onbon 仰邦科技

SPECIFICATION

Environmental integrated sensor

Version：V1.0   Release time：2019.5.23

Directory

GUIDING

Safety notes

◆ Input voltage is 12V, electric current is 4A, power voltage can't be less than 12V, please make sure the quality of the power supply of sensors.

◆ Users are not allowed to disassemble, not to touch the sensor core, so as not to cause damage to the product.

◆ As far as possible away from high-power interference equipment, so as not to cause inaccurate measurement, such as frequency converter, motor, etc., installation, disassembly transmitter must turn off the power ,The power supply must be disconnected first. Water entering the forbidden transmitter can cause irreversible changes.

◆ Please make sure that all the power supply cables are plugged off when you want to connect or plug off any signal or controlling cables.

◆ Please make sure that all the power supply cables and signal cables are plugged off when you need to put in or take off the hardware equipment.

◆ Please make sure the environment is clean, dry and ventilated when you use this product, also, do not put this product to a high temperature and wet environment.

◆ This product is electronic products, please keep away from fire, water source and flammable&combustible products.

◆ There's high pressure components in this products, please do not open the box and repair it by yourself.

◆ Turn off the power supply immediately when you find smoking, peculiar smell or something unusual. And contact with us soon.

PRODUCT INSTRUCTION

Photo

Description

BX-QX (485) environmental integrated sensor, easy to carry and assemble, integrated multiple sensor functions in one, can accurately measure temperature and humidity, noise, air quality, atmospheric pressure and light value.

The shell is made of high-quality aluminum alloy profile, and the exterior is plated and sprayed with plastic. It has good characteristics of anti-corrosion and anti-erosion. It can ensure that the transmitter can be used for a long time without rust. At the same time, it cooperates with the smooth bearing system to ensure information collection.It is widely used in the measurement of environmental values in greenhouses, environmental protection, meteorological stations, ships, docks, and breeding.

Features

Temp&humidity
- Simple structure and convenient installation;
- meeting future diversified needs;
- fool operation will achieve the best results without training;
- Unique anti-reverse plug interface, just plug in the interface to communicate;
- support BX-5/6th controller and VMF card.
- Support real-time monitoring of the temperature and humidity of the environment. The humidity measurement range is from 0 to 99.9% RH in increments of 3% RH, the temperature measurement is from -40 °C to + 80 °C, and the increment is 0.5 °C.
- Suitable for full-color LED displays of various specifications.
- excellent long-term stability, strong anti-interference ability, reliable quality ,can be used in outdoor.

Noise function
- Using high-sensitivity condenser microphone, stable signal and high precision.
- Wide measuring range, good linearity, easy to use, easy to install, long transmission distance, etc.

Air quality function
- Range: 0-6000ug / m3, resolution 1ug / m3.
- PM2.5, PM10 output at the same time.
- Unique dual-frequency data acquisition and automatic calibration technology, consistency up to ± 10%.
- Adopt advanced laser anti-fading technology to ensure the long-term stability of the equipment.
- Standard ModBus-RTU communication protocol, easy access.

Atmospheric pressure function
- 10-30V wide DC voltage power supply

- Standard ModBus-RTU communication protocol
- Simultaneous measurement of atmospheric pressure and temperature
- Wide range 0-120Kpa pressure range, can be applied to various altitudes
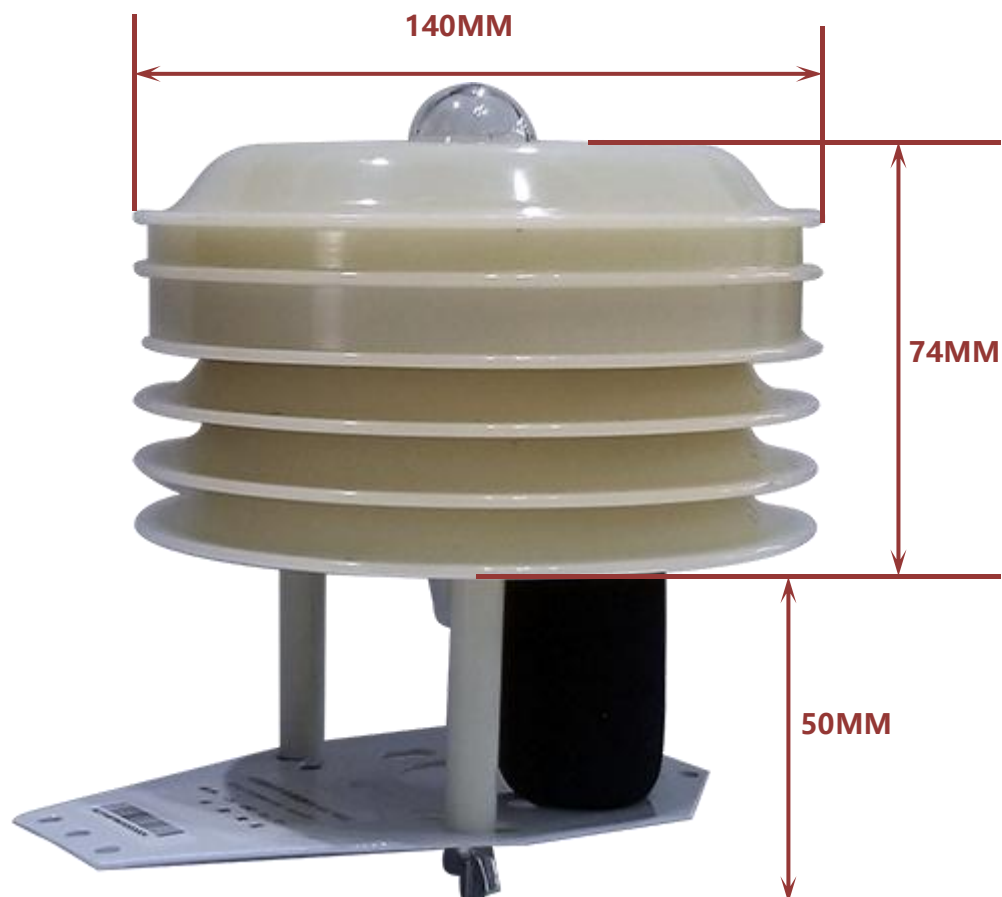
Brightness function

- High-precision illumination detection and measurement range 0-60 thousand Lux, 0-20 thousand Lux optio
- 485 communication, standard ModBus-RTU communication protocol, communication address and baud rate can be set, the longest communication distance is 2000 meters
- Wall-mounted waterproof shell, high protection level, can be used outdoors or in harsh on-site environments
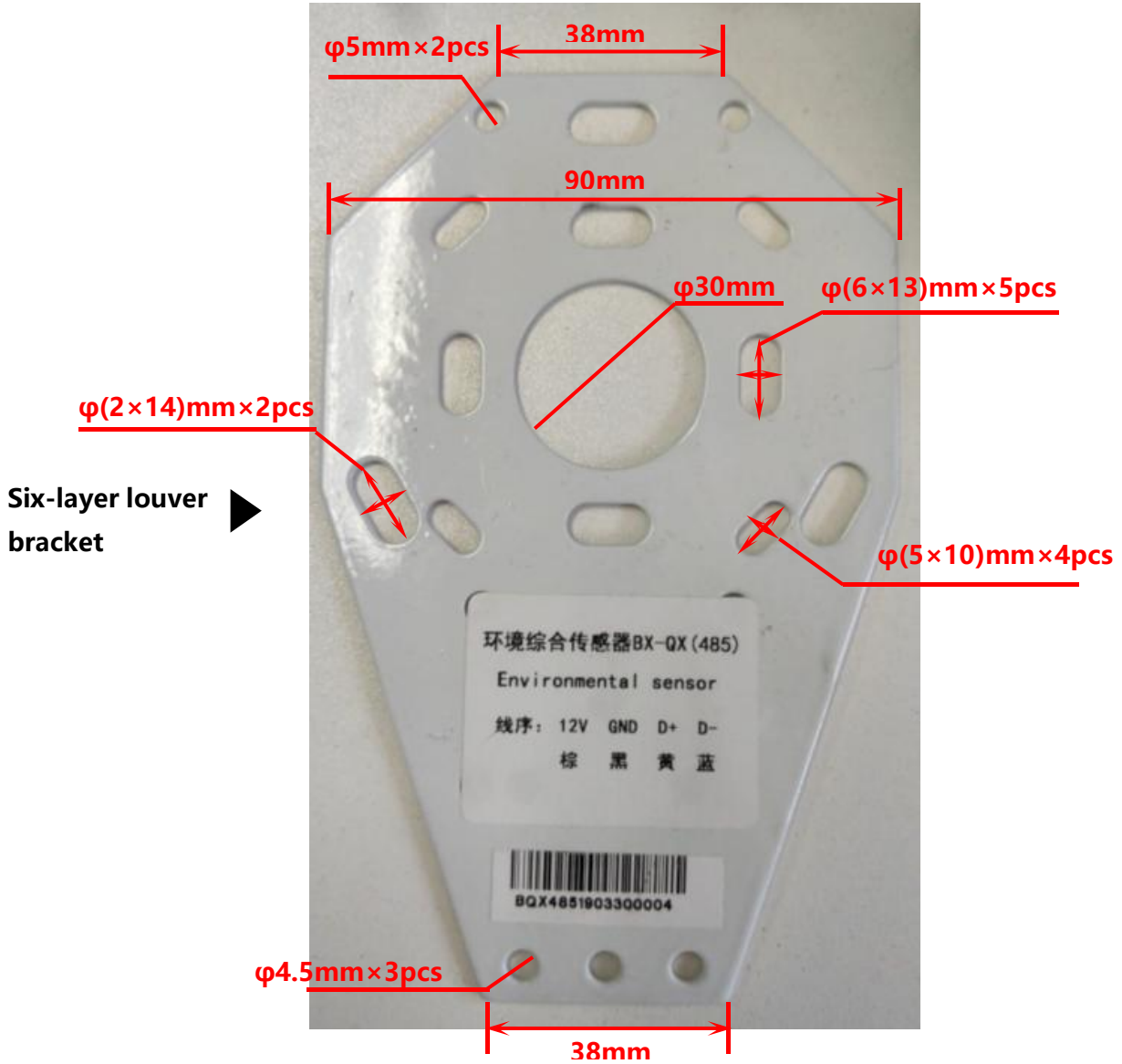- 10-30V DC wide voltage power supply

Key parameters

DC power supply（default)	10-30V DC	
Accuracy	humidity	±3%RH(5%RH~95%RH,25℃)
	temp	±0.5℃（25℃)
	noise	0.1dB
	Air quality	±10%
	Atmospheric pressure	Atmospheric pressure：±0.15Kpa@25℃ 75Kpa
		temp：±0.5℃（25℃)（default)
	Light intensity	±7%(25℃)
Range	Temp&humidity	-40℃~+60℃，0%RH~80%RH
	noise	30dB~120dB，20Hz~12.5kHz
	Air quality	PM2.5：0~6000ug/m3
		PM10：0~6000ug/m3
	Atmospheric pressure	Atmospheric pressure：0~120Kpa
		temp：40℃~80℃(customized)
	Light intensity	0-65535Lux，0-20万Lux
Long-term stability	temp	≤0.1℃/y
	humidity	≤1%/y
	noise	less than 2% in the service life

	Atmospheric pressure	Atmospheric pressure：-0.1Kpa/ year
		temp：≤0.1℃/year
	Light intensity	≤5%/y
response time	temp	≤18s(1m/s wind speed)
	humidity	≤6s(1m/s wind speed)
	noise	≤3s
	Air quality	≤90s
	Atmospheric pressure	≤1s
	Light intensity	0.1s
Output signal	RS485(Modbus protocol)	

DEMENSION

INSTALLATION

φ5mm×2pcs

38mm

90mm

φ30mm

φ(6×13)mm×5pcs

φ(2×14)mm×2pcs

Six-layer louver bracket ▶

φ(5×10)mm×4pcs

环境综合传感器BX-QX(485)

Environmental sensor

线序： 12V GND D+ D-
　　　 棕　 黑　 黄　 蓝

BQX4851903300004

φ4.5mm×3pcs

38mm

CONTACT US

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ONBON APP