



- 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

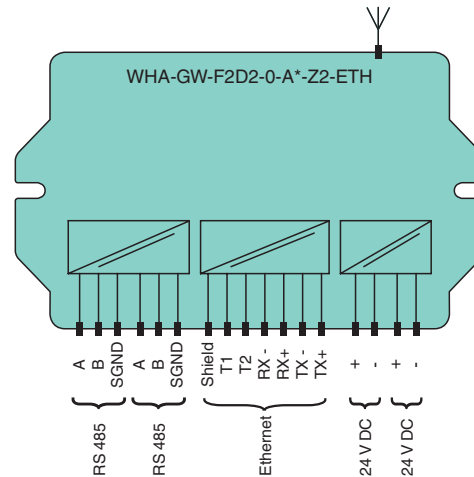
WHA-GW-F2D2-0-AS-Z2-ETH

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.

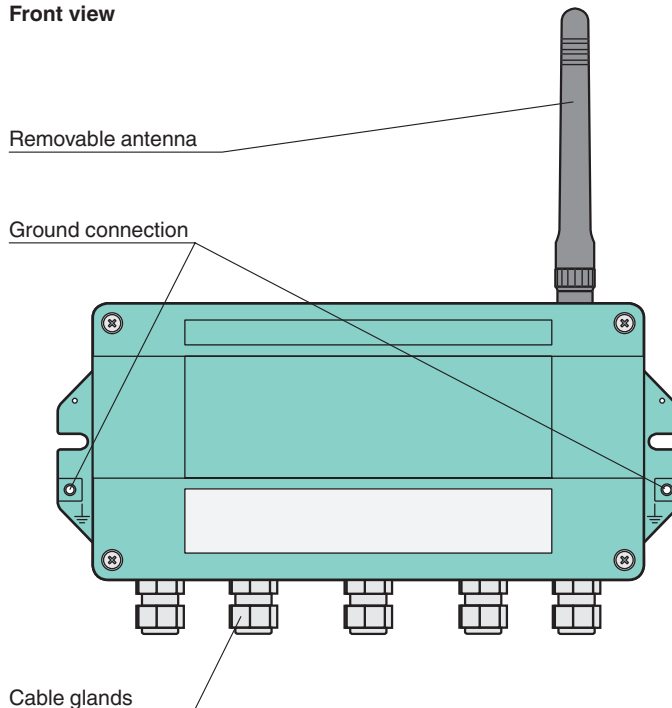
Connection



Zone 2

Composition

Front view



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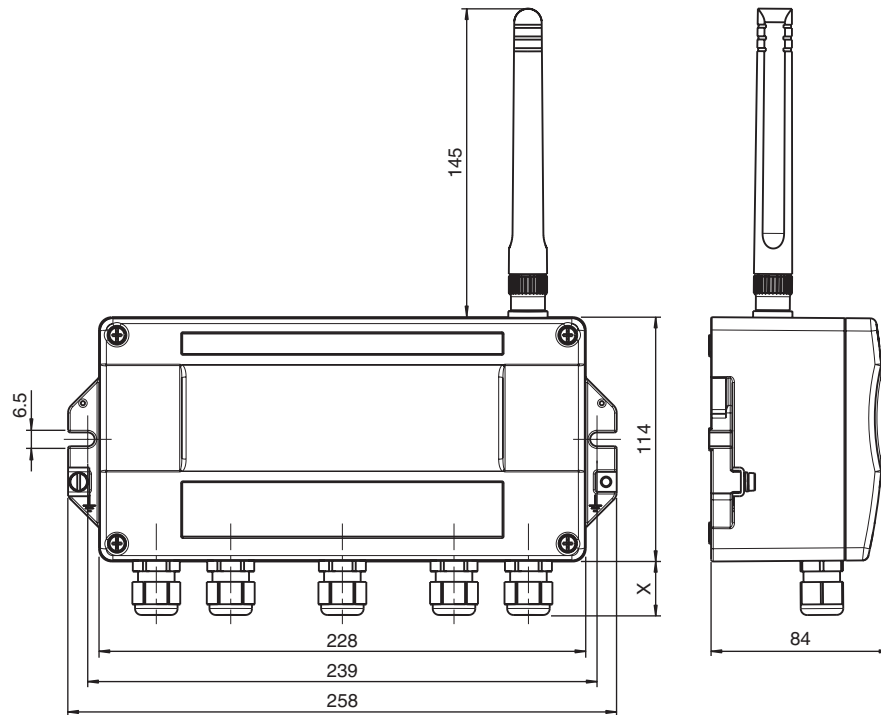
Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Supply	
Rated voltage U_r	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 - maximum transmit power: +10 dBm (EIRP) - transmission range: outdoor 250 m, indoor 50 m (under reference conditions) - communication standard: WirelessHART acc. to IEC 62591
Galvanic 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}
Indicators/settings	
Display elements	LED PWR (power supply status), one green LED LED COM (communication status), three yellow LEDs LED FLT (fault signal), one red LED
Control elements	2 push buttons: - restore HART configuration - restore communication configuration DIP switches: - baud rate - RS-485 address - RS-485 termination - security mode
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013
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 2014/53/EU	EN 300328: V2.1.1 EN 301489-17: V1.3.2
FCC CFR47 Part 15 B and C	ANSI C63.4-2003 , FCC ID: SJC-M2140
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 hazardous areas	

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EU-Type Examination Certificate	FM 12 ATEX 0061
Marking	Ⓔ II 3 G Ex nA IIC T4 Gc
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013 , 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
Approved for	Ex nA IIC T4 Gc , Ex nAc T4
General information	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com .

Dimensions



All dimensions in millimeters and without tolerance indication.