

pH/ORP Transmitter and Controller



PHCN-85



PHCN-85 transmitter, shown actual size.

- ✓ 3.5", 320 × 240 TFT Color Display, Virtual Pointer or Digital Style, Multi-Parameter
- ✓ Calibration with Automatic Buffer Recognition
- ✓ Automatic or Manual Temperature Compensation
- ✓ Two 4 to 20 mA Outputs
- ✓ 3 Photoelectric Relays
- ✓ RS485 Modbus®-RTU Protocol

Applications

- ✓ Water Quality Management
- ✓ Pharmaceutical, Fine Chemical, Clinical Medical Science, Life-Science Research
- ✓ Industrial Processes, Concentrate Management, Mixing, Industrial Coating, Large-Scale Water Treatment
- ✓ Metallurgy, Petrochemical, Industrial Cleaning

The new PHCN-85 is the latest edition to the pH/ORP meters from OMEGA. This transmitter and controller offers a large TFT color display and 32-bit processor/ARM core operation system.

The PHCN-85 has two 4 to 20 mA outputs to control or retransmit the pH or ORP and temperature value. In addition, this powerful instrument has 3 relay outputs for pH, ORP, temperature or timing.

The PHCN-85 is also packed with standard features like RS485 communications, a calendar function and password protection. The power supply input even has automatic polarity detection.

Specifications

Measurement:

pH:

Range: 0.00 to 14.00

Resolution: 0.01

Accuracy: ±0.1

ORP:

Range: -1999 to +1999

Resolution: mV, 0.1mV

Accuracy: ±5 mV (display)

Temperature:

Range: 0 to 100°C (32 to 212°F)

Resolution: 0.1

Accuracy: ±0.5

Automatic Temperature

Compensation: 0 to 50°C

(32 to 122°F)

Temperature Input: 1000 Ω RTD

Current Outputs (2): Isolated, adjustable, reversible, 4 to 20 mA output, control or transmitter mode

Loop Resistance: 400 Ω maximum, DC 24V

Current Output: 4 to 20 mA

Resolution: ±0.1 mA

Relay Outputs (3): Contact photoