

**PHCN-670 Series
pH Analyzer**
PHCN-674 1/4 DIN Panel Mount
PHCN-675, 676 1/2 DIN
NEMA-4X Case

PHCN-674
\$595



- pH/ORP Measurement Capability
- Multiple Language Capability
- Menu Guided Operation
- Two 4 to 20 mA dc Outputs
- 2 or 4 Relays
- Relays For On-Off Control or Alarm

The PHCN-674 1/4 DIN panel mounted or the PHCN-675 and PHCN-676 1/2 DIN panel or surface mounted pH analyzers are powerful but easy to use. They accept many different types of pH or ORP electrodes including the special PHE-6028-PO preamplified differential sensor. The units feature multiple language capability in English, French, German or Spanish and menu screens which guide you through setup, calibration, operation and test maintenance functions.



PHCN-675/676

These pH analyzers can be used with any pH electrode as well as the unique PHE-6028-PO differential pH sensor



PHCN-674

Shown smaller than actual size

Specifications

Display (PHCN-674): Two line 16 character backlit LCD, Graphic dot matrix LCD. (PHCN-675,676) 128 x 64 pixels with LED backlighting; 13 mm (1/2") main character height; 3 mm (1/8") auxiliary information

Measurement

pH: -2.0 to 14.0 pH or -2.00 to 14.00 pH

ORP: -2100 to 2100 mV

Temperature: -20 to 200°C (-4 to 392°F)

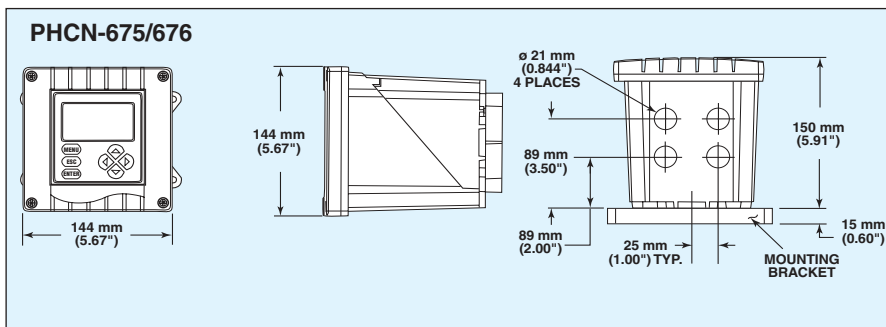
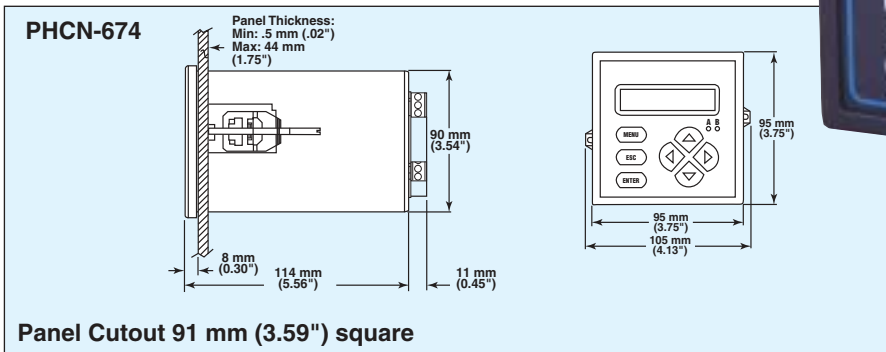
Ambient Conditions

Operation: 20 to 60°C (-4 to 140°F); 0 to 95% RH non-condensing

Storage: -30 to 70°C (-22 to 158°F); 0 to 95% RH non-condensing

Power Requirements:

90 to 130 Vac, 50/60 Hz (10 VA max) or 180 to 260 Vac, 50/60 Hz (10 VA max)



Relays

Types/Outputs: Two or four (PHCN-676) electromechanical relays; SPDT (Form C) contacts; U.L. rated 5A 115/230 Vac, 5A @ 30 Vdc resistive

Functional Modes: Each relay (A, B, C, and D) can be assigned to be driven by the measured pH (or ORP) or temperature

Operating Modes

Control: Settings for high/low phasing, setpoint, deadband, overfeed timer, off delay, and on delay

Alarm: Settings for low alarm point, low alarm point deadband, high alarm point, high alarm point deadband, off delay, and on delay

Temperature Compensation:

Automatic or manual, -10 to 110°C (14 to 230°F) with selection for temperature compensator (Pt1000 Ω RTD, Pt100 Ω RTD, or NTC 300 Ω thermistor)

Calibration Methods:

1 or 2-Point Buffer Method (pH only); 2-Point Sample Method (pH only); 1-Point Sample Method (pH & ORP)

Analog Outputs

Two outputs (#1 and #2) each with 0.004 mA (12-bit) resolution, isolated 0 to 20 mA or 4 to 20 mA (selectable); 600 Ω max load

NOTE: Each scalable output can be assigned to represent the measured pH (or ORP) or temperature

Electrode Connections: Screw terminals

Analyzer Performance

(Electrical, Analog Outputs):

Accuracy: 0.1% of span

Sensitivity: 0.05% of span

Stability: 0.05% of span per 24 hrs., non-cumulative

Non-Linearity: 0.05% of span

Repeatability: 0.1% of span or better

Temperature Drift:

Zero: less than 0.01% of span per °C; Span: less than 0.01% of span per °C

Mechanical

PHCN-674

Enclosure: NEMA-4X front panel

Mounting: Panel

Net Weight: 0.8 kg (1.7 lb)

PHCN-675, PHCN-676

Enclosure: NEMA-4X; polycarbonate face panel, epoxy-coated high-quality cast aluminum door and case with four 13 mm (0.5") conduit holes, nylon mounting bracket and stainless steel hardware

Mounting: Panel, surface and pipe (horizontal and vertical) mounting

Net Weight: 1.6 kg (3.5 lb)

Viton® is a registered trademark of DuPont Dow Elastomers.

PHE-6028-PO Differential pH Sensor

✓ Accurate Differential Measurement Technique

✓ Encapsulated Electronics

✓ Double Junction

✓ Universal Mounting

✓ Chemical Resistant Liquid Crystal Polymer (LCP) Body

✓ Up to 914 m (3000 ft.) Transmission Distance

Specifications

Temperature: -5 to 95°C (23 to 203°F)

Max. Pressure: 100 psig

Measuring Range: 0 to 14 pH

Sensitivity: <0.005 pH

Wetted Materials:

LCP body, PVDF junction, Viton O-rings, glass electrode, and titanium ground rod

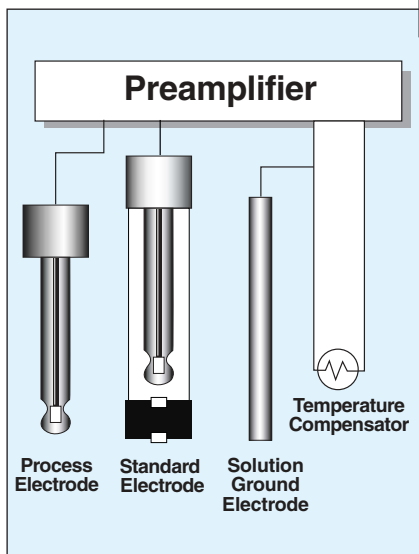
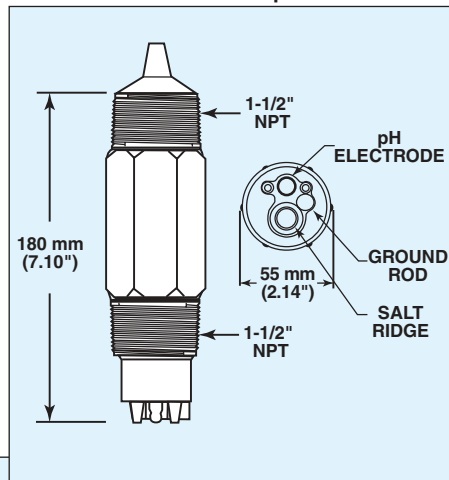
Cable Length: 10 ft

Connector: Stripped Leads

Weight: 0.6 kg (~1.3 lb)

Temp. Compensator: NTC 300 Ω thermistor

PHE-6028-PO Differential pH Sensor



pH Differential Sensor Technology

The unique differential sensor technology offers many advantages over conventional sensor technology. It uses three measuring electrodes instead of the two contained in conventional pH sensors. The process electrode and standard electrode measure the pH differentially with respect to a third ground electrode. This technique is proven to provide unsurpassed accuracy, reduce reference junction fouling, and virtually eliminate ground loops. The benefit is greater reliability with less downtime and maintenance.

The differential sensor, with its built-in preamplifier, boosts the high impedance mV signals of the electrodes, providing a strong signal which can be transmitted up to 914 m (3000 feet).

☐ MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model No)

Model No	Price	Description
PHCN-674	\$595	¼ DIN panel mounted pH analyzer with 2 relays
PHCN-675	795	½ DIN NEMA-4X pH analyzer with 2 relays
PHCN-676	870	½ DIN NEMA-4X pH analyzer with 4 relays
PHE-6028-PO	545	Differential pH sensor with preamplifier for use with PHCN-674, PHCN-675, PHCN-676

Ordering Example: PHCN-674, ¼ DIN panel mounted pH analyzer with 2 relays, \$595 and PHE-6028-PO differential pH sensor, \$545. \$595 + 545 = \$1140



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• pH and Conductivity

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