
THERMOCOUPLE TEMPERATURE
HEAD TRANSMITTER
REF.: PA132720210

KEY FEATURES

THERMOCOUPLE SENSOR INPUT
E, J, K, N, R, S, T

WIDE MEASUREMENT RANGE

4 TO 20 MA ANALOG OUTPUT

2 STATUS LEDS

HIGH MEASUREMENT ACCURACY

IN LINE LOOP CURRENT MEASURE PADS

NAMUR NE 43 FAULT DETECTION

CONFIGURABLE OVER PC
THROUGH THE TEKON CONFIGURATOR SOFTWARE



Dimensions 45Ø x 23 mm

Weight 50 g (aprox.)

Material Nylon 66

Protection Index IP40

TECHNICAL SPECIFICATIONS

INPUT THERMOCOUPLES (TC)

Sensor type	Thermocouples: E, J, K, N, R, S, T
Open-circuit monitoring	Always active (cannot be disabled)
Short-circuit monitoring	Not available
Cold junction compensation (CJC)	Integrated resistance thermometer
Measuring range	Configurable (see table "Digital measuring errors")

OUTPUT

Output signal	4 to 20 mA
Power supply (Uaux)	9 to 30V DC
Max. load	(Uaux - 9) / 0.022 A
Overrange	3 to 22 mA
Error signal (e.g. following sensor fault) [conforming to NE43]	Software configurable ≤ 3,6mA or ≥ 21mA
Sample cycle	< 1s
Protection	Against reversed polarity Surge protection

OPERATING ENVIRONMENT

Ambient temperature range	-20 to 80°C [-4 a 176°F]
---------------------------	--------------------------

CERTIFICATES AND APPROVALS

EN 61326	Electrical equipment for measurement, control and laboratory use. EMC requirements.
IEC 61000-4-2	Electrostatic discharge immunity test
IEC 61000-4-3	Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-4	Electrical fast transient/brust/immunity test
IEC61000-4-5	Surge immunity test

DIGITAL MEASURING ACCURACY

THERMOCOUPLES (TC)

SENSOR	RANGE °C [°F]	DIGITAL ACCURACY °C [°F]
E	-200 to 1000 [-328 to 1832]	1
J	-210 to 1200 [-346 to 2192]	1
K	-230 to 1370 [-382 to 2498]	1
N	-200 to 1300 [-328 to 2372]	1
R	-50 to 1760 [-58 to 3200]	2
S	-50 to 1760 [-58 to 3200]	2
T	-200 to 400 [-328 to 752]	1

The digital accuracy is the accuracy after the analog/digital conversion including linearization and calculation of the measured value.
An additional error is generated in the output current 4 to 20mA as a result of the digital/analog conversion of 0.025% of the set span (digital-analog error).

INHEAD

THT101
PT100 TEMPERATURE HEAD
TRANSMITTER
REF.: PA13272110

KEY FEATURES

PT100 SENSOR INPUT

4 TO 20 MA ANALOG OUTPUT

HIGH MEASUREMENT ACCURACY

NAMUR NE 43 FAULT DETECTION

CONFIGURABLE OVER PC
THROUGH THE TEKON CONFIGURATOR SOFTWARE



- Dimensions 45Ø x 23 mm
- Weight 50 g (aprox.)
- Material Nylon 66
- Protection Index IP40

TECHNICAL SPECIFICATIONS

INPUT RESISTANCE THERMOMETER (RTD)

Sensor type	PT100
Connection	1 Resistance thermometer (RTD) in 2-wire, 3-wire or 4-wire system
Units	°C or °F
Sensor current	600uA (2 or 4 wires); 300uA (3 wires)
Sampling time	<100 ms

OUTPUT

Output signal	4 to 20mA
Power supply (Uaux)	9 to 30 V DC
Max. load	(Uaux - 9)/0.022A
Over range	3 to 22 mA
Error signal (e.g. Following sensor fault) (conforming to NE43)	Software configurable ≤3,6mA or ≤21mA
Sample cycle	<1s
Protection	Against reversed polarity - Surge protection

OPERATING ENVIRONMENT

Ambient temperature range	-20 to 80°C [-4 a 176°F]
---------------------------	--------------------------

CERTIFICATES AND APPROVALS

EN 61326	Electrical equipment for measurement, control and laboratory use. EMC requirements.
IEC 61000-4-2	Electrostatic discharge immunity test
IEC 61000-4-3	Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-4	Electrical fast transient/brust/immunity test
IEC061000-4-5	Surge immunity test

The digital accuracy is the accuracy after the analog/digital conversion including linearization and calculation of the measured value.
An additional error is generated in the output current 4 to 20mA as a result of the digital/analog conversation of 0.025% of the set span (digital-analog error).

INHEAD

THT102-I
PT100 TEMPERATURE HEAD
TRANSMITTER
REF.: PA183120110

KEY FEATURES

- GALVANIC ISOLATION 2KV AC
- PT100 SENSOR INPUT
- 4 TO 20 MA ANALOG OUTPUT
- HIGH MEASUREMENT ACCURACY
- NAMUR NE 43 FAULT DETECTION
- CONFIGURABLE OVER PC
THROUGH THE TEKON CONFIGURATOR SOFTWARE



- Dimensions 45ø x 23 mm
- Weight 50 g (aprox.)
- Material Nylon 66
- Protection Index IP40

TECHNICAL SPECIFICATIONS

INPUT RESISTANCE THERMOMETER (RTD)

Sensor type	PT100
Connection	1 Resistance thermometer (RTD) in 2-wire, 3-wire or 4-wire system
Units	°C or °F
Sensor current	600uA (2 or 4 wires); 300uA (3 wires)
Sampling time	<100 ms

OUTPUT

Output signal	4 to 20mA
Power supply (Uaux)	9 to 30 V DC
Max. load	(Uaux - 9)/0.022A
Over range	3 to 22 mA
Error signal (e.g. Following sensor fault) (conforming to NE43)	Software configurable ≤3,6mA or ≤21mA
Sample cycle	<1s
Protection	Against reversed polarity - Surge protection

OPERATING ENVIRONMENT

Ambient temperature range	-20 to 80°C (-4 a 176°F)
---------------------------	--------------------------

CERTIFICATES AND APPROVALS

EN 61326	Electrical equipment for measurement, control and laboratory use. EMC requirements.
IEC 61000-4-2	Electrostatic discharge immunity test
IEC 61000-4-3	Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-4	Electrical fast transient/brust/immunity test
IEC61000-4-5	Surge immunity test

INHEAD

THT202-I
THERMOCOUPLE TEMPERATURE
HEAD TRANSMITTER
REF.: PA183120210

KEY FEATURES

GALVANIC ISOLATION 2KV AC

THERMOCOUPLE SENSOR INPUT
E, J, K, N, R, S, T

WIDE MEASUREMENT RANGE

4 TO 20 MA ANALOG OUTPUT

2 STATUS LEDS

HIGH MEASUREMENT ACCURACY

IN LINE LOOP CURRENT MEASURE PADS

NAMUR NE 43 FAULT DETECTION

CONFIGURABLE OVER PC
THROUGH THE TEKON CONFIGURATOR SOFTWARE



Dimensions 45ø x 23 mm

Weight 50 g (aprox.)

Material Nylon 66

Protection Index IP40

TECHNICAL SPECIFICATIONS

INPUT THERMOCOUPLES (TC)

Sensor type	Thermocouples: E, J, K, N, R, S, T
Open-circuit monitoring	Always active (cannot be disabled)
Short-circuit monitoring	Not available
Cold junction compensation (CJC)	Integrated resistance thermometer
Measuring range	Configurable (see table "Digital measuring errors")

OUTPUT

Output signal	4 to 20 mA
Power supply (Uaux)	9 to 30V DC
Max. load	(Uaux - 9) / 0.022 A
Overrange	3 to 22 mA
Error signal (e.g. following sensor fault) (conforming to NE43)	Software configurable ≤ 3,6mA or ≥ 21mA
Sample cycle	< 1s
Protection	Against reversed polarity Surge protection

OPERATING ENVIRONMENT

Ambient temperature range	-20 to 80°C [-4 a 176°F]
---------------------------	--------------------------

CERTIFICATES AND APPROVALS

EN 61326	Electrical equipment for measurement, control and laboratory use. EMC requirements.
IEC 61000-4-2	Electrostatic discharge immunity test
IEC 61000-4-3	Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-4	Electrical fast transient/brust/immunity test
IEC61000-4-5	Surge immunity test

DIGITAL MEASURING ACCURACY

THERMOCOUPLES (TC)

SENSOR	RANGE °C [°F]	DIGITAL ACCURACY °C [°F]
E	-200 to 1000 [-328 to 1832]	1
J	-210 to 1200 [-346 to 2192]	1
K	-230 to 1370 [-382 to 2498]	1
N	-200 to 1300 [-328 to 2372]	1
R	-50 to 1760 [-58 to 3200]	2
S	-50 to 1760 [-58 to 3200]	2
T	-200 to 400 [-328 to 752]	1

The digital accuracy is the accuracy after the analog/digital conversion including linearization and calculation of the measured value.
An additional error is generated in the output current 4 to 20mA as a result of the digital/analog conversation of 0.025% of the set span (digital-analog error).
The total error under reference conditions at the analog output is the sum from the digital error and the digital-analog error (poss. with the addition of cold junction errors in the case of thermocouple measurements).

INHEAD

THU1102
UNIVERSAL TEMPERATURE
TRANSMITTER
REF.: PA110020100



KEY FEATURES

UNIVERSAL SENSOR INPUT

4 TO 20 MA ANALOG OUTPUT

HIGH MEASUREMENT ACCURACY

NAMUR NE 43 FAULT DETECTION

CONFIGURABLE OVER PC
THROUGH THE TEKON CONFIGURATOR SOFTWARE

- Dimensions 45ø x 23 mm
- Weight 50 g (aprox.)
- Material Nylon 66
- Protection Index IP40

TECHNICAL SPECIFICATIONS

INPUT	RESISTANCE THERMOMETER (RTD)	RESISTANCE-BASED SENSORS (R)	THERMOCOUPLES (TC)	(MV)
Sensor type	PT100, PT500, PT1000	Resistance, potentiometers	E, J, K, N, R, S, T	DC Voltage source
Open-circuit monitoring	Always active (cannot be disabled)			
Short-circuit monitoring	Always active (cannot be disabled)		Not available	

OUTPUT	
Output signal	4 to 20 mA
Power supply (Uaux)	9 to 30V DC
Max. load	(Uaux - 9) / 0.022 A
Overrange	3 to 22 mA
Error signal [e.g. following sensor fault] (conforming to NE43)	Software configurable ≤ 3,6mA or ≥ 21mA
Sample cycle	< 1s

OPERATING ENVIRONMENT	
Ambient temperature range	-20 to 80°C [-4 a 176°F]

DIGITAL MEASURING ACCURACY

RESISTANCE THERMOMETER (RTD)		
SENSOR	RANGE °C [°F]	DIGITAL ACCURACY °C [°F]
PT100	-200 to 850 [-328 to 1562]	0,1 [0,18]
PT500	-200 to 850 [-328 to 1562]	0,2 [0,40]
PT1000	-200 to 350 [-328 to 662]	0,2 [0,40]

THERMOCOUPLES (TC)		
SENSOR	RANGE °C [°F]	DIGITAL ACCURACY °C [°F]
E	-200 to 1000 [-328 to 1832]	1
J	-210 to 1200 [-346 to 2192]	1
K	-230 to 1370 [-382 to 2498]	1
N	-200 to 1300 [-328 to 2372]	1
R	-50 to 1760 [-58 to 3200]	2
S	-50 to 1760 [-58 to 3200]	2
T	-200 to 400 [-328 to 752]	1

RESISTANCE-BASED SENSORS (R)		
SENSOR	RANGE Ω	DIGITAL ACCURACY Ω
Resistance	0 to 2200	0,25

CERTIFICATES AND APPROVALS	
EN 61326	Electrical equipment for measurement, control and laboratory use. EMC requirements.
IEC 61000-4-2	Electrostatic discharge immunity test
IEC 61000-4-3	Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-4	Electrical fast transient/brust/immunity test
IEC61000-4-5	Surge immunity test

SOFTWARE

IOT PLATFORM

REF.: PA110020100

IoT platform is an essential component of an IoT ecosystem that supports and connects all components within the system. The management of datasources and data analysis, enhances data flow and functionality of smart applications.

