Produal Proxima® WBU - wireless base unit

Produal Proxima® WBU wireless base unit is designed for Produal wireless network. The base unit supports the following communication protocols: Modbus RTU and Modbus TCP. The base unit is built on the Produal PUMP® platform and can be expanded with additional modules for added functionality.

The base unit settings can be configured with Produal MyTool® Android application which speeds up the commissioning. The device configuration can be saved to Produal MyCloud cloud service by using the application.

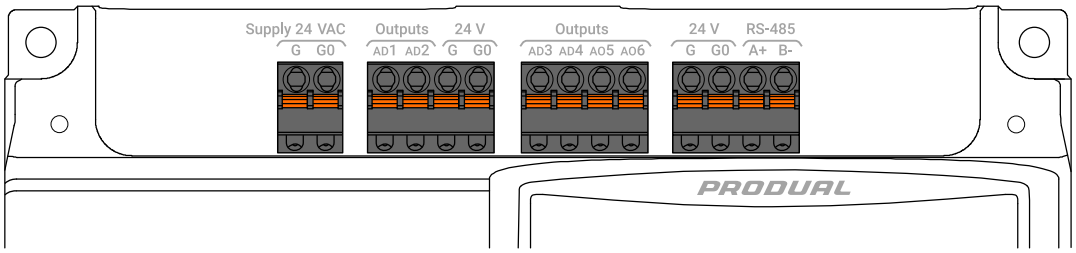
Technical specifications

Property	Value
Supply	24 Vac/dc (22...26 V), < 7 VA NOTE **Note:** Only the DC functions work when using DC supply voltage. To get full functionality, use AC supply.
Network frequency	2,4 GHz
Network range (maximum distance between devices)	up to 100 m indoors / up to 200 m in open air
Network size	up to 100 transmitters NOTE **Note:** The network performance depends on the network structure. When approaching the maximum device count, the network speed will decrease.
Inputs	6 x universal input (NTC 10 / Pt1000 / Resistive / Potential free contact / 0...10 Vdc)
Outputs	6 x 0...10 Vdc / 2...10 Vdc, -0,5...+2 mA
Supply output	2 x 24 Vac, total load < 8 A
Communication	Modbus RTU / Modbus TCP
	PUMP expansion socket
Default Ethernet network settings	
IP address	192.168.1.1
Subnet mask	255.255.255.0
Commissioning tool	Produal MyTool® GET IT ON Google Play

Property	Value
Operating conditions	
Temperature	-5...50 °C
Humidity	0...90 %rH (non-condensing)
Antenna connector	SMA
Wiring terminals	1,5 mm^2, spring terminals
Mounting	on the wall surface or on 35 mm DIN rail
Housing	ABS, IP22
Dimensions (w x h x d)	186 x 136 x 55 mm

Wiring

Top connectors



Supply 24 VAC

G	24 Vac/dc supply.
G0	Ground

Outputs

AD1	Output 1. 0...10 Vdc (-0,5...+2 mA) output.
AD2	Output 2. 0...10 Vdc (-0,5...+2 mA) output.

24 V

G	24 Vac output.
G0	Ground

Outputs

AD3	Output 3. 0...10 Vdc (-0,5...+2 mA) output.
AD4	Output 5. 0...10 Vdc (-0,5...+2 mA) output.
AO5	Output 5. 0...10 Vdc (-0,5...+2 mA) output.
AO6	Output 6. 0...10 Vdc (-0,5...+2 mA) output.

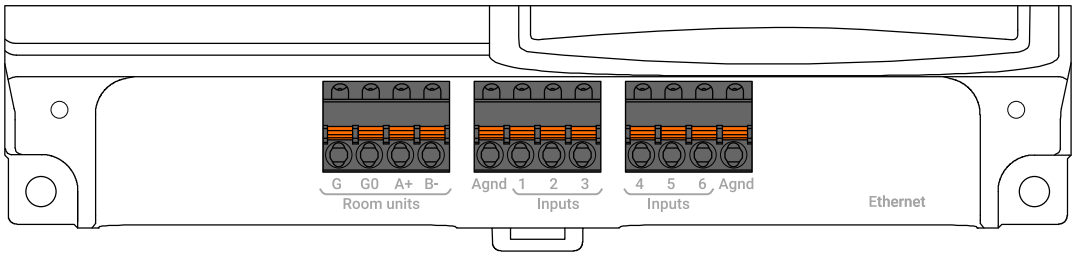
24 V

G	24 Vac output.
G0	Ground

RS-485

A+	RS-485 bus connection for Modbus RTU.
B-	

Bottom connectors



Room units

G	Not in use.
G0	
A+	
B-	

Inputs

Agnd	0 V
1	Input 1. NTC 10 / Pt1000 / Resistive / Potential free contact / 0...10 Vdc
2	Input 2. NTC 10 / Pt1000 / Resistive / Potential free contact / 0...10 Vdc
3	Input 3. NTC 10 / Pt1000 / Resistive / Potential free contact / 0...10 Vdc
4	Input 4. NTC 10 / Pt1000 / Resistive / Potential free contact / 0...10 Vdc
5	Input 5. NTC 10 / Pt1000 / Resistive / Potential free contact / 0...10 Vdc
6	Input 6. NTC 10 / Pt1000 / Resistive / Potential free contact / 0...10 Vdc
Agnd	0 V

