

pH 2100 PA/pH 2100e FF (2-Wire) For Easy System Integration



The pH 2100e 2-wire transmitter allows easy networking with your DCS or PLC using PROFIBUS® PA, FOUNDATION fieldbus™ (FF) or HART® interface to support digital communication. The transmitter is designed for continuous, accurate, reliable measurement of demanding process applications. Sophisticated software permits flexible parameter selection through user-friendly menus. Intelligent internal diagnostics are provided and the SensoCheck feature continuously monitors the glass and reference electrodes.

Specifications

Performance

Measurement parameters	pH, mV, and temperature
pH range	0 to 14 pH
ORP range	-1500 to 1500 mV
Resolution	0.01 pH, 1 mV
Measurement error	<0.02 pH; <1 mV
Temperature input	Pt 100/Pt 1000/NTC 30 kΩ
Temperature measuring range	-20 to 130 °C (-4 to 266 °F)
Temperature resolution	0.1 °C/1 °F
Temperature measurement error	<0.5 °C (<1 °C for Pt 100; <1 °C for NTC at >100 °C)

General

Power supply	10.5 to 40 V DC
Display	Custom LCD
Ambient temperature	-20 to 55 °C (-4 to 131 °F)
Relative humidity	10 to 95% non-condensing
Enclosure rating	IP 65/NEMA 4X
Hazardous area classification	FM, ATEX

PROFIBUS® PA-Interface

Profile	Profile 3.0 for analyzers
Physical interface	According to IEC 1158-2 with Fisco
Current consumption	<12.7 mA
Maximum current on error	<21.4 mA

FOUNDATION Fieldbus™ Interface

Physical interface	According to IEC 1158-2 with Fisco
Current consumption	<12.7 mA
Maximum current on error	<21.4 mA

HART®

HART® communication	AMS and Simatic PDM compatible
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Feature Overview

- High performance and advanced electronics
- Large, clear data display
- PROFIBUS® PA, FOUNDATION fieldbus™ or HART® version
- Continuous sensor and transmitter diagnostics

Other Highlights

- 2-wire installation
- IP 65/NEMA 4X waterproof rated enclosure
- Wall, pipe or panel mountable
- Simple cost effective wiring

► www.mt.com/pH2100

Ordering Information

Transmitters	Order Number
pH 2100 PA (2-wire, w/PROFIBUS® PA, Ex)	52 121 042
pH 2100e FF (2-wire, w/FOUNDATION fieldbus™, Ex)	52 121 245
pH 2100e/2H (2-wire, w/HART®)	52 120 724
pH 2100e/2XH (2-wire, w/HART®, Ex)	52 120 758

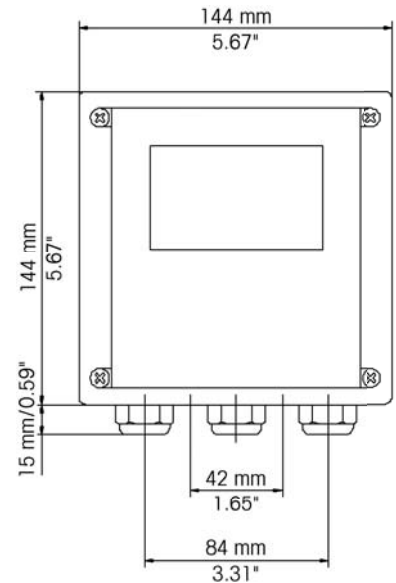
Installation Accessories	Order Number
Pipe mount kit	52 120 741
Panel mount kit	52 120 740
Protective hood	52 120 739

See pH accessories pg. 62–63.

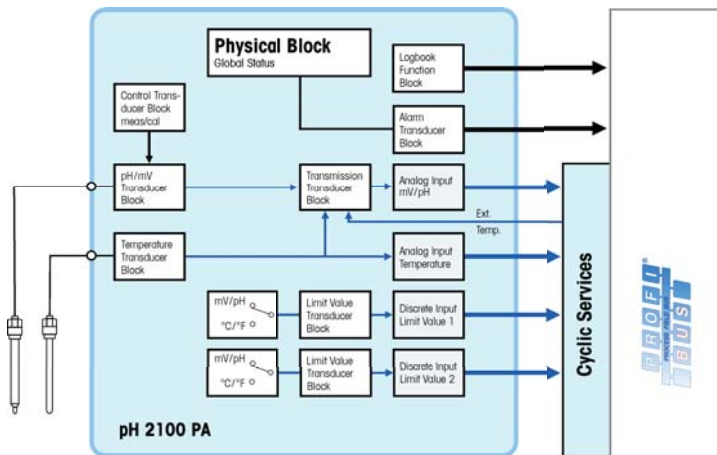
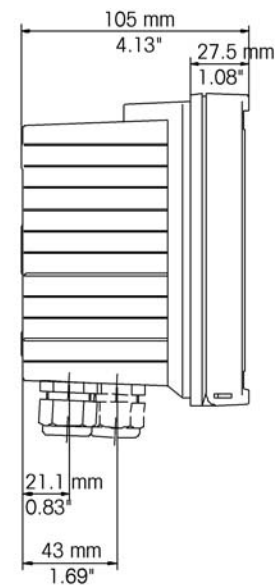
Communication Model (profile for analytical devices)

Through the assignment of specific device functions to standardized function blocks, interoperability of analytical devices becomes manufacturer-independent. For the first time it is now possible to use uniform operational control and engineering tools.

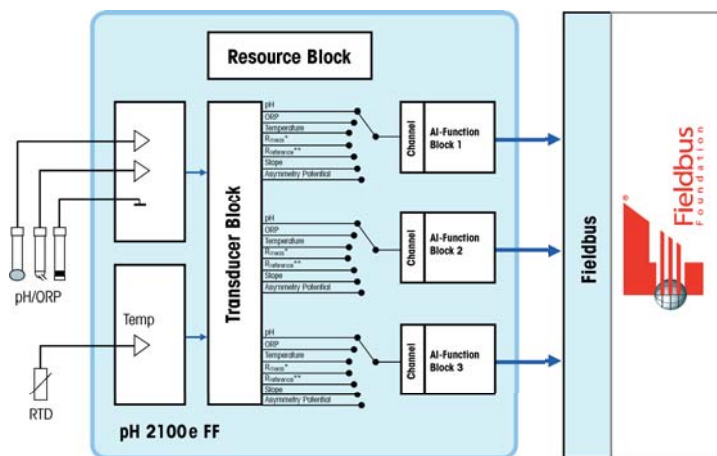
Front dimensions of
 pH 2100 PA 2-wire/
 pH 2100e FF 2-wire



Side dimensions of
 pH 2100 PA 2-wire/
 pH 2100e FF 2-wire



Communication model pH 2100 PA



* R_{meas} = glass impedance, ** R_{reference} = reference impedance

Communication model pH 2100e FF