KEY FEATURES

CLOUD OR LOCAL DATABASE INSTALLATION

DESKTOP, TABLET AND MOBILE FRIENDLY

WEB-BASED PLATFORM
FOR WORLDWIDE REMOTE ACCESS

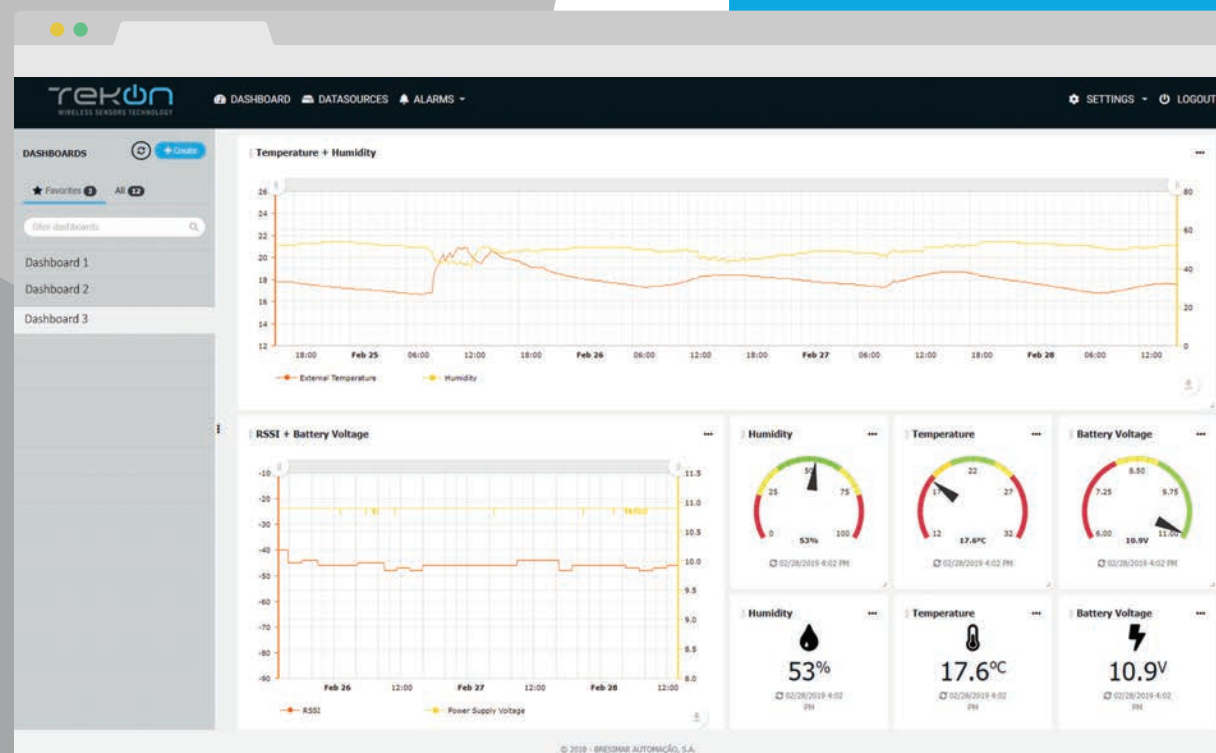
CONFIGURABLE
ERROR AND WARNING ALARMS

BACKUP AND EXPORT OF DATA

MULTIPLE DASHBOARDS AND WIDGETS

INTUITIVE AND MODERN GRAPHICAL INTERFACE

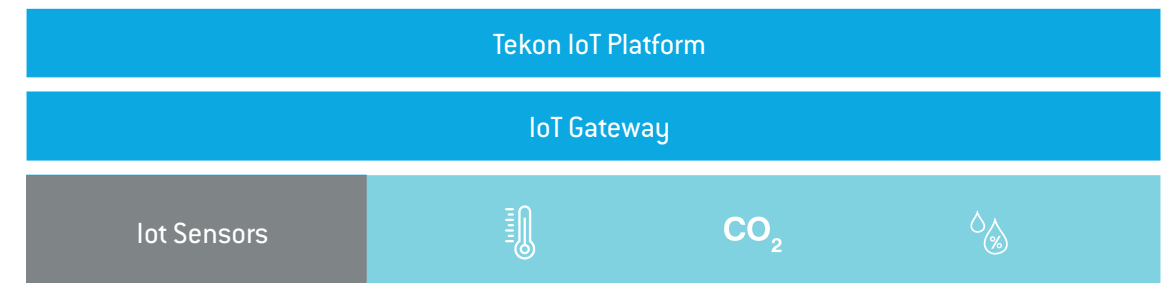
IN-HOUSE DEVELOPED
PROPRIETARY SOFTWARE



Deliver value with your IoT solution for smart metering.

Connect sensors and collect all the data.

Tekon IoT Platform is a complete software solution that allows business and industrial professionals to use data generated by Tekon sensors in order to drive better business outcomes.



- > Reliable connection and management of datasources
- > Secure access to data
- > Dashboard with custom variables and widgets
- > Instant graphic view IoT data

MONITORING AND REPORTING

Through Tekon IoT Platform teams have direct and simple access to Tekon devices and associated status. Rapid identification of devices status could help to identify potential problems and avoid huge losses. Also, the data could be exported for further data analysis and reporting.

ALARMS AND WARNINGS

Monitoring temperature, humidity or CO₂ thresholds are an important step to avoid product losses. In IoT platform you can set thresholds for the variables and get alarms before the event happens allowing immediate action.

GROUPS AND USERS MANAGEMENT

Collect the data from all the points in your business and manage the permissions locally. Get all the data from all the departments / local stores, and delegate the micromanagement. Manage all your users, so they could have access to the information they need.

IoT ECOSYSTEM

Get the most of Tekon sensors and translate insights generated by business assets into critical operational improvements.

PROBES

Tekon Electronics has a high capacity of execution to the custom needs of each client, in all type of probes of temperature and level probe, with different dimensions and varied types of accessories, adapted to the most diverse applications and requirements.

- > Customizable solutions
- > OEM applications
- > Highly specialized industry projects
- > High measuring accuracy
- > Long-term stability.

