# Economy pH Sensor with Modbus output MBRTU-PH-H035

## Introduction

MBRTU-PH-H035 is an economy type in-line (continuous measurement) pH sensor offering affordable sensor application coverage for many water applications such as drinking water, industrial water, aquaculture, tank installations or related applications. Output is Modbus RTU for easily integrating with any PLC, controller, SCADA, BMS or IoT gateway.

- 12mm OD compact probe;
- Automatic temperature compensation;
- Standard ModbusRTU output;
- Plug & Play.

## Typical Applications

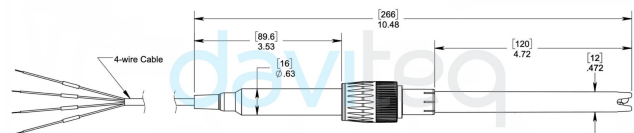MBRTU-PHFLAT can be used for pH monitoring and control in the followings:

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

**ECONOMY PH SENSOR WITH MODBUS OUTPUT MBRTU-PH-H035**



MBRTU-PH-H035-H1.PNG

**DIMENSION DRAWING OF MBRTU-PH-H035**
(Unit: [mm]/in)



MBRTU-PH-H035-H2.PNG

| MEASURING pH IN WATER | pH TRANSMITTER, DIN-RAIL MOUNT |
|---|---|
| <br>MBRTU-PH-H035-H3.PNG | <br>MBRTU-PH-H035<br><br>MBRTU-PH-H035-H4.PNG |

# Specification

| pH SENSOR SPECIFICATION | |
|---|---|
| Sensing Technology | Glass, combine electrode with temperature sensor |
| Measuring range | pH 0 .. 14 |
| Resolution | pH 0.1 |
| Accuracy | +/- 0.1 |
| Working temperature | 0 .. 80 oC (compensated) |
| Working pressure | 0 .. 15 psig |
| Process connection | 3/4" NPT both ends |
| Probe protection | Polycarbonate tube |
| Sensor Cable | 3m |
| Rating | IP68 |
| Sensor Dimension | D12 x 266 (mm) |
| Sensor net weight | < 150 grams |
| pH TRANSMITTER SPECIFICATION | |
| Inputs | pH sensor |
| 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-PH-H035-P001 | PH SENSOR 12MM PROBE WITH TEMPERATURE COMPENSATION, 3M SENSOR CABLE, C/W DIN RAIL MOUNT TRANSMITTER WITH MODBUSRTU RS485 OUTPUT, 9-36VDC |
| **Accessories** | |
| 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=0TMhHOvn5DLr3zpqL31oDmObhRx0Xr3W

⚠ Link for manual: