# Product data sheet
## Characteristics

# ZBRT1
## transmitter wireless batteryless w/o Head




## Main

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|---|---|
| Range of product | Harmony XB5 |
| Product or component type | Wireless and batteryless transmitter |
| Device short name | XB5R |
| Bezel material | Plastic |
| Mounting diameter | 22 mm |
| Transmission frequency | 2405 MHz |
| Level or class | 5M00G7W |
| Antenna type | Omnidirectional |

## Complementary

| | |
|---|---|
| Rated power in W | <= 1 mW |
| Number of channels | 1 |
| Modulation technique | O-QPSK |
| Bandwidth | 5 MHz |
| Antenna gain | 0 dBi |
| Embedding depth | <= 42 mm |
| CAD overall height | 41.5 mm |
| CAD overall width | 30 mm |
| CAD overall depth | 43 mm |
| Product weight | 0.025 kg |
| Operating travel | 4.3 mm total travel |
| Operating force | < 25 N C/O changing electrical state |
| Mechanical robustness | Free fall resistance (test level: 1000 mm) conforming to EN/IEC 60068-2-32 |
| Standards | UL 508<br>CSA C22.2 No 14<br>EN/IEC 60947-1<br>EN/IEC 60947-5-1 |
| Radio agreement | RSS<br>SRRC<br>ICASA |

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

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|---|---|
| | ANATEL<br>ARIB T66<br>FCC |
| Communication port protocol | Zigbee (green power) at 2.4 GHz conforming to IEEE 802.15.4 |
| Maximum sensing distance | 100 m in free field<br>25 m transmitter in a plastic box type XAL D and receiver in a metal enclosure<br>300 m transmitter in box type XAL D, receiver in metal enclosure and use relay-antenna |
| Acquisition time | 2 ms |
| Response time | < 2 ms |
| Fixing mode | Fixing nut beneath head, nominal torque: 2.2 N.m, nominal torque: +/- 0.2 N.m) |
| Electrical composition code | PW1 |

## Environment

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|---|---|
| Ambient air temperature for storage | -40...70 °C |
| Ambient air temperature for operation | -25...55 °C |
| Relative humidity | 95 % at 70 °C without condensation |
| IP degree of protection | IP65 on front face conforming to IEC 60529<br>IP30 on back face conforming to IEC 60529<br>IP65 on front face conforming to UL Type 12 |
| IK degree of protection | IK03 conforming to IEC 50102 |
| Mechanical durability | 1000000 cycles |
| Shock resistance | 25 gn (duration = 6 ms) for 6000 shocks conforming to IEC 60068-2-27<br>30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27<br>50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 |
| Vibration resistance | +/- 10 mm (f= 2...11 Hz) conforming to IEC 60068-2-6<br>5 gn (f= 11...500 Hz) conforming to IEC 60068-2-6 |
| Electromagnetic compatibility | Immunity for industrial environments<br>Radiated emission<br>Electrostatic discharge immunity test (test level:8 kV - in free air (in insulating parts))<br>Electrostatic discharge immunity test (test level:6 kV - on contact (on metal parts))<br>Susceptibility to electromagnetic fields (test level:10 V/m - 80...2000 MHz)<br>Susceptibility to electromagnetic fields (test level:3 V/m - 80...2700 MHz, distance = 20 m) |
| Product certifications | CSA<br>BT 2006/95/EC<br>C-Tick<br>UL<br>CCC<br>GOST |
| Directives | 1999/5/EC - R&TTE directive<br>2004/108/EC - electromagnetic compatibility |

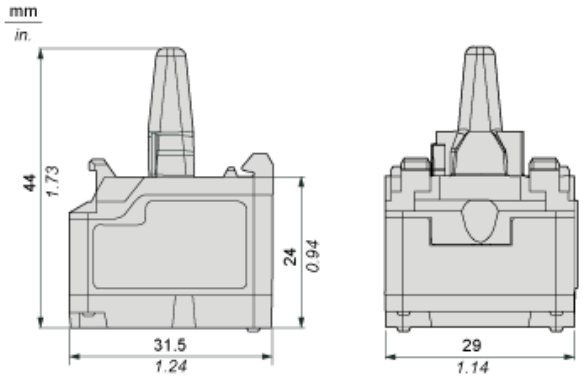
## Offer Sustainability

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|---|---|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 1040 - Schneider Electric declaration of conformity<br>Schneider Electric declaration of conformity |
| REACh | Reference not containing SVHC above the threshold<br>Reference not containing SVHC above the threshold |
| Product environmental profile | Available |
| Product end of life instructions | Available |

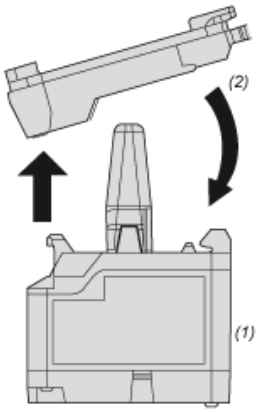
## Contractual warranty

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|---|---|
| Warranty period | 18 months |

## Dimensions Drawings



## Mounting of the Transmitter onto the Body Fixing Collar




(1): ZBRT1
(2): Body fixing collar