

## AirySense™-TH: SMART TEMPERATURE & HUMIDITY SENSOR

### General Description:

AirySense™-TH is a Smart Temperature and Humidity Sensor which can be connected on standard Building Automation Networks. These can be used for monitoring ambient environmental conditions for monitoring and control.

### Applications:

- Monitoring of Ambient Temperature and Humidity at Solar Power Plants, Control Rooms, Machinery Room, Remote Unmanned Stations, Buildings and Complexes, Warehouses, Cold Storage areas, Hospitals, etc.
- Monitoring of Temperature and Humidity inside the Server racks, and Data Centres
- Can be integrated with Zone Thermostats for monitoring and control of Temperature and Humidity remotely.



### Salient Features:

- AirySense™-TH provides smart monitoring of ambient Temperature and Humidity in clean and unclean environments.
- AirySense™-TH is based on semiconductor based monolithic precision sensor with low drift and hysteresis and excellent long term stability
- AirySense™-TH communicates on standard Modbus RTU protocol on RS485 multidrop networks with field configurable device address and baud rates
- Adding more sensors is very easy; the network can support up to 30 more sensors.
- AirySense™-TH is designed to be robust for usage in hostile conditions
- Packaged in industrial grade metallic enclosure with wall mounting

### Specifications:

#### Temperature Measurement:

Range	-35 to +85 °C
Resolution	0.1 °C
Accuracy	± 0.5 °C
Response Time	5 – 30 sec

#### Relative Humidity Measurement:

Range	0 to 100 %RH
Resolution	0.1 %RH
Accuracy	± 2 %RH
Response Time	~ 20 sec

**Serial Communication:**

Protocol	Modbus RTU
Device ID	User configurable from HMI
Physical Layer	RS485 Half Duplex
Maximum Devices	31
Maximum Length	Up to 1000m
Baud Rate (BPS)	9600, 19200, 38400, 57600
Protection	Short Circuit
ESD	Compliant as per IEC 61000-4-2 Level 3 (Contact Discharge: 8kV, Air Discharge: 15kV)
Connectors	Screw Terminals

**Power:**

Input Voltage	24V AC/DC +/- 10%
Power Consumption	< 200mW
Protection	Overvoltage, Short Circuit, Reverse Polarity
ESD	Compliant as per IEC 61000-4-2 Level 3 (Contact Discharge: 8kV, Air Discharge: 15kV)
Connectors	Screw Terminals

**Mechanical:**

Enclosure	Aluminium Sheet, Powder coated
Mounting	Wall mount
Dimensions	88 (W) x 125 (H) x 30 (D) (mm)
Weight	~ 200g

**Environmental:**

Operating Temperature	-35 to 85 °C
Operating Humidity	0 to 100 %RH
Ingress Protection	IP 20

**Order Code:**

Part Number	Display	Relay	Protocol
AirySense-TH / MB	--	--	Modbus RTU
AirySense-TH / MB-R	--	✓	Modbus RTU
AirySense-TH / MB-D	✓	--	Modbus RTU
AirySense-TH / MB-DR	✓	✓	Modbus RTU

**Contact:**
**SUNLUX TECHNOLOGIES PRIVATE LIMITED,**

#174, 19th Main, 4th Sector, HSR Layout, Bangalore, India 560102.

Tel: +91-80-65954374, 25724545

Fax: +91-80-25720500

Email: info@sunluxtech.com,

Website: www.sunluxtech.com