

pH & Temperature Isolator

Range: pH 0-14pH/0 ± 2V Temp: -100 to 200°

Overview

Global's pH & Temperature Isolator Signal Conditioning Module is designed for isolating pH Transmitter's signal to On-line Indicator / Controller. It uses up to four levels of isolation to eliminate ground loop problems and induced field noise.

When you move data from the electrically harsh environment commonly encountered in process industry, some problems may arise which may combine to destroy measurement accuracy, or possibly even the equipment.

The unique circuitry used in this specially designed pH Signal Conditioning Module, specifically to be used in harsh industrial environment is fully compatible with all "On-line" pH Systems manufactured by Global.

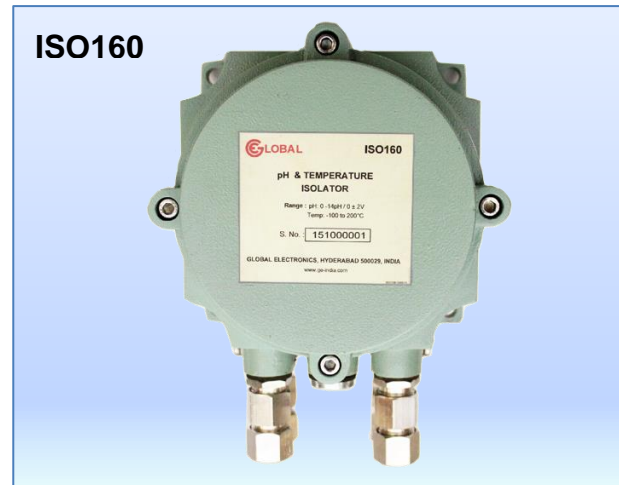
It provides high accuracy measurement and very high degree of isolation with excellent immunity against most types of electrical noise commonly encountered highly polluted (electrical) conditions in manufacturing environment.

Features:

- Inputs and outputs are floating and Galvanically separated.
- High galvanic isolation
- Three Port isolation in Four Levels
- Fast input to output response time
- Excellent signal/noise ratio > 60 dB
- High Accuracy
- Low Power Consumption
- Wide Operating Temperature
- Housed in Flame Proof Box

Applications:

- pH Measurement in electrically noisy environment
- Provides Surge suppression and protects systems from transients and noise.



Isolation

Max. Voltage:	1000 V
Isolation voltage, test	2.5 KV AC
Leakage Current	< 0.1uA
Impedance	> 10 12
Isolation Mode Rejection	> 110 dB
Barrier Capacitance Coupling	< 2 pF

Environmental Conditions

Operating Temperature	-25°C to +60°C
Storage Temperature	-40°C to +65°C
Relative humidity	IP 65
Enclosure: Flame-Proof	IS- 2148; Group IIA & IIB
Dimensions	150mm dia x 100 mm height
Power	230V, 50Hz, 5VA
Weight	2 Kg

Specification:

Inputs:

- pH or ORP Output from Transmitter: 0 to 14 pH / 0 to ± 1999 mV
- Temperature Output from Transmitter: -100 °C to $+ 200$ °C
- Impedance: > 1 M Ω

Outputs:

pH or ORP Output to Instrument

Temperature Output to Instrument

Impedance: < 10 Ω

Accuracy $\pm 0.25\%$ (FS)

Frequency Response 0 to 5 KHz

Signal / noise ratio > 60 dB

Temperature coefficient $< \pm 0.01\%$ of span / °C

EMC immunity influence $< \pm 0.5\%$ of span

 Under normal operating conditions

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