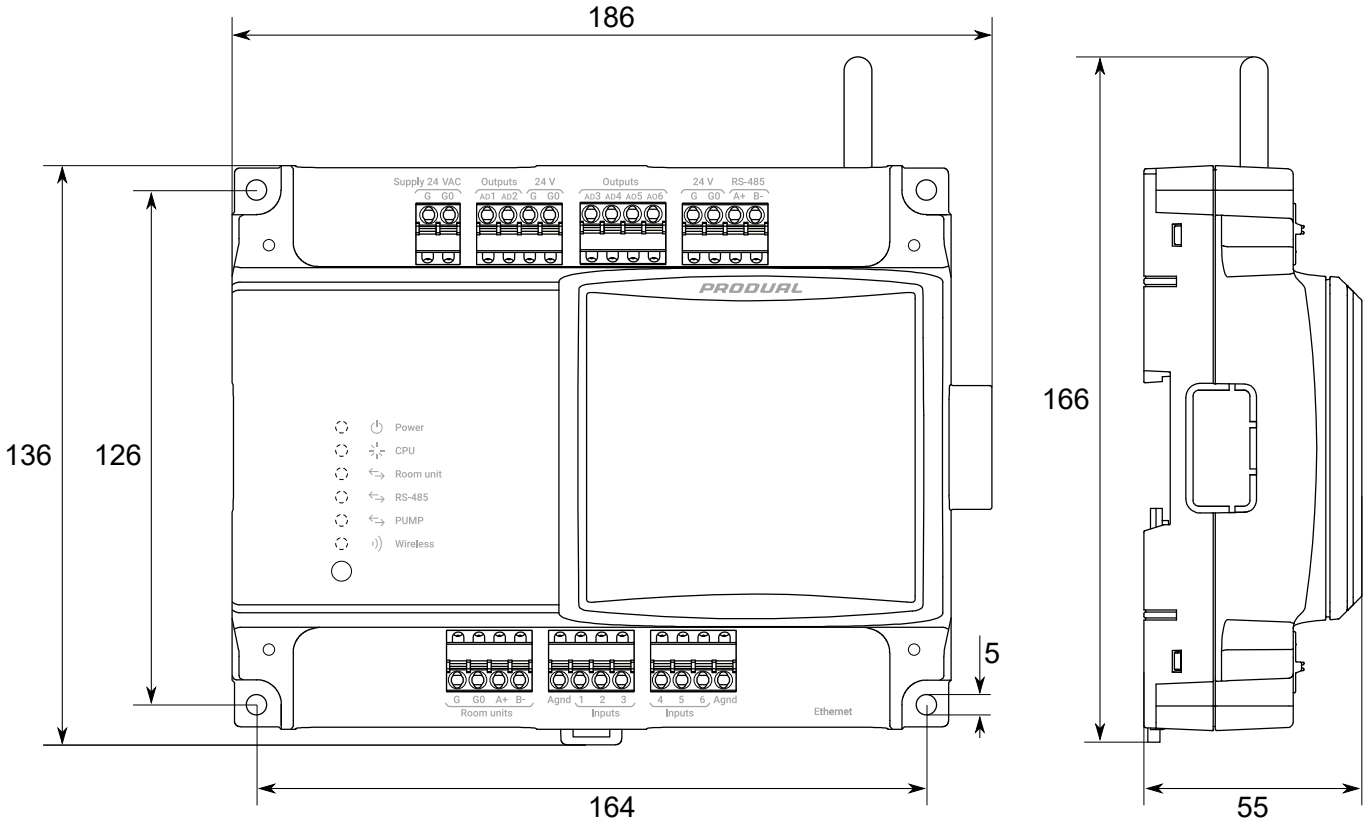
Ethernet

Ethernet	RJ-45 connector for Modbus TCP.

Ordering information

	Type	Product number	Description
	WBU	54011W0000	Wireless base unit, white
	WA-AS1	5401900010	extension cable and base for WBU antenna, 3 m cable
	CUCC	5201010400	Cable covers (includes two covers and four fixing screws)

Dimensions



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 V2.1.1	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 V2.1.1	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements.
EN 301 489-17 V2.1.1	Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission systems
EN 61000-6-2:2006	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments.
EN 61000-6-3:2007/ A1:2011	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments.