ZBRTT1

Easergy CL110 wireless environmental temperature and humidity sensor



Main	
Range of product	Harmony XB5R
Product or component type	Wireless transmitter
Device short name	XB5R
Transmission frequency	2400 MHz
Antenna tyne	Omnidirectional

Complementary

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Max power consumption in W	60 mW
Number of channels	16
Modulation technique	O-QPSK
Bandwidth	5 MHz
Antenna gain	0 dBi
CAD overall height	21 mm
CAD overall width	40 mm
CAD overall depth	40 mm
Net weight	0.034 kg
Measurement temperature	90 °C
Mechanical robustness	Free fall resistance 1000 mm conforming to EN/IEC 60068-2-32
Standards	IEC 61010-1 UL 61010-1 IEEE 802.15.4
Radio agreement	ANATEL ARIB T66 FCC ICASA RSS SRRC
Communication port protocol	Zigbee green power at 2.4 GHz conforming to IEEE 802.15.4
Maximum sensing distance	100 M in free field 25 M transmitter in a plastic box type XAL D and receiver in a metal enclosure 10 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	Magnetic fixing
Mounting mode	Magnetic
Electrical composition code	PW1

Environment

Ambient air temperature for storage	-4070 °C	
Ambient air temperature for operation	-4070 °C	
Relative humidity	1095 % at -4070 °C	
IP degree of protection	IP54 conforming to EN/IEC 60529	
IK degree of protection	IK06 conforming to EN/IEC 62262	
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Shock resistance	40 gn (duration = 6 ms) for 3 shocks conforming to IEC 60068-2-27 20 gn (duration = 16 ms) for 1000 shocks conforming to IEC 60068-2-27 10 gn (duration = 11 ms) for 3 shocks conforming to IEC 60068-2-27
Vibration resistance	2 gn (f= 5200 Hz) conforming to IEC 60068-2-6 4 gn (f= 200500 Hz) conforming to IEC 60068-2-6 1 gn (f= 102000 Hz) conforming to IEC 60068-2-64 1 gn (f= 5500 Hz) conforming to IEC 60068-2-6
Electromagnetic compatibility	Susceptibility to electromagnetic fields - test level: 25 V/m (80 MHz6 GHz) conforming to EN/IEC 61000-4-3 Susceptibility to conducted disturbances - test level: 20 V (0.1580 MHz) conforming to EN/IEC 61000-4-6 Electromagnetic field immunity test - test level: 1000 A/m (pulsed) conforming to EN/IEC 61000-4-8 Electromagnetic field immunity test - test level: 300 A/m (continuous) conforming to EN/IEC 61000-4-8 Electromagnetic field immunity test - test level: 1000 A/m (pulsed) conforming to EN/IEC 61000-4-9 Damped oscillatory wave - test level: 3 kV conforming to IEC 61000-4-10 Damped oscillatory wave - test level: 2.5 kV conforming to EN/IEC 61000-4-18 Surge immunity test conforming to EN/IEC 61000-4-18 Surge immunity test (common mode) conforming to EN/IEC 61000-4-5 Immunity to conducted RF disturbances - test level: 30 V (differential mode) conforming to EN/IEC 61000-4-5 Immunity to conducted RF disturbances (continuous) conforming to IEC 61000-4-16 Immunity to conducted RF disturbances - test level: 300 V Immunity to conducted RF disturbances (short term) conforming to IEC 61000-4-16
Product certifications	CSA CCC UL GOST C-Tick BT 2006/95/EC
Directives	2004/108/EC - electromagnetic compatibility 1999/5/EC - R&TTE directive
Packing Units	
Unit Type of Package 1	PCE

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	62 g
Package 1 Height	4.5 cm
Package 1 width	4.5 cm
Package 1 Length	9 cm
Unit Type of Package 2	S03
Number of Units in Package 2	100
Package 2 Weight	6.6 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Product data sheet Dimensions Drawings

ZBRTT1

Dimensions

