BKC-MT RS485- MB

BKC WeatherSys
Integrated Systems since 1990

Overview



The **BKC–MT RS485-MB** is a high-accuracy, industrial-grade temperature sensor designed for precise surface temperature monitoring. It features a Pt1000 RTD element in a self-adhesive aluminium block, ensuring reliable thermal contact with the target surface.

With RS-485 Modbus RTU communication, wide voltage input, and a compact IP67-rated housing, it's ideal for SCADA systems**,** data loggers**,** and industrial automation setups. It's specially formulated Thermo-conductive adhesive ensures enhanced accuracy and thermal response.

Features and Applications:

Features	Applications
High-accuracy Pt1000 RTD sensor element (Class A)	Solar panel surface temperature monitoring
RS-485 interface with Modbus RTU protocol	Industrial automation and process control systems
Wide operating range: -50°C to 120°C (sensor),	SCADA systems
self-adhesive aluminium housing	Renewable energy systems (e.g., solar panel)
Thermo-conductive adhesive for enhanced accuracy	Electrical panels and equipment protection

Technical Specification:

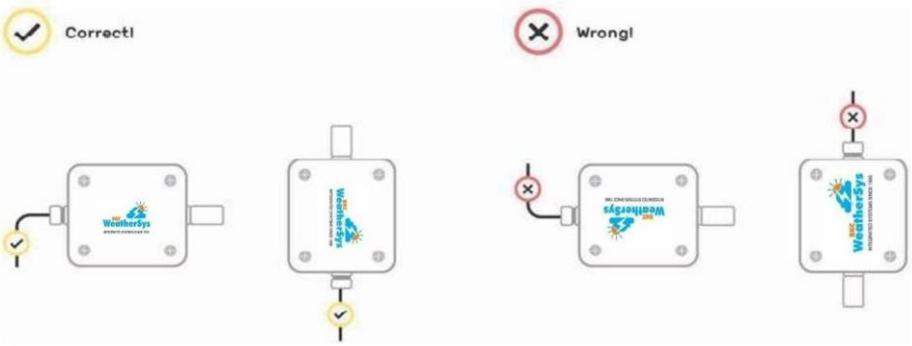
Parameter	Specification
Model	BKC – MT RS485-MB
Output	RS485
Sensor Element & Type	Pt1000, RTD (Resistance Temperature Detector)
Operating Range	-50°C to 150 °C
Supply Voltage	12 to 35V DC
Accuracy	Class A
Sensor Housing	Self-adhesive aluminium block (30x12x6mm)
Sensor Cable	Teflon-coated 3 meters,
Case material	Powder Coated Aluminium
Module temperature sensor	Sensor element -30°C to 600 °C
Case size / protection level	80mm x 75 mm x 57 mm / IP 67
certificate	Calibration certificate Provided

Safety Instruction:
Installation must be carried out only by electrically qualified personnel.

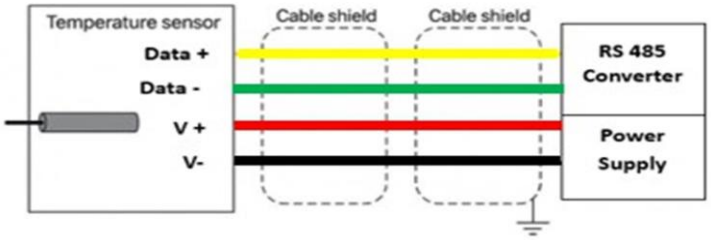
ISO 9001:2015

BKC WeatherSys Pvt. Ltd.
CIN#U74140DI1998PTC095066
Corporate Office: H-135, Sector 63, Noida, Uttar Pradesh 201307, India
T: +91 120 4632504, 507 **F:** +91 120 4632511 **E:** weather@weathersysbkc.com
Registered Office: 109 Kusal Bazar, 32-33, Nehru Place, New Delhi 110 019 (INDIA)
www.weathersysbkc.com

Mounting and Installing Instruction:



Wiring Diagram:



BKC MT RS485-MB

Wiring Instructions:

RS-485 Communication:

- **Yellow Wire** → Connect to **RS-485 D (+)**
- **Green Wire** → Connect to **RS-485 D (−)**

Power Supply:

- **Red Wire (V^+)** → Connect to the **positive terminal** of the power supply
- **Black Wire (V^-)** → Connect to the **negative terminal** of the power supply.

NOTE: DC Supply Voltage Ranging from 12V DC to 35V DC.

Communication Protocol

The BKC-MT 1 RS485- MB Sensor is following factory default settings:

- **Modbus Address:** 1
- **Modbus Baud Rate:** 9600
- **Data Bit :** 8
- **Parity :** None
- **Stop bit :** 1
- **Register Address :** Holding Register (40001)

ISO 9001:2015

BKC WeatherSys Pvt. Ltd.
CIN#U74140DI1998PTC095066
Corporate Office: H-135, Sector 63, Noida, Uttar Pradesh 201307, India
T: +91 120 4632504, 507 **F:** +91 120 4632511 **E:** weather@weathersysbkc.com
Registered Office: 109 Kusal Bazar, 32-33, Nehru Place, New Delhi 110 019 (INDIA)
www.weathersysbkc.com