Produal Proxima® WTR - wireless room transmitter

Produal Proxima® WTR battery powered wireless transmitters are for detecting indoor temperature, humidity and CO_2 level. The transmitters can also be equipped with a display, advanced setpoint knob, setpoint knob, and occupancy detection. Transmitters are compatible with the Produal Proxima® MESH wireless network.

The information is transmitted to the base unit according to the base unit poll interval. Data may be additionally transmitted using change-of-value (COV) based transmission. COV means that the data is sent to base station after the value has changed enough. If COV based transmission is used, the required value change must be configured with Produal MyTool®.

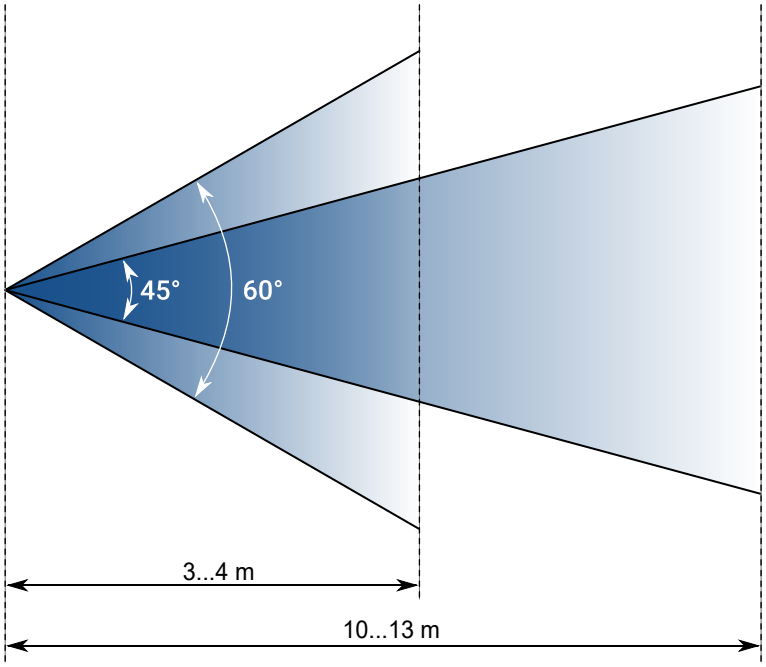
The wireless network needs one base unit. Commissioning is done by using Produal MyTool® smart phone application.

Technical specifications

Property	Value
Supply	3,6 V lithium battery (3600 mAh)
Network frequency	2.4 GHz
Network range (maximum distance between devices)	up to 100 m in the line of sight, typically 10...20 m inside buildings NOTE **Note:** The maximum distance between devices depends on the installation environment.
Temperature measurement	
Range	0...50 °C
Accuracy	±0.5 °C
Humidity measurement (RH models)	
Range	0...100 %rH
Accuracy (25 °C)	typ. ±3 %rH (10...90 %rH), max. ±5 %rH
CO_2 measurement (CO2 models)	
Range	0...5000 ppm
Accuracy	typ. ±30 ppm ±3 % of value
Measurement interval	30...180 s
Occupancy detection (PIR models)	
Detection area	up to 13 meters See more information about the detection area from the chapter Detection area (PIR models) on page 2.
Lens	Fresnel lens, high density polyethylene
Display (D and AK models)	Monochrome LCD display

Property	Value
Commissioning tool	Produal MyTool®
Operating conditions	
Temperature	0...50 °C
Humidity	0...85 %rH (non-condensing)
Housing	PC plastic, IP20
Mounting	on the wall surface or on the standard flush mounting box (60 mm hole spacing)
Dimensions (w x h x d)	97 x 97 x 33 mm

Detection area (PIR models)



Powering WTR

WTR models have a battery for power supply. The devices are delivered with a battery that is disconnected by using a disconnecting strip. Open the cover and remove the strip to enable the power supply for the device.

CAUTION **CAUTION:** There is a risk of explosion if the battery is replaced by an incorrect type. Use only battery types that are defined by Produal. Contact Produal sales to get more information about recommended batteries.

CAUTION **CAUTION:** Dispose the used batteries according to the instructions of local authorities.

