

# Ambient Temperature Sensor with Modbus output MBRTU-ATE

SKU: MBRTU-ATE

Doc No: MBRTU-ATE-DS-EN-10

## Introduction

MBRTU-ATE Ambient Temperature Sensor utilizes digital temperature sensor delivers high accuracy measurement in range -40 to + 85 °C. Output is Modbus RTU for easily integrating with any PLC, controller, SCADA, BMS or IoT gateway.

- Digital sensor technology;
- High accuracy;
- Standard ModbusRTU output;
- Plug & Play.

## Typical Applications

MBRTU-ATE can be used widely in the followings:

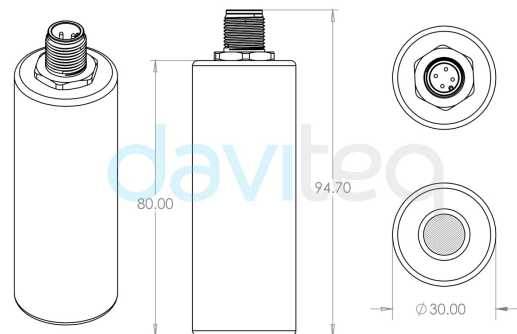
- Ambient temperature Monitoring for Factory;
- Ambient temperature Monitoring for Building;
- Ambient temperature Monitoring for Warehouse;
- Ambient temperature Monitoring for Data Center;
- Ambient temperature Monitoring for HVAC;
- ...

TEMPERATURE SENSOR WITH MODBUS OUTPUT  
MBRTU-ATE



MBRTU-ATE-H1.PNG

DIMENSION DRAWING OF MODBUS OUTPUT SENSOR  
(Unit: mm)



MBRTU-ATE-H2.PNG

## MONITORING TEMPERATURE IN WAREHOUSE



MBRTU-ATE-H3.PNG

### Specification

| SENSOR SPECIFICATION                |   |
|-------------------------------------|---|
| Sensor                              | Digital type, factory calibrated          |
| Measuring range                     | -40 .. + 85 oC                            |
| Accuracy                            | +/- 0.5oC                                 |
| Resolution                          | 0.125oC                                   |
| Sensor protection material / Rating | PA / IP68 (for version with sensor cable) |
| Sensor Filter                       | PA (for version integrated sensor)        |
| OTHER SPECIFICATION                 |   |
| Communication Port                  | RS485, ModbusRTU protocol, max 19200 baud |
| Power supply                        | 7..48VDC, avg. < 200mA                    |
| Connector                           | M12-male 4-pin Code A                     |
| Working temperature                 | -40 .. 85 oC                              |
| Working humidity                    | 0 .. 100% RH                              |
| Housing                             | Engineered Plastic                        |
| Rating                              | IP67                                      |
| Dimension                           | H100xD30 (without sensor cable)           |
| Mounting                            | SS304 L type bracket for wall mounting    |
| Net weight                          | <200 grams                                |

## Ordering Code

| Item code  | Descriptions  |
|--|---|
| MBRTU-ATE-01   | AMBIENT TEMPERATURE SENSOR, INTEGRATED TYPE, -40 .. + 85 C, RS485/MODBUSRTU, 7..48VDC SUPPLY, M12-MALE                                      |
| MBRTU-ATE-12-300                                     | AMBIENT TEMPERATURE SENSOR, CABLE TYPE 300MM, -40 .. + 85 C, RS485/MODBUSRTU, 7..48VDC SUPPLY, M12-MALE                                     |
| Please select below M12 cable with different lengths |   |
| 2M-FM12CAB4X0.25                                     | M12 4PIN FEMALE ASSEMBLY CONNECTOR WITH SOLDERING TERMINALS AND CODING A AND CONTROL CABLE CU/PVC/OS/PVC 4X0.25MM2, L=2M, ROHS, SHIELD 80%  |
| 5M-FM12CAB4X0.25                                     | M12 4PIN FEMALE ASSEMBLY CONNECTOR WITH SOLDERING TERMINALS AND CODING A AND CONTROL CABLE CU/PVC/OS/PVC 4X0.25MM2, L=5M, ROHS, SHIELD 80%  |
| 10M-FM12CAB4X0.25                                    | M12 4PIN FEMALE ASSEMBLY CONNECTOR WITH SOLDERING TERMINALS AND CODING A AND CONTROL CABLE CU/PVC/OS/PVC 4X0.25MM2, L=10M, ROHS, SHIELD 80% |

 [Link for full datasheet:](#)

 [Link for manual:](#)



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