

# WirelessHART gateway - RAD-WHG/WLAN-XD - 2900178

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Gateway between WirelessHART field devices and 802.11b/g

## Product Description

WirelessHART gateway to 802.11b/g Ethernet

### Why buy this product

- ✓ WirelessHART gateway supports 250 WirelessHART devices
- ✓ Completely meshed routing (self-organizing and self-healing network) with WirelessHART
- ✓ Easy programming and diagnostics using an integrated web server or HART programming device
- ✓ 802.11b/g client can be used as a WirelessHART backhaul connection with 802.11i (WPA2) 128-bit AES encryption
- ✓ WirelessHART uses "channel hopping" for interference tolerance



## Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356543569

## Technical data

### Dimensions

Width	45 mm
Height	99 mm
Depth	114.5 mm
Width	45 mm
Height	99 mm
Depth	114.5 mm

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

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## Technical data

### Ambient conditions

Degree of protection	IP20
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### Wireless path

Interface description	WLAN as per IEEE 802.11 b/g
Direction	Bi-directional
Frequency range	2.4 GHz ... 2.472 GHz
Transmit capacity, minimum	0 dBm
Transmit capacity, maximum	20 dBm
Channel distance	5 MHz
Number of channel groups	13
Antenna connection method	RSMA (female)
Interface description	WirelessHART
Note	Test loops connect HART programming tool
Antenna	External
Antenna connection method	RSMA (female)
Frequency range	2.4 GHz ... 2.4835 GHz
Transmit capacity, minimum	0 dBm
Transmit capacity, maximum	10 dBm
Channel distance	5 MHz
Number of channel groups	15

### Serial interface

Connection method	RJ45
Serial transmission speed	10/100 Mbps

### Supply

Supply voltage	24 V DC
Supply voltage range	9 V DC ... 30 V DC
Typical current consumption	125 mA (at 24 V DC)
Max. current consumption	300 mA (at 24 V DC)
Nominal power consumption	5.1 W (typical)

### General

Mounting position	any
Assembly instructions	NS 35 in acc. with EN 60715
Housing material	Polyamide PA non-reinforced

### Connection data

Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	24

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## Technical data

### Connection data

Conductor cross section AWG max.	14
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3

### Standards and Regulations

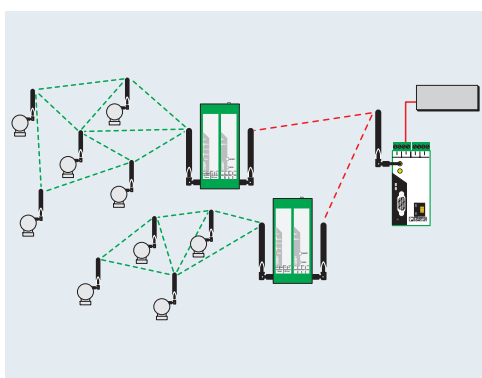
Electromagnetic compatibility	Conformance with RED Directive 2014/53/EU
Interface description	WLAN as per IEEE 802.11 b/g
Channel distance	5 MHz
Interface description	WirelessHART
Channel distance	5 MHz
Conformance	CE-compliant
	FCC Directive, Part 15.247
	CE-compliant (RED Directive 2014/53/EU)
	ATEX 2014/34/EU
ATEX	Ex nA IIC T4 Gc; Sira 10ATEX4252X
IECEX	Ex nA IIC T4; IECEX CSA 10.0008X

### Environmental Product Compliance

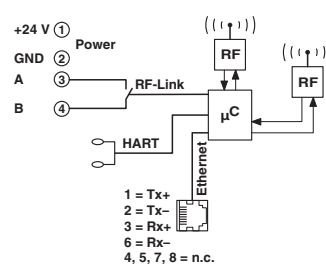
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Application drawing



Block diagram



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