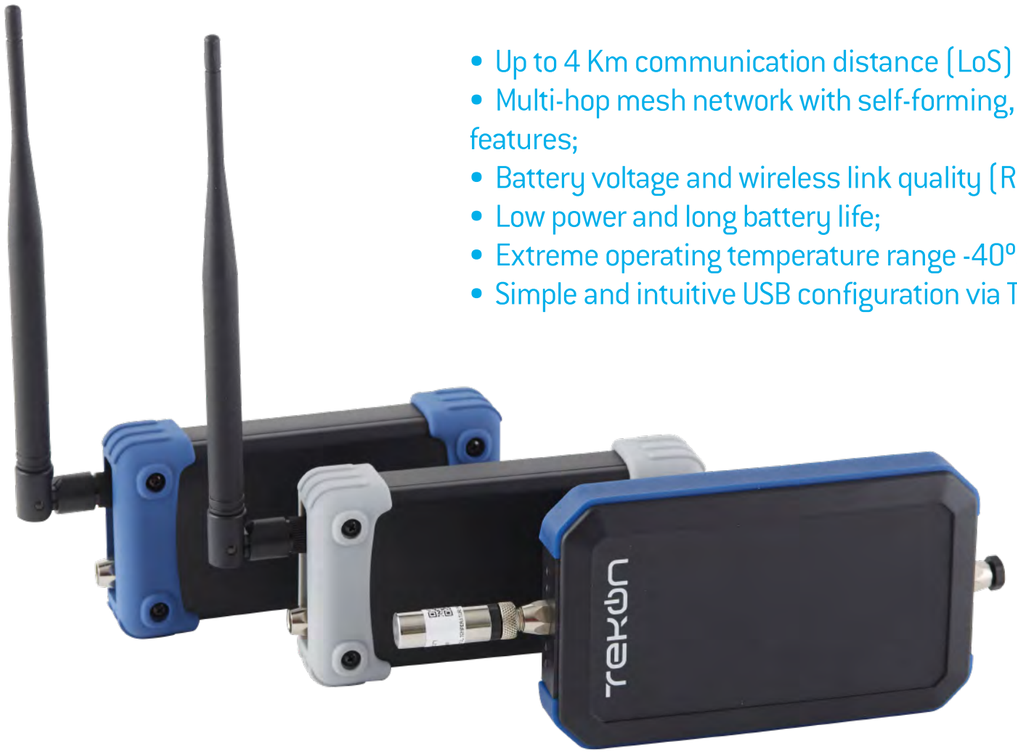
C.03.340-E-180518
www.tempco.be

WIRELESS

SYSTEM DUOS

An accurate wireless measuring system for monitoring applications, automation and centralization of temperature, humidity or CO_2 measurements.



- Up to 4 Km communication distance (LoS) with 128-bit AES encryption;
- Multi-hop mesh network with self-forming, self-healing and self-optimizing features;
- Battery voltage and wireless link quality (RSSI) monitoring;
- Low power and long battery life;
- Extreme operating temperature range -40°C to 80°C and IP67 protection;
- Simple and intuitive USB configuration via Tekon Configurator (free software).

TYPICAL **APPLICATIONS**

AGRO-INDUSTRY

BUILDING AUTOMATION

HVAC

RENEWABLE ENERGY

DATA CENTER

FOOD INDUSTRY

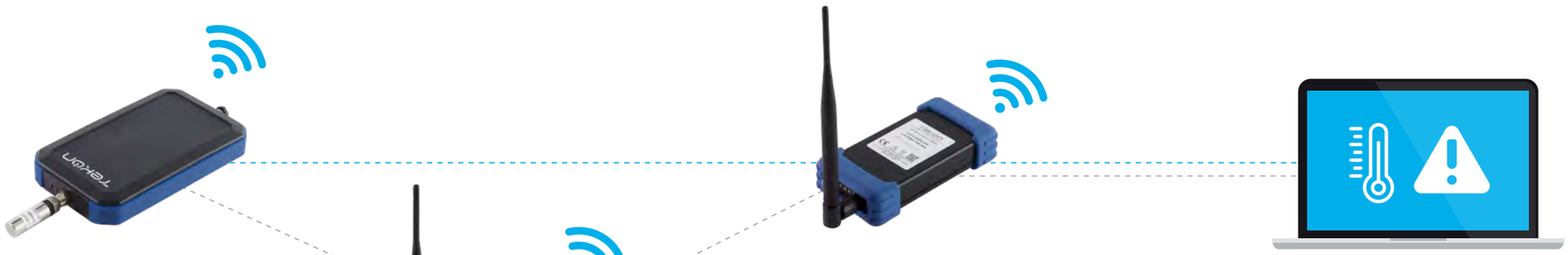
PROCESS INDUSTRY

PHARMACEUTICAL INDUSTRY

COLD CHAIN

RETAIL

HOW IT WORKS



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.

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.

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.

TEKON IoT PLATFORM

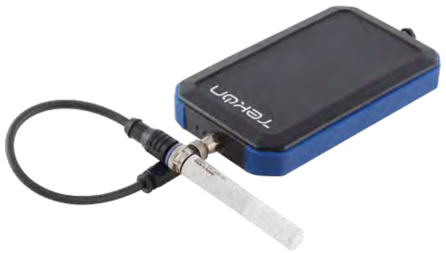
Tekon's proprietary software allows fully integration of DUOS family devices for remote monitoring - web and mobile - cloud access and warnings configuration. It is now easier to be connected to Tekon devices anytime and anywhere, welcoming Industry 4.0 and Industrial IoT transformation.

DUOS **FAMILY**

TEMP

Dual temperature probe
internal and external*

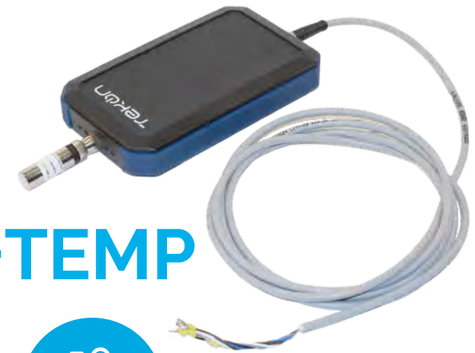
*various probe options



HYGROTEMP

Dual probe
external temperature and humidity*
+ internal temperature

*various probe options



DI+TEMP

Dual temperature probe
internal and external*
External digital input
for event detection

*various probe options

CO_2

Dual probe
external CO_2 and internal temperature