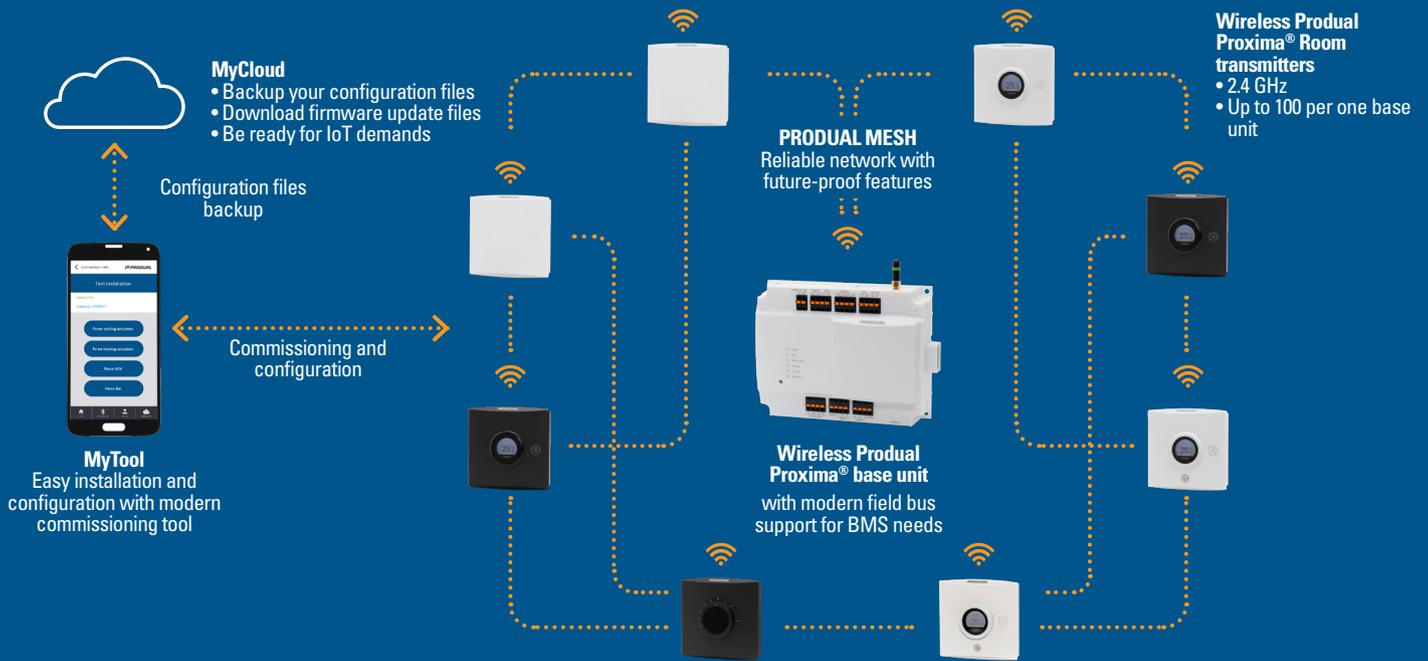




WIRELESS
IS THE WAY

pd **PRODUAL**
PROXIMA

pd **PRODUAL**
measure-be sure.



THE WIRELESS

PROXIMAL PROXIMA® IS THE WAY

The wireless future is here. Our next-generation Proximal Proxima® solution creates reliability for wireless measuring for a multitude of applications – from building automation to environment monitoring and IoT applications.

Wireless Proximal Proxima® is one of the first wireless MESH systems that can be fully operated with a battery. Its every transmitter acts simultaneously as a repeater, removing the need for external repeater units in the network. Utilising the latest wireless technology innovations, Proximal MESH network ensures extreme reliability even in the most challenging radio environments. In addition, with external power supply, there

is a possibility to run a wireless network with minimal latency in applications where speed is a high priority.