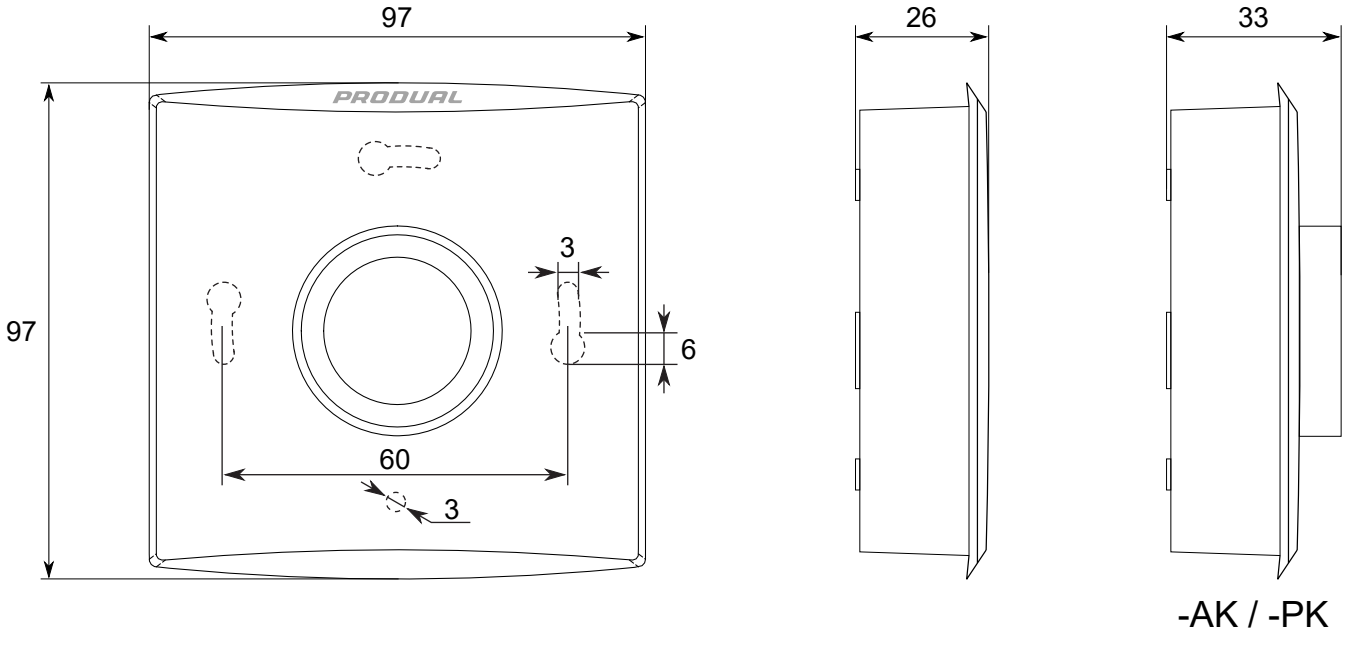
Ordering information

			Type	0	1	2	3	4	5	6
0	Wireless room transmitter			5401	3				0	0
1	Device type	Battery powered wireless temperature transmitter	WTR		3					
2	Body colour	White				W				
		Black	B			B				
3	Display	No display					0			
		Advanced setpoint knob with display, menu button	-AK				1			
		Setpoint knob	-PK				2			
		Setpoint knob with custom print	-PKC				P			
		Display, menu button	-D				3			
4	Additional measurements	No additional measurements						0		
		CO_2 (not with -PK)	-CO2					C		
		Relative humidity	-RH					H		
		Occupancy detection (not with -PK)	-PIR					P		
		Relative humidity and occupancy detection (not with -PK)	-RH-PIR					1		
		CO_2 and relative humidity (not with -PK)	-CO2-RH					2		
		CO_2 and occupancy detection (not with -PK)	-CO2-PIR					3		
		CO_2, relative humidity and occupancy detection (not with -PK)	-CO2-RH-PIR					4		

For example, ordering a black wireless transmitter with battery powered CO_2 measurement and display (+ menu button): The product type is WTRB-D-CO2 and the product number is 54013B3C00.

	Type	Product number	Description
	VP-PROX	9000460	Protective casing for Proxima room products
	WA-STIC	5401900050	Bottom housing with sticker mounting
	WA-MAG	5401900060	Bottom housing with magnetic mounting

Dimensions



-AK / -PK

Supported standards and directives

Standard	Description
2014/30/EU	Electromagnetic Compatibility (EMC).
2014/35/EU	Low Voltage Directive (LVD).
2014/53/EU	Radio Equipment Directive (RED).
2011/65/EU	Restriction of Hazardous Substances (RoHS2) Directive.
(EU) 2015/863	Commission Delegated Directive, amending Annex II to Directive 2011/65/EU.
2000/299/EC	Classification of radio equipment: Class 1, Wideband data transmission systems (Subclass 22).
EN 60950	Safety of information technology equipment.
EN 300 328 V2.2.2	Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques; Harmonised Standard covering the essential requirements of article 3.2 of directive 2014/53/EU.
EN 301 489-1 V2.2.3	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements.
EN 301 489-17 V2.2.1	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission systems.
EN 61000-6-2:2019	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments.
EN 61000-6-3:2020	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments.
SFS-EN IEC 63044-5-1:2019	Home and building electronic systems (HBES) and building automation and control systems (BACS) - Part 5-1: EMC requirements, conditions and test set-up
SFS-EN IEC 63044-5-2:2019	Home and building electronic systems (HBES) and building automation and control systems (BACS) - Part 5-2: EMC requirements for HBES/BACS used in residential, commercial and light-industrial environments
SFS-EN IEC 63044-5-3:2019	Home and building electronic systems (HBES) and building automation and control systems (BACS) - Part 5-3: EMC requirements for HBES/BACS used in industrial environments