

# Process Flat pH Sensor with Modbus output MBRTU-PHFLAT

SKU: MBRTU-PHFLAT

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

## Introduction

MBRTU-PHFLAT is a general purpose in-line (continuous measurement) pH sensor offering affordable, flat sensor application coverage for many water applications such as drinking water, industrial water, aquaculture, tank installations or related applications. The flat surface sensor is often referred to as "self-cleaning" when installed in a process stream since the water flow has a tendency to "shear off" biofouling and other debris from the sensor surface. Output is Modbus RTU for easily integrating with any PLC, controller, SCADA, BMS or IoT gateway.

- Robust pH electrode for continuous measurement;
- Self-cleaning flat electrode;
- Standard ModbusRTU output;
- Plug & Play.

## Typical Applications

MBRTU-PHFLAT can be used for pH monitoring and control in the followings:

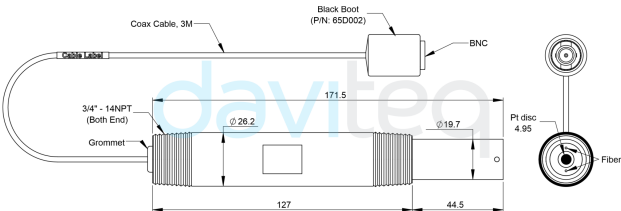
- Drinking water;
- Waste water;
- Industrial water;
- Aquaculture;
- ...

PROCESS PH FLAT SENSOR  
WITH TEMPERATURE COMPENSATION  
MBRTU-PHFLAT



MBRTU-PHFLAT-H1.PNG

DIMENSION DRAWING OF MBRTU-PHFLAT  
(Unit: mm)



MBRTU-PHFLAT-H2.PNG

MEASURING PH IN WATER



MBRTU-PHFLAT-H3.PNG

pH TRANSMITTER, DIN-RAIL MOUNT



MBRTU-PHFLAT-H4.PNG

## Specification

pH SENSOR SPECIFICATION	
Sensing Technology	Glass, combine electrode with Pt100 temperature sensor
Measuring range	pH 0 .. 14
Resolution	pH 0.1
Accuracy	+/- 0.1
Working temperature	0 .. 100 oC (compensated)
Working pressure	0 .. 100 psig
Process connection	3/4" NPT both ends
Wetted parts	PVC
Sensor Cable	6m with BNC connector
Rating	IP68
Sensor Dimension	D27 x 172 (mm)
Sensor net weight	< 200 grams
pH TRANSMITTER SPECIFICATION	
Inputs	pH and Pt100
Output	RS485, ModbusRTU protocol, max 19200 baud
Power supply	9..36VDC, avg. < 200mA
Mounting	DIN Rail
Working temperature	-40 .. 85 oC
Working humidity	0 .. 95% RH, non-condensing
Housing	Engineered Plastic

Ingress Protection	IP20
Dimension	93 x 40 (mm)
Net weight	<200 grams

## Ordering Code

Item code	Descriptions
MBRTU-PHFLAT-01	PROCESS PH FLAT SENSOR WITH TEMPERATURE COMPENSATION IP68, 3/4" NPT SUBMERSIBLE, DIN-RAIL MOUNT TRANSMITTER WITH MODBUSRTU RS485 OUTPUT, 9-36VDC, 6M CABLE
<b>Accessories</b>	
RS485-FM12-USB-1	RS485 FEMALE M12 4-PIN, CODING A TO USB CABLE WITH POWER ADAPTER 12VDC/2.0A FOR CONFIGURATION
* Configuration cable for pH sensor, Windows' software is free. Contact our sales for more information.	

⚠ Link to download datasheet: <https://filerun.daviteq.com/wl/?id=S2wQivqLteFdY4di7gODEJEecRt3g0gv>

⚠ Link for manual:



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