

# Product data sheet

Specifications



Wireless and batteryless range,  
Harmony XB5R, Relay Antenna, AC  
DC, 5m cable output

ZBRA1

## Main

Range of product	Harmony XB5R
Product or component type	Wireless and batteryless range
Device short name	ZBRA
Product destination	Wireless Schneider Electric ecosystem devices
Control station application	Transceiver (emission and reception)
Colour of base of enclosure	Black (RAL 9011)
Colour of cover	Transparent
Material	Polycarbonate
frequency	2405 MHz for transmitter 2405 MHz for receiver
emission class	5M00G7W
Antenna type	Omnidirectional

## Complementary

Communication port protocol	Zigbee green power at 2.4 GHz conforming to IEEE 802.15.4
Antenna gain	0 dBi
Maximum sensing distance	300 m transmitter in box type XAL D, receiver in metal enclosure and use relay-antenna
Emission power	3 mW
[Us] rated supply voltage	24...240 V AC/DC 50/60 Hz - 10...10 %
Maximum power consumption in W	4 W AC/DC
Operating position	Vertical
Status LED	1 LED green for power ON 1 LED green for emission signal
Overvoltage category	III conforming to IEC 60664-1
Rated short-duration power frequency withstand voltage	4 kV 50 Hz conforming to IEC 60947-5-1
[Uimp] rated impulse withstand voltage	4 kV
Electrical connection	2 conductors cable 0.34 mm² - flexible - 5 m conforming to IEC 60947-1
Tightening torque	0.6 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Short-circuit protection	0.4 A fuse type fast blow
Max power consumption in W	1 mW

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Number of channels	1
Modulation Technique	O-QPSK
Bandwidth	5 MHz
Product weight	0.2 kg

## Environment

Ambient air temperature for storage	-40...70 °C
Relative humidity	90 % at -20...55 °C, without condensation conforming to ETSI EN 300 440-1
Electrical shock protection class	Class II conforming to IEC 61140
IP degree of protection	IP65 conforming to IEC 60529 55 °C 0.1 m
Pollution degree	3 conforming to IEC 60664-1
IK degree of protection	IK03 conforming to IEC 62262
Radio agreement	RSS SRRC ANATEL, type III conforming to ETSI EN 301 489-3 ARIB T66, class 2 conforming to ETSI EN 301 489-3 FCC, category 2 conforming to ETSI EN 300 440-1 ICASA, category 1 conforming to ETSI EN 300 440-1
Product certifications	CCC BT 2006/95/EC UL GOST CSA CE C-Tick
Directives	1999/5/EC - R&TTE directive 2004/108/EC - electromagnetic compatibility
Vibration resistance	+/-0.5 mm (f= 10...55 Hz) conforming to IEC 60068-2-6 6 gn (f= 55...150 Hz) conforming to IEC 60068-2-6
Shock resistance	25 gn (duration = 6 ms) for 6000 shocks conforming to IEC 60068-2-27 15 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27
Insulation resistance	> 500 MOhm at 500 V DC conforming to NF C 20030
[UI] rated insulation voltage	250 V conforming to IEC 60664-1

Electromagnetic compatibility	Immunity for industrial environments conforming to IEC 61000-6-2 Conducted and radiated emissions class B conforming to CISPR 22 Electrostatic discharge immunity test - test level: 8 kV (in free air (in insulating parts)) conforming to IEC 61000-4-2 Electrostatic discharge immunity test - test level: 6 kV (on contact (on metal parts)) conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields - test level: 10 V/m (80...2000 MHz) conforming to IEC 61000-4-3 Susceptibility to electromagnetic fields - test level: 3 V/m (80...2700 MHz, distance = 20 m) conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test - test level: 2 kV conforming to IEC 61000-4-4 1.2/50 µs shock waves immunity test - test level: 1 kV (differential mode) conforming to IEC 61000-4-5 1.2/50 µs shock waves immunity test - test level: 2 kV (common mode) conforming to IEC 61000-4-5 Conducted RF disturbances - test level: 10 V conforming to IEC 61000-4-6 Immunity to microbreaks and voltage drops conforming to IEC 61000-4-11 Radiated emission conforming to ETSI EN 300 440-1 Conducted emission conforming to EN 300-489-1 Conducted emission conforming to ETSI EN 300 489-3 Radiated emission conforming to ETSI EN 300 440-2
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## Packing Units

Unit Type of Package 1	PCE
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Number of Units in Package 1	1
Package 1 Height	8.000 cm
Package 1 Width	8.000 cm
Package 1 Length	18.700 cm
Package 1 Weight	267.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	18
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.293 kg

## Contractual warranty

Warranty	18 months
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Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)


[How we assess product sustainability >](#)

