

# 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:

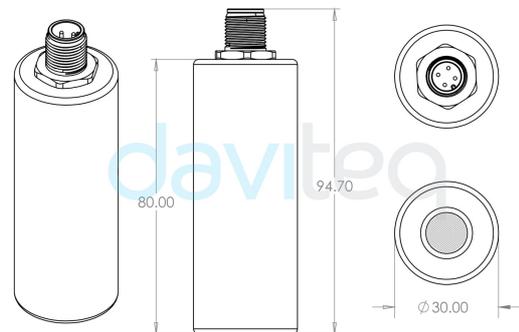
- Ambient temperature Monitoring for Factory;
- Ambient temperature Monitoring for Building;
- Ambient temperature Monitoring for Warehouse;
- Ambient temperature Monitoring for Data Center;
- Ambient temperature Monitoring for HVAC;
- ...

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

<b>SENSOR SPECIFICATION</b>	
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)
<b>OTHER SPECIFICATION</b>	
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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