

# Process Pressure Sensor with Modbus output MBRTU-PPS

SKU: MBRTU-PPS

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

## Introduction

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

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

## Typical Applications

MBRTU-PPS can be used widely in the followings:

- Pressure Monitoring & Control for Water, Steam, Liquid, Gas;
- Pressure Monitoring & Control for Compressed Air System;
- Pressure Monitoring & Control for Municipal Water network pipeline;
- ...

PROCESS PRESSURE SENSOR WITH MODBUS OUTPUT  
MBRTU-PPS



### GAUGE PRESSURE ABSOLUTE PRESSURE

RANGE : -1 .. + 35 BARG  
OVER PRESSURE : 1.5X  
ACCURACY : 0.5% OF SPAN  
WORKING TEMPERATURE : -10 .. +80 oC

MBRTU-PPS-H1.PNG

DIMENSION DRAWINGS  
Unit(mm)



MBRTU-PPS-H2.PNG

## PRESSURE MEASUREMENT FOR LIQUIDS OR GASES



MBRTU-PPS-H3.PNG


### Specification


SENSOR SPECIFICATION	
Sensing Technology	Advanced PIEZO technology
Measuring range	Select from -1 .. + 700 bar Gage/Absolute/Sealed Gage
Over pressure protection	1.5 x Span
Accuracy	0.5% of span
Stability	< 0.3% span/year
Wetted parts	304SS/316SS
Measuring Fluids	Any fluid which is workable with materials 304SS/316SS
Working temperature	-10 .. + 80 oC
Process connection	Standard G1/4 or Others (consult factory)
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-PPS-G-10-01	MODBUS RTU, RS485 OUTPUT, GAGE PRESSURE SENSOR, RANGE 0-10 BARG, ACCURACY 0.5%, PROCESS CONNECTION G1/4-MALE, 304SS, ELECTRICAL CONNECTOR M12-MALE
MBRTU-PPS-G-20-01	MODBUS RTU, RS485 OUTPUT, GAGE PRESSURE SENSOR, RANGE 0-20 BARG, ACCURACY 0.5%, PROCESS CONNECTION G1/4-MALE, 304SS, ELECTRICAL CONNECTOR M12-MALE
* Replace "G" by A for Absolute, D for Differential, S for Sealed gauge; * Replace "10" by other value of pressure range in unit of bar. For examples: 20, 50, 100... * Replace "01" by "02" for 1/2" NPT;	
<b>Please select below M12 cable with different lengths</b>	
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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