LEVEL

Electrical connection by head, connector or cable

- Tailor-made customizable versions

TEMPERATURE

Thermoresistances, thermocouples, thermistors and pyrometric canes

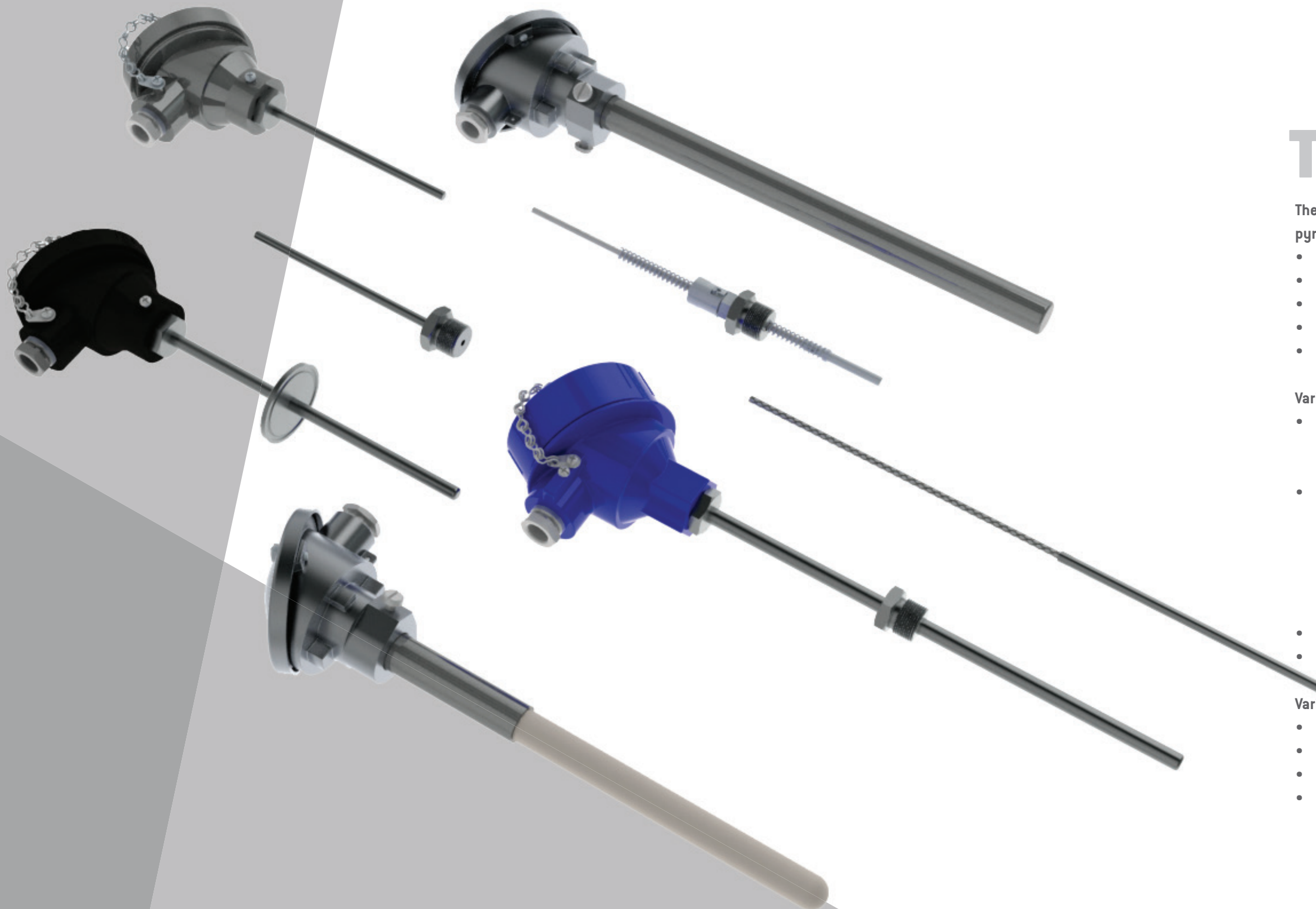
- Temperatures from -200 to + 1700°C
- Diameter from 0.25mm
- Models for agro-food
- Special coatings
- Mineral insulation

Various types of electrical connection

- Head
 - Plastic (PA)
 - Metallic (in aluminum or stainless steel)
- Cable
 - Silicone
 - Metal braid
 - PTFE
 - Fiberglass
 - PVC
- Connector
- Metal or plastic housing

Various types of mechanical connection

- Thread (BSP, NPT, Metric)
- Flange
- Agro-food
- Quick connect



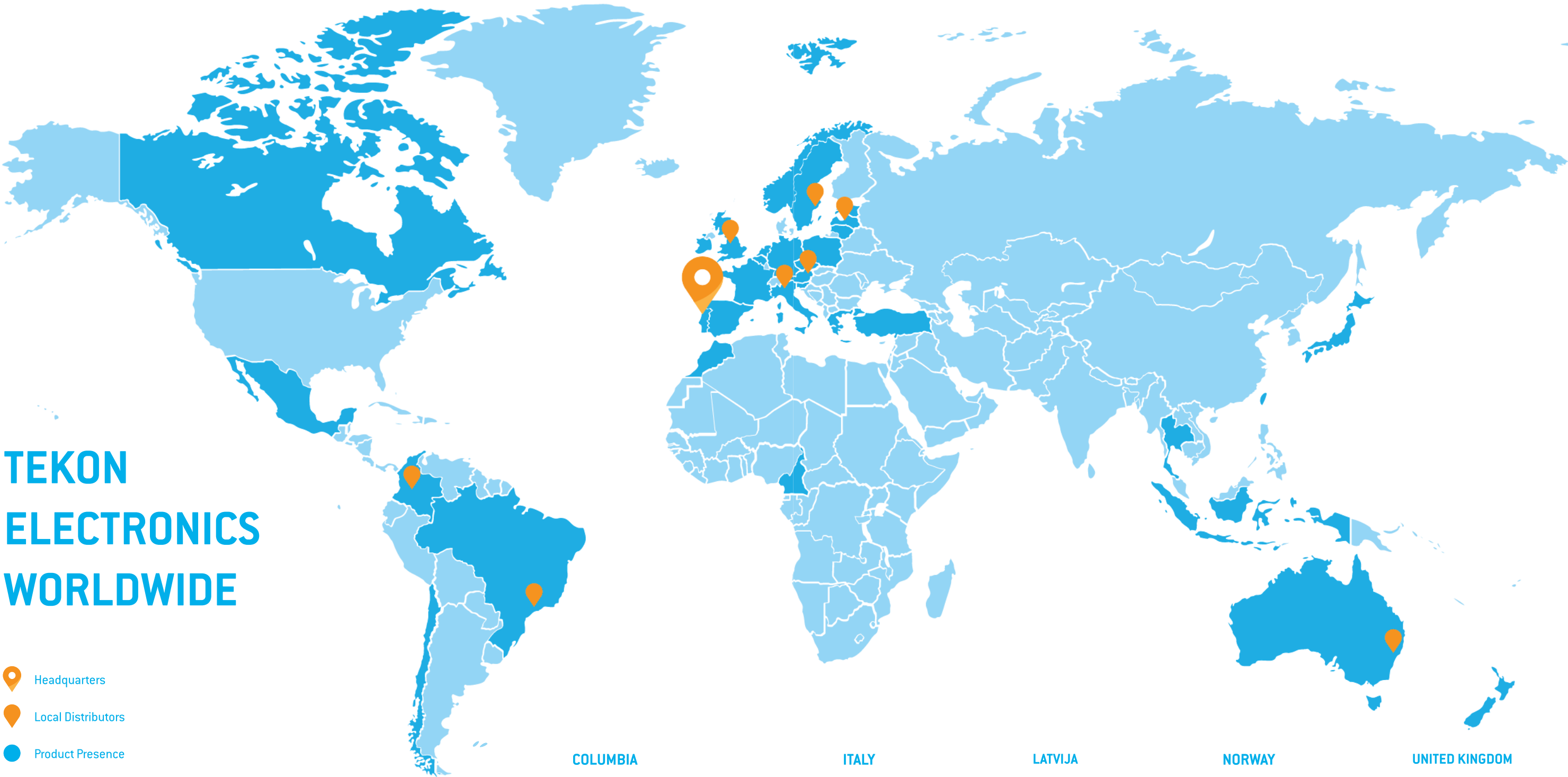
REFERENCE TABLE

PRODUCT DESIGNATION		REFERENCE		
		868 MHz	2.4 GHz	915 MHz
PLUS	TWP4AI	PA164510110	-	COMING SOON
	WGW420	PA164510210	-	
	WRP001	PA164510310	-	
	TWPH-1UT	PA165510510	-	
	ANTENNA CABLE EXTENSION 2M	PA123772100	PA123771100	
	BUZ CONNECTION HEAD FOR WIRELESS TRANSMITTERS	PA123790200		
	PROBE HEAD ANTENNA FIXING	PA160410006		
ONE	THW401	PA123720200	PA123720100	
	WGW410	PA123730100	PA123710100	
	RS485 TO USB CONVERTER CABLE	PA123790400		
DUOS	TEMP	PA160410110	PA160411810	
	HYGROTEMP	PA164520110	PA164520510	
	DI+TEMP	PA160411210	PA160412510	
	CO ₂	PA160411110	PA160412410	
	GATEWAY	PA160410210	PA160411910	
	GATEWAY IOT	PA160410220	PA160411920	
	REPEATER	PA160410310	PA160412010	
	RS485-USB CONVERTER	PA160410004		
	TRANSMITTER SARC	PA160410005		
	POWER SUPPLY	PA160410006		
	GATEWAY EXTERNAL CABLE	PA160410007		
	EXTERNAL POWER CABLE	PA160410008		
	TRANSMITTER MOUNTING CLIP	PA160410910		
	TRANSMITTER MOUNTING BRACKET	PA160410810		
	GATEWAY/REPEATER MOUNTING CLIP	PA160411010		
	DIGITAL TEMPERATURE PROBE	PA160410001		
	DIGITAL TEMPERATURE PROBE WITH 2M [A] or 5M [B] CABLE	PA160410002 [A] /PA160410003 [B]		
	HUMIDITY + TEMPERATURE PROBE TK07-PFT5 [A] with 2m	PA164520001 [A] / PA164520004 [B]		
	TK871-HR5000J2 CO2 PROBE [a] with 2m cable [b]	PA160410010 [A] / PA160410011 [B]		
	DI+TEMP EXTERNAL CABLE	PA160410009		

PRODUCT DESIGNATION		REFERENCE
INHEAD	THP101	PA132720110
	THT201	PA132720210
	THP102-I	PA183120110
	THT202-I	PA183120210
	THU1102	PA110020100
	THM501	PA151700100
	SARC1105 - USB CONFIGURATOR	PA110050100
	SARC2 - USB CONFIGURATOR	PA132720310
DIN-RAIL	TDU1219	PA121800100

TEKON ELECTRONICS WORLDWIDE

-  Headquarters
-  Local Distributors
-  Product Presence



HEADQUARTERS

TEKON ELECTRONICS
Quinta do Simão - EN109 - Esgueira
3800-230 Aveiro, Portugal
+351 234 303 320
sales@tekonelectronics.com
Contact person: Fernando Costa

AUSTRALIA / NEW ZEALAND

LEVELTEC ENGINEERING
41 Tate Street, Gloucester,
New South Wales, Australia
+61 2 6558 9264
sales@leveltec.com.au
Contact person: Ben Stokes

AUSTRIA

BEVMAT E.U.
Muehlgasse 8
AT-2544 Leobersdorf, Austria
+43 6767820774
office@bevmat.eu
Contact person: Martin Mateyka

BRAZIL

ENVISIA
Rua Arizona 1042, Bairro Monções
04567-003 São Paulo, Brazil
+55 986113284
comercial@envisia.com.br
Contact person: Augusto Baptista

COLUMBIA

TECNOMEDICION SAS
Carrera 26 N.11 - 48
Bogotá, Colombia
+57 3108838506
contactenos@tecnomedicion.com
Contact person: Gilberto Lozada

ITALY

MAFFIOLETTI SRL
Via San Marino 2
24044 Dalmine - Bergamo, Italy
+39 3804188483
info@maffioletti.net
Contact person: Luca Maffioletti

LATVIJA

ZTF LASMA
Krivu street 11, LV-1006,
Riga, Latvija
+371 6754 5217
info@lasma.lv
Contact person: Lauris Berzins

NORWAY

TORMATIC AS
Skreppstadveien 24,
3261 Larvik, Norway
+47 482 83 253
christer@tormatic.no
Contact person: Christer Dreng

UNITED KINGDOM

ELECTROSERV+
4 Heather Cl, Macclesfield SK11
OLR, United Kingdom
+44 1625 618526
sales@electroserv.co.uk
Contact person: Simon Fisher

TEKON ELECTRONICS
a brand of Bresimar Automação S.A.

Quinta do Simão
3800-230 Aveiro
PORTUGAL

P.: +351 234 303 320
M.: +351 933 033 250
E.: sales@tekonelectronics.com
☎ +351 933 033 250

Authorized Local Distributor

Tekon Electronics is a trademark of Bresimar Automação S.A.

The information provided in this catalogue, contains merely general descriptions or characteristics of performance which in case of actual application do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

Cofinanciado por:

