

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

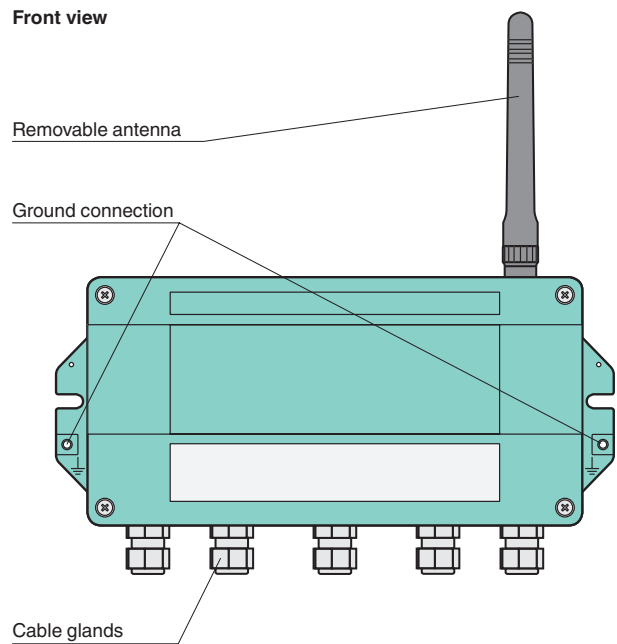
Function

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.

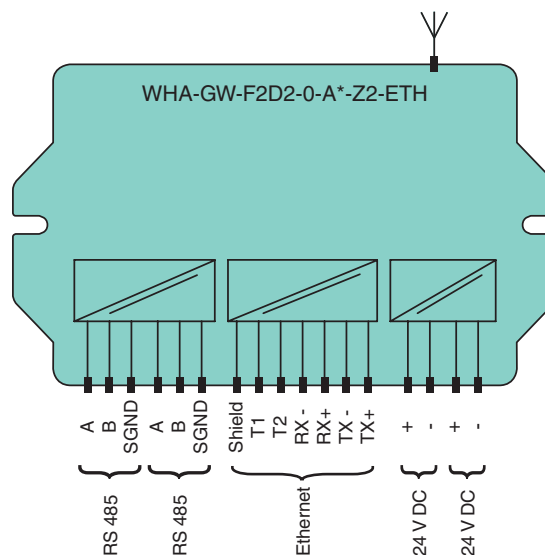
The device can be configured via the DTM or DD in connection with a configuration software. Furthermore, it provides a web interface for direct access via a web browser.

Assembly



WirelessHART

Connection



Zone 2

Supply		
Rated voltage	U _n	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		
Degree of protection		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		
Degree of protection		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
International approvals		
FM approval		Coc3042646
Approved for		NI Class I, Div. 2, GPS A-D NI Class II, Class III, Div. 2, GPS E-G
IECEX approval		IECEX FMG 12.0002

Release date 2016-01-11 13:36 Date of issue 2016-03-03 t46565_eng.xml

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

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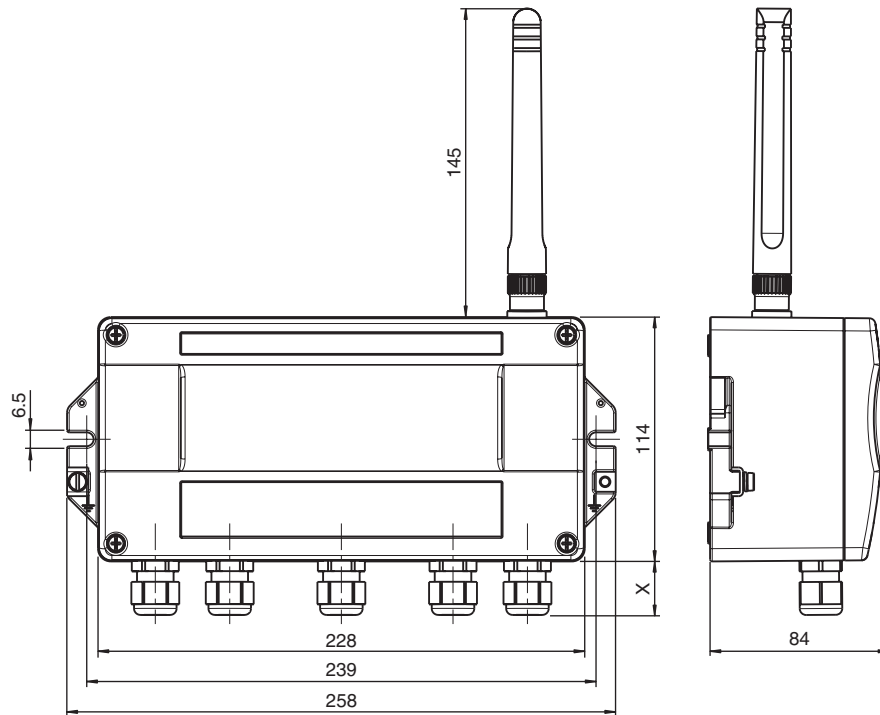
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Approved for	Ex nA nC IIC T4 Gc Ex nAc nCc T4
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .

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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