

210-501 Temperature Transmitter with Solar Radiation Shield

The **210-501 Temperature Transmitter** measures outside air temperature using a platinum RTD sensor enclosed in a 6-plate solar radiation shield. It produces a 4-20 mA output signal which is an industrial standard signal for process control monitoring. Most PLCs (Programmable Logic Controllers), RTUs (Remote Telemetry Units), and data acquisition systems accept this signal directly.

If a voltage signal is required, the sensor output may be converted by reading the voltage across a precision resistor in series with the signal wire. When the 4-20 mA signal is dropped across a 250 ohm resistor, the output will be 1 to 5 Vdc.

The 210-501 can be operated as a loop-driven device or connected in 3-wire configuration. The sensor includes 25 feet (7.6 m) of 3-conductor cable. The cable can be extended up to 500 feet (152 m).

Features

- Attached solar radiation shield allows mounting in direct sunlight
- Mounts on vertical 1-inch to 2-inch diameter pipe
- 4-20 mA transmitter output allows longer wire runs than standard thermistor sensors

Applications

- Agriculture, Livestock Operations, Greenhouse Monitoring
- Building Automation Systems
- Climate Monitoring/Weather Stations
- Evaporation Measurement Stations
- Solar Power Generation Facilities



Approvals

- CE approval
- RoHS compliant

Specifications

Sensor type	Pt1000 RTD
Range/Operating temperature	-40 to 140°F (-40 to 60°C)
Accuracy	±0.5°C @ 25°C
Response time	100 ms
Materials	304 stainless steel (probe), polycarbonate (housing)
Electrical connection	Terminal block (internal), tinned leads (cable)
Power requirement	12 to 36 Vdc
Output signal	4-20 mA loop or 3-wire configuration
Cable	3-conductor 24 AWG, 25 feet (7.6 m) standard, 500 feet (152 m) maximum
Enclosure rating	NEMA-4X (IP66)
Weight/Shipping	1 lbs 7.4 oz (0.66 kg) / 3 lbs (1.4 kg)

Ordering Information

210-501	Temperature Transmitter with Solar Radiation Shield, includes 25' cable
330-0324	Cable, 3C 24AWG, per foot