Product datasheet
Characteristics

ZBRA1

Main

Range of product	Harmony XB5R
Product or component type	Wireless and batteryless range
Device short name	ZBRA
Product destination	For XB5R and XB4R Ø 22 mm control units
Control station application	Transceiver (emission and reception)
Colour of base of enclosure	Black RAL 9011
Colour of cover	Transparent
Material	Polycarbonate
Transmission frequency	2405 MHz for transmitter 2405 MHz for receiver
Level or 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 %
Power consumption in W	<= 4 W AC/DC
Operating position	Vertical
Status LED	1 LED green power ON 1 LED green emission signal
Overvoltage category	III conforming to IEC 60664-1
Rated short-duration power frequency withstand voltage	4 kV 50 Hz conforming to EN/IEC 60947-5-1
[Uimp] rated impulse withstand voltage	4 kV
Electrical connection	2 conductors cable flexible with 16.4 ft (5 m) length, cross section: 0 in² (0.34 mm²) conforming to EN/IEC 60947-1
Tightening torque	5.31 lbf.in (0.6 N.m) conforming to EN/IEC 60947-1
Housing material	Self-extinguishing plastic
Short-circuit protection	0.4 A fuse fast blow
Max power consumption in W	1 mW
Number of channels	1
Modulation technique	O-QPSK
Bandwidth	5 MHz
Product weight	0.44 lb(US) (0.2 kg)

Environment

ambient air temperature for storage	-40...158 °F (-40...70 °C)
relative humidity	90 % at -4...131 °F (-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 at 131 °F (55 °C), 0.1 m
pollution degree	3 conforming to IEC 60664-1
IK degree of protection	IK03 conforming to EN 50102
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 CE CSA C-Tick GOST UL BT 2006/95/EC
directives	2004/108/EC - electromagnetic compatibility 1999/5/EC - R&TTE directive
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) 6000 shocks conforming to IEC 60068-2-27 15 gn (duration = 11 ms) 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 EN/IEC 61000-6-2 Immunity to microbreaks and voltage drops conforming to IEC 61000-4-11 Conducted emission conforming to EN 300-489-1 Conducted and radiated emissions, class B conforming to CISPR 22 Radiated emission conforming to ETSI EN 300 440-1 Conducted emission conforming to ETSI EN 300 489-3 Radiated emission conforming to ETSI EN 300 440-2 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

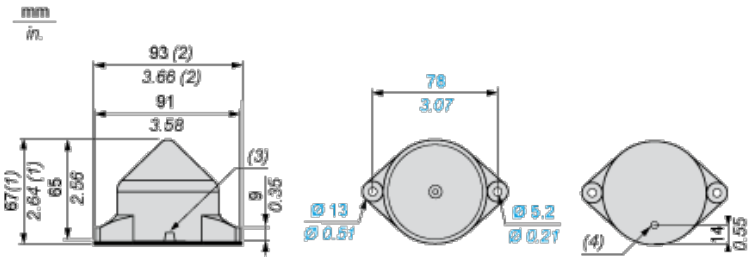
Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 1129 - Schneider Electric declaration of conformity	Compliant - since 1129 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available

Contractual warranty

Warranty period	18 months

Relay-Antenna



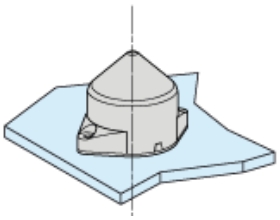
(1) Knock-out for wire routing, maximum capacity 14 mm/0.55 in.

(2) With seal

(3) Radial cable route

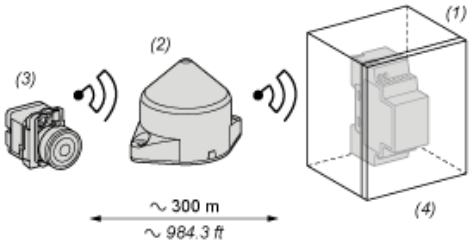
(4) Axial cable route

Antenna Mounting



The antenna is installed following his vertical axis

Antenna Clearance in a Metal Enclosure



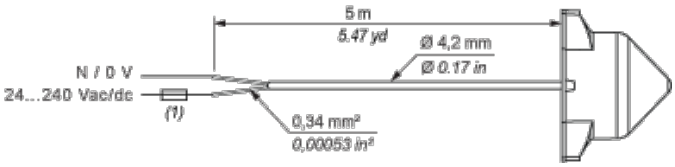
(1): Metal enclosure
(2): Relay Antenna
(3): Transmitter
(4): Receiver

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 %

Relay-Antenna

Wiring Diagram



(1) 400 mA fast-blow fuse