Environmental footprint	
Total lifecycle Carbon footprint	2

Use Better

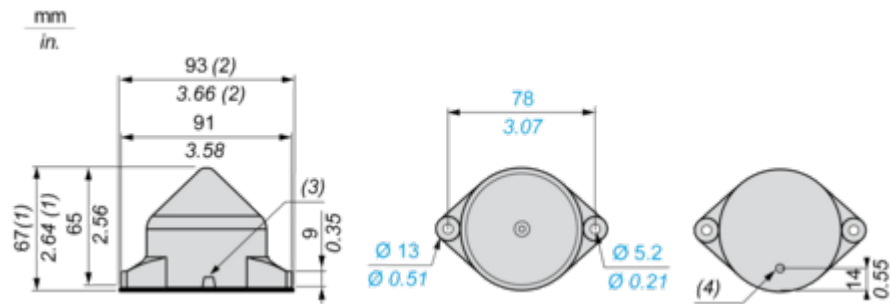
Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	25b7f895-3732-43c8-9910-ef6005058640
California proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

Use Again

Repack and remanufacture	
End of life manual availability	<a href="#">End of Life Information</a>
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Relay-Antenna

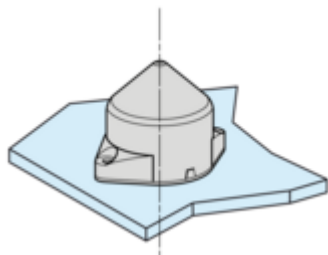


- (1) Knock-out for wire routing, maximum capacity 14 mm/0.55 in.
- (2) With seal
- (3) Radial cable route
- (4) Axial cable route

Mounting and Clearance

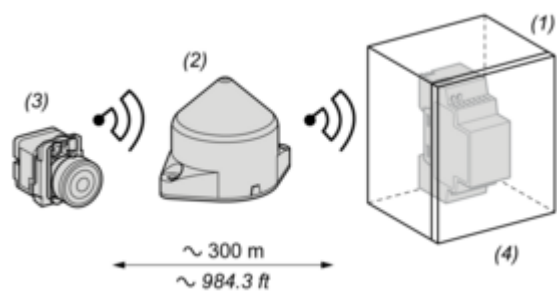
Antenna Mounting

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The antenna is installed following his vertical axis

Antenna Clearance in a Metal Enclosure



(1): Metal enclosure

(2): Relay Antenna

(3): Transmitter

(4): Receiver

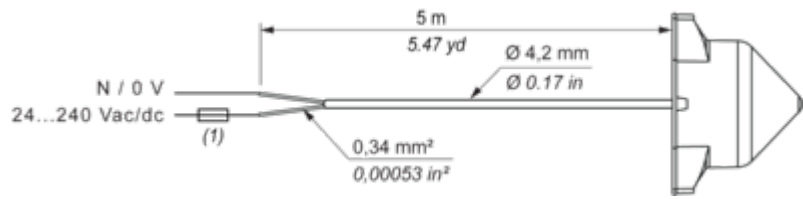
The range is reduced if the transmitter is placed in a metal enclosure (reduction factor: approx 10%).

Glass window	10...20 %
Plaster wall	30...45 %
Brick wall	60 %
Concrete wall	70...80 %
Metal structure	50...100 %

Connections and Schema

Relay-Antenna

Wiring Diagram

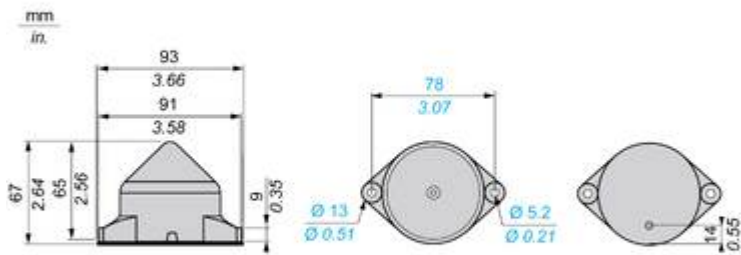


(1) 400 mA fast-blow fuse



Technical Illustration

Dimensions



Technical Illustration

Wiring diagram

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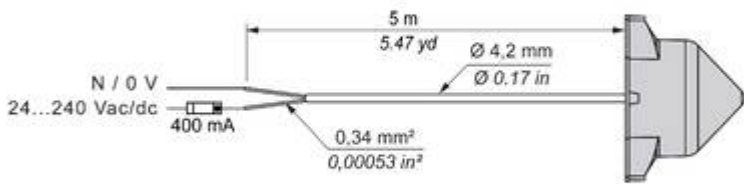


Image of product / Alternate images

Alternative

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Image of product in real life situation

