INDUMART Canada
www.indumart.com

pH Analyzer / Transmitter / Controller

MODEL: PHT300

- 4-20 mA OUTPUT
- TWO ON/OFF OUTPUTS
- 4-DIGIT DISPLAY (2 DECIMALS)
- FAST RESPONSE ELECTRODE
- AUTOMATIC TEMPERATURE COMPENSATION
- FLOWTHROUGH & SUBMERSIBLE APPLICATIONS

INTRODUCTION

Indumart *PHT300 Series* Loop-powered pH Analyzer / Controller / Transmitter is a cost effective solution for accurate measurements of pH in industrial and municipal applications and control of the process.

Designed for a wide variety of applications, the *PHT300* Series features automatic temperature compensation, two control contacts and a 4-20 mA output for recording or control. The microprocessor-based circuitry equipped with digital filters provides stable readings with very good accuracy.

The instrument consists of two parts: 1) pH probe, 2) transmitter/indicator. The industrial combination pH glass electrode uses the conventional technique, employing a process electrode and a reference electrode in KCl solution. The convertible design of these probes allows them to be used both in flowthrough and submersible applications.

The pH value is indicated on a 4-digit display and configuration parameters are programmed via a two-key hidden keyboard. The contacts' parameters such as setpoints, hysteresis, direction of the alarms and their time delay can be programmed by the user.

The transmitter section of the *PHT300* is suitable for wall mounting, and if required, it may be ordered with DIN rail clamp for rail mounting.

SPECIFICATIONS

Electrode

Wetted Parts	CPVC body, glass electrode, ceramic junction, RTV sealant Option: Epoxy body, CPVC compression fitting
Process Temperature	-5...+80°C (23 to 176°F)
Temp. Compensation	Automatic
Maximum Pressure	100 psig at 65°C
Maximum Flow Speed	3 m/s (10 ft/s)
Stability	0.05 pH/day
Process Connection	CPVC body: 1" NPT male; Epoxy body: ¾" NPT male compression fitting
Environ. Protection	IP-66 (NEMA4X)

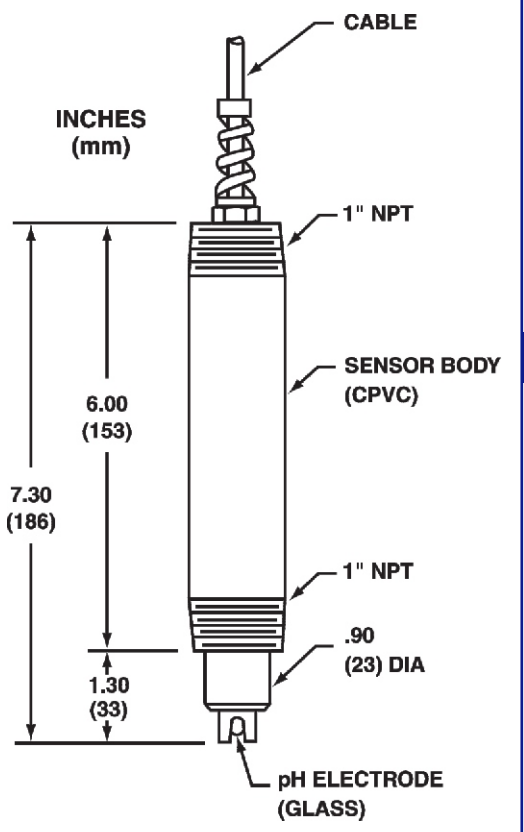
Transmitter / Indicator

Display	4-digit LCD, 14mm high
Measuring Range	0.00 to 14.00
Decimal Position	User programmable
Loop Supply Voltage	10...30 VDC (24 VDC nominal)
Accuracy	0.05%
Case Material	ABS
Environ. Protection	IP-65
Environ. Condition	-10...+65°C; 0 to 95% RH
Mounting	Wall, Probe; DIN rail (option)
Weight	Approximately 250 g

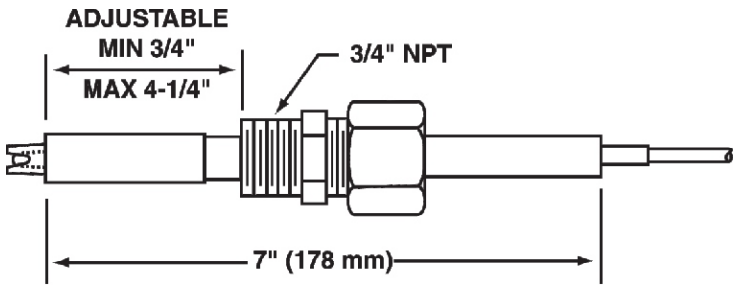
Outputs

Analogue Output	4-20 mA; Proportional to the measured pH value
Contact Output	Transistor gate (open collector NPN)
Switching Current	100 mA maximum
Switching Voltage	40 VDC maximum
Adjustable Parameters	Setpoint, hysteresis, direction and delay time

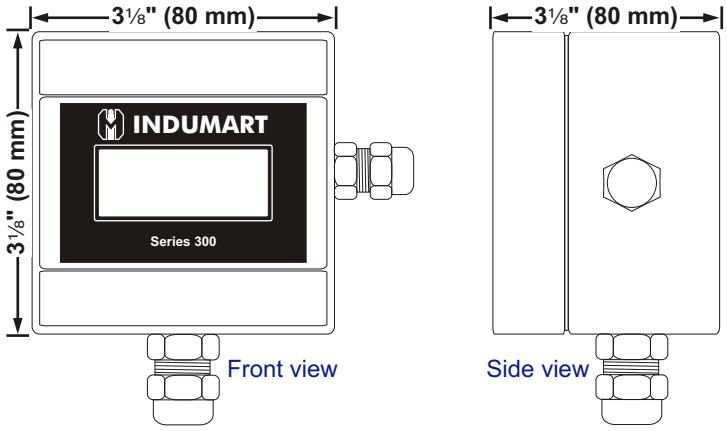
Electrode Type "C"



Electrode Type "E"



PHT300 Transmitter/Indicator



Specifications may change without prior notice.

ORDER CODE

Model: **PHT300 -** ☐ ☐

ELECTRODE
CPVC Body (standard) — C
Epoxy Body — E

TRANSMITTER / CONTROLLER
Wall Mounting (standard) — X
DIN Rail Mounting — R

APPLICATION EXAMPLE

Application: To monitor, control and record the pH of a process between 10 and 11.

Solution: Using a PHT300 series pH analyzer/controller/transmitter pH of the process can be monitored. One of the instrument's contacts can be set downward at 10.1 pH with 0.1 pH hysteresis to trigger the pump for injecting strong basic solution, and the other can be set upward at 10.9 pH with 0.1 hysteresis to control the power to the acid pump. If required, a delay time may be specified for the contacts actions. A 4-20 mA signal is sent from the PHT300 to a separately acquired recorder.

APPLICATIONS

- Process Control
- Industrial & Municipal Water Treatment
- Waste Treatment & Neutralization
- Fume Scrubber
- Circuit Board Manufacturing
- Plating Process
- Chemical Processing
- Pulp & Paper Manufacturing
- Mining Industries
- Pharmaceutical Processes

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