

Features

- MODBUS WirelessHART Gateway
- Graphical network analysis
- Simple and automatic configuration options
- Ethernet and RS 485 interface
- HART and MODBUS protocol via both interfaces
- Input WirelessHART wireless interface
- 24 V DC supply
- Redundant power supply connections

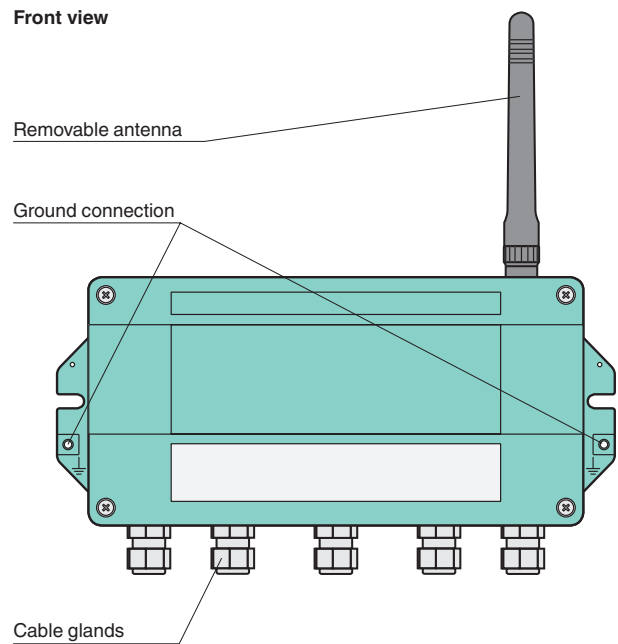
Function

The WirelessHART Gateway is the interface between the WirelessHART network and the control system or asset management system.

The device supports WirelessHART networks with up to 250 network participants and provides a RS485 interface as well as an Ethernet interface. Both interfaces transmit the HART or MODBUS protocol. OPC connectivity can be realized via the HART OPC server.

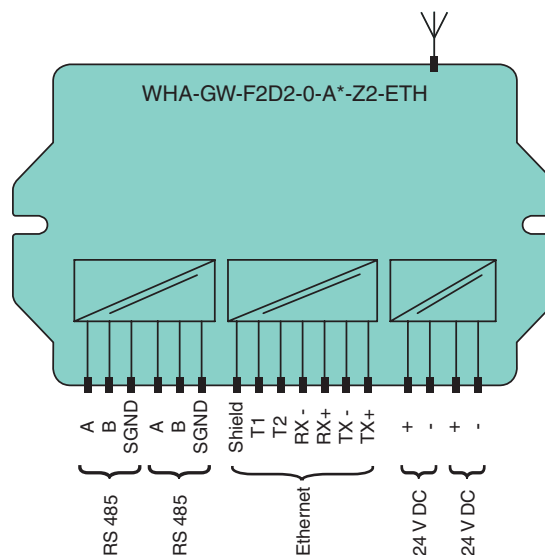
The device can be configured via the DTM or DD in connection with a configuration software. Furthermore, it provides a web interface for direct access via a web browser.

Assembly



WirelessHART

Connection

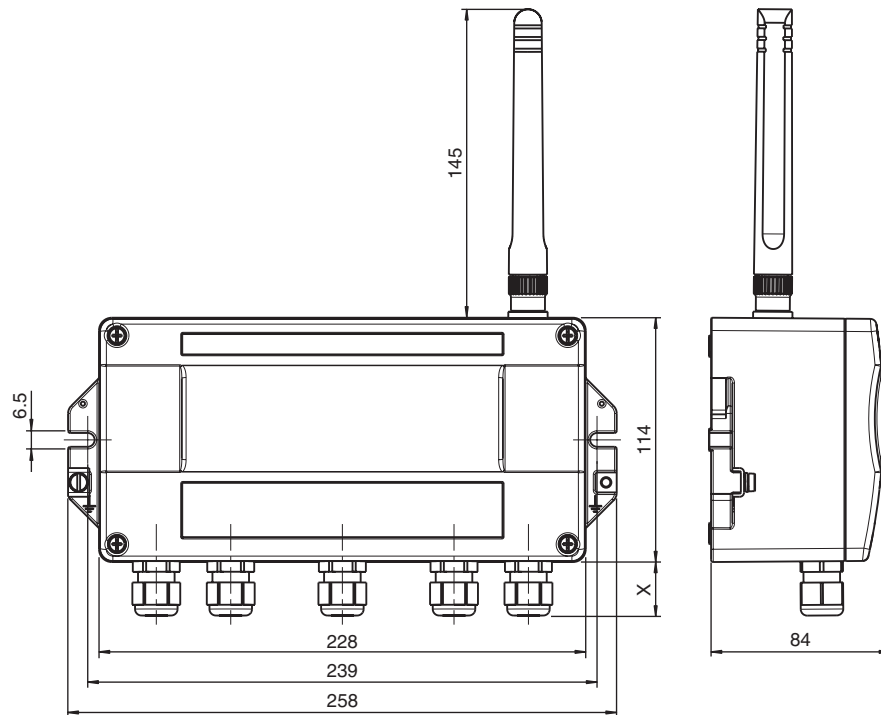


Zone 2

Supply	
Rated voltage	20 ... 30 V DC SELV/PELV
Power consumption	< 5 W
External bus	
Connection	screw terminals for - 0.2 ... 4 mm ² (rigid wire) - 0.2 ... 2.5 mm ² (flexible wire)
Interface 1	Ethernet 10 BASE-T/100 BASE-TX , full galvanic isolation
Protocol	HART UDP, MODBUS TCP
Cable length	max. 100 m , depending on cables and transfer rate
Connection	UTP, STP or FTP
Interface 2	RS 485
Protocol	HART, MODBUS RTU
Daisy-chain capability	supported by duplicated connection terminals
Transfer rate	max. 115 kBit/s
Cable length	max. 1200 m , depending on cables and transfer rate
Bus termination	integrated termination resistor , adjustable via DIP switch and software
Input	
Interface	omnidirectional dipole antenna, removable
Communication	WirelessHART specifications - physical layer: IEEE 802.15.4.2006 - frequency band: 2.4 GHz (ISM band, licence free) - transmission rate: 250 kBit/s - max. transmit power: +10 dBm (EIRP) - transmission range: outdoor 250 m, indoor 50 m (under reference conditions) - communication standard: WirelessHART
Electrical isolation	
Interface/power supply	basic insulation according to IEC 61140, rated insulation voltage 50 V _{eff}
Interface/interface	basic insulation according to IEC 61140, rated insulation voltage 50 V _{eff}
Directive conformity	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006
Radio and telecommunication terminal equipment	The usage of 2.4 GHz equipment is bound to local restrictions. Ensure that restrictions allow usage of this product before commissioning.
Directive 99/5/EC	EN 300328: V1.7.1 EN 301489-17: V1.3.2
FCC CFR47 Part 15 B and C	ANSI C63.4-2003
Conformity	
Protection degree	IEC 60529
Shock resistance	EN 60068-2-27
Vibration resistance	EN 60068-2-6
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Relative humidity	5 ... 95 %, noncondensing
Corrosion resistance	acc. to ISA-S71.04-1985, severity level G3 test setup and execution acc. to EN 60068-2-60
Mechanical specifications	
Protection degree	IP66/IP67
Mass	approx. 1 kg
Dimensions	258 mm x 114 mm x 84 mm without antenna and cable glands
Mounting	panel mounting
Data for application in connection with Ex-areas	
EC-Type Examination Certificate	FM 12 ATEX 0061 , for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection, temperature class	Ⓔ II 3 G Ex nA nC IIC T4 Gc
Directive conformity	
Directive 94/9/EC	EN 60079-0:2012 EN 60079-15:2010
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .

Release date 2013-12-03 10:46 Date of issue 2013-12-03 t46565_eng.xml

Dimensions



All dimensions in millimeters and without tolerance indication.

Product versions

Type code	Description	Height "X" (mm) of cable gland	Cable diameter (mm) depending on cable gland
WHA-GW-F2D2-0-AP-Z2-ETH	Plastic cable gland	27,5	5 ... 10
WHA-GW-F2D2-0-AS-Z2-ETH	Steel cable gland	22	5 ... 10
WHA-GW-F2D2-0-AB-Z2-ETH	Brass cable gland, nickel-plated	22	5 ... 10

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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