Wireless Proximal base unit (WBU) is the heart of the wireless Proximal MESH network, supporting up to 100 wireless transmitters for a wide range of measurements and options, e.g. temperature, humidity, CO₂, occupancy, and implementation of wireless room

interface. There are also products that can convert digital contacts, NTC10 temperature measurement and 0...10 V inputs to wireless messages, which allows for almost unlimited application possibilities. Wireless Proximal Proxima® is designed to be both tangle-free and future-proof, aiming to offer the most comprehensive and multifunctional wireless portfolio on the market.



Unparalleled reliability and scalability

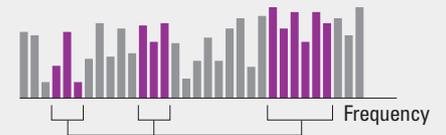
Wireless interferences are a thing of the past

A self-healing Proidual MESH network is the most energy-efficient way to ensure reliable data transfer, since every transmitter in a MESH network works as a repeater. In case of an interruption, the transmitters simply reroute communication through working nodes – thus keeping a steady connection at all times. Also, two-way communication ensures ultimate reliability with its smart message acknowledgement feature.

Wide network monitoring and supervising possibilities make the system extremely trustworthy.

- Scalable setup from small to large-sized installations.
- The best possible wireless connection
- A wider coverage area than ever before
- Transmitters working as repeaters extend the coverage.

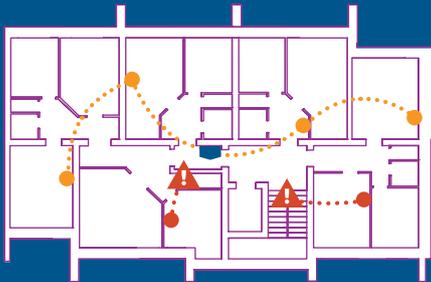
Adapted messages use available frequencies



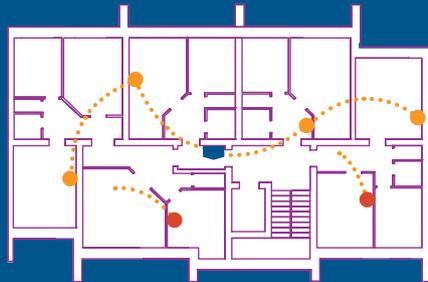
Proidual MESH network operates along with other wireless technologies in the building by dynamically using the best available communication frequencies. This patented technology minimises the likelihood of being interfered by or interfering with other wireless systems.

IMPROVED CONNECTION VIA PRODUAL MESH

1. Some transmitters detect a connection problem.

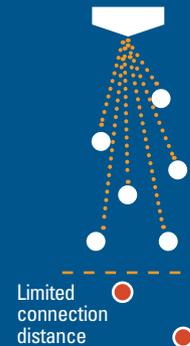


2. Proidual MESH network technology enables them to find new routes to connect to the base unit.

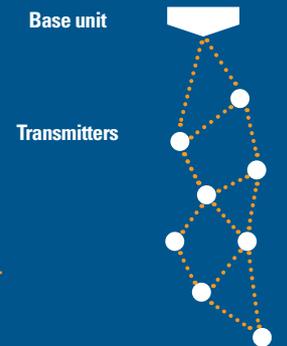


MESH VS. POINT-TO-POINT NETWORK

POINT-TO-POINT NETWORK



MESH NETWORK



No need for worrying about maximum distance between the base unit and the utmost transmitter in the network.



Battery-powered freedom

The first fully battery-operated MESH network on the market

- No need for extra repeaters
- Energy efficient technology
- No need for external power supplies for routing nodes
- Ultra-low power consumption
- Battery lifetime up to 8 years
- Adjustable battery alarm set point
- Battery-operated transmitters with displays also available

BATTERY LIFETIME OF TRANSMITTERS UP TO 8 YEARS depending on measuring intervals and functions

Built-in options

Temperature °C	Display
Adjustable poll interval	Value Over Bus
Movement	CO ₂
COV	Humidity %rH
	Dew point

External measurements

Dry contact
Resistance
NTC 10
0...10 V



Intuitive security

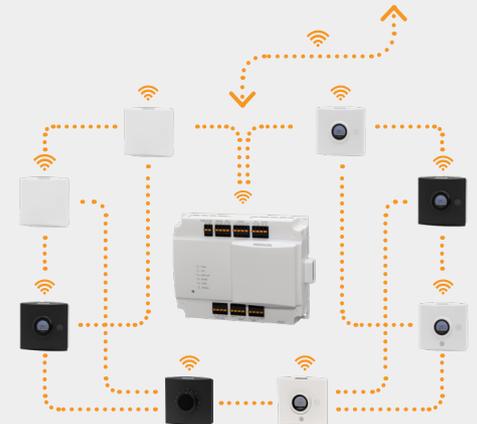
Presenting an easy-to-use tool for quick configuration and updates

By using the handy Produal MyTool® Android application, the entire wireless network can be configured and commissioned easily through your standard mobile device.

All the network messages between devices are encrypted in AES-128 level. Easy remote firmware updates allow time and money savings and ensure future-proof security.

THE MANY FUNCTIONALITIES OF PRODUAL MyTool®

- Network commissioning
- Network monitoring
- Signal scanning
- Finding the best possible transmitter installation places
- Device data monitoring

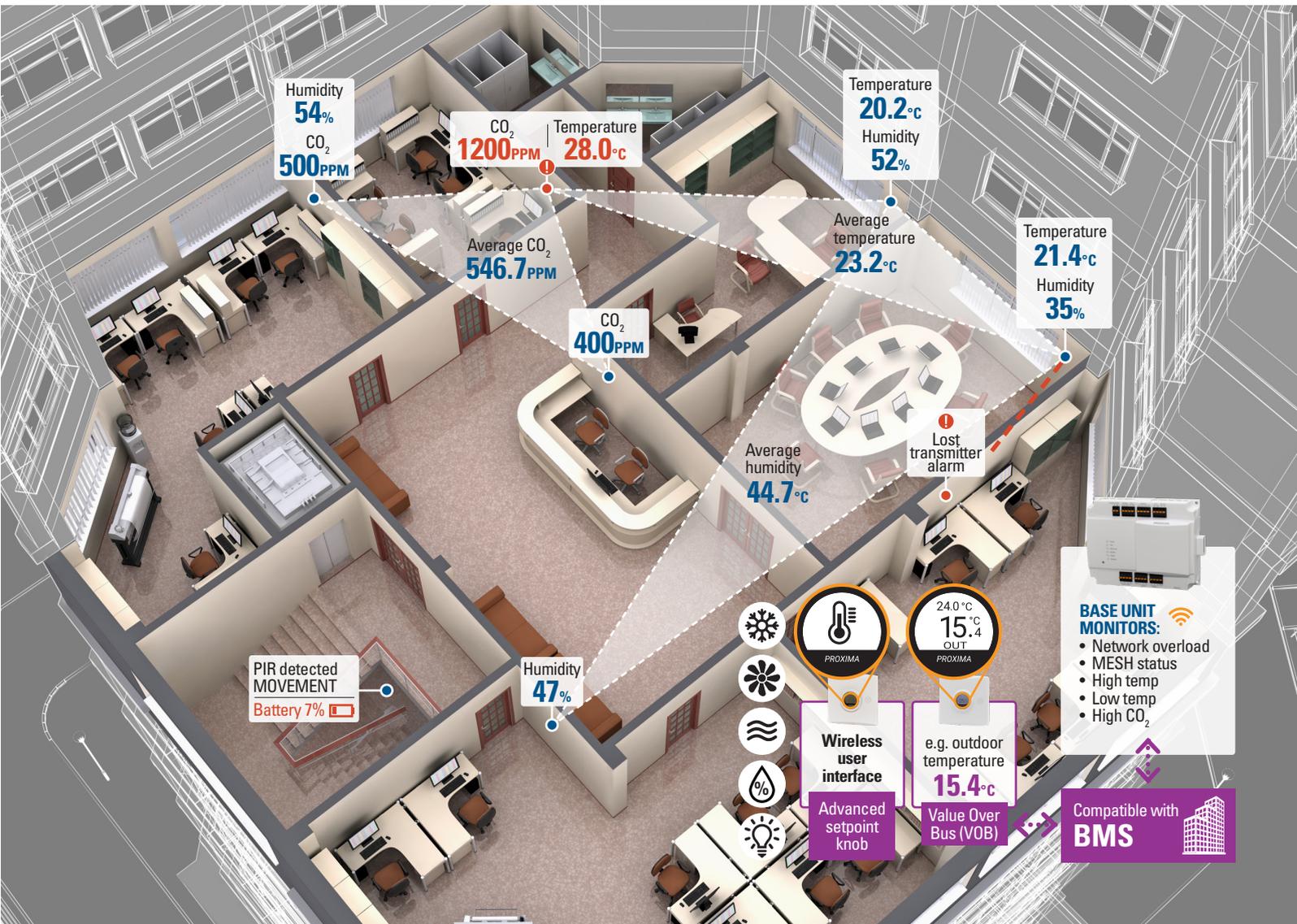


It wirelessly covers
EVERYTHING.

Stunning multifunctionality

A plethora of features to fully benefit system integrators

Operating in the globally accepted frequency 2.4 GHz, which is acknowledged in various environments, Wireless Proximal Proxima® offers a broad gamut of possibilities and options for system integrators – including wide measuring opportunities, alarm and monitoring functions, wireless user interface option, and more. With base unit polling and/or transmitter change of value features, the system provides increased flexibility to network data collecting.



Wireless Produal Proxima® network components

*Presenting the foundation
of a wireless future*



**WIRELESS
PROXIMA BASE
UNIT**

WBU is a base unit for wireless network transmitters. With Wireless Proxima, all transmitters are communicating with WBU over the air, with measurement data converted to Modbus TCP/IP, Modbus RTU or 0...10 V analog outputs (6 pcs) for the requirements of BMS or other systems. Wired measurements can be read over Modbus to BMS via inputs (6 pcs).



**BATTERY-
OPERATED
WIRELESS
PROXIMA ROOM
TRANSMITTERS**

Our basic WTR – battery-operated wireless transmitter – includes temperature measurement, and offers a variety of different options, such as humidity and CO₂ measurement, occupancy detection*, and display. Also, a setpoint knob* and an advanced setpoint knob with the display are available for implementing a wireless user interface in the room. There are two basic colours available: white (WTR) and black (WTRB).

*available in Q2/2021



POWER SUPPLY OPERATED WIRELESS PROXIMA ROOM TRANSMITTERS

WTR24 is a power supply operated wireless transmitter. The basic WTR24 includes temperature measurement, and offers a variety of different options, such as humidity and CO₂ measurement, occupancy detection*, and display. Also, an advanced setpoint knob with the display is available for implementing a wireless user interface in the room. Most installations can use battery-powered devices, but wired versions can provide a fast frequency of measurements for applications where speed is a high priority. There are two basic colours available: white (WTR24) and black (WTR24B).

WIRELESS PROXIMA INPUT MODULE

WTR-IM can be operated with a battery and/or power supply. The basic WTR-IM includes temperature and humidity measurement. WTR-IM supports three additional external measurements, such as NTC10 temperature, 0...10 V inputs, or digital input. There are two basic colours available: white (WTR-IM) and black (WTRB-IM).

PRODUAL MYTOOL® APPLICATION

Android application available for download via Google Play.



*available in Q2/2021



pd **PRODUAL**
measure-be sure.

Produal is your reliable partner for high-quality building automation measurement and control. Wireless functionality is one of the fastest growing trends in the world – and this is also the case in building automation. Produal has been a pioneer in offering wireless solutions to this market since 2006. Now, the wireless future is here: our next generation Produal Proxima® solution is creating reliability for wireless building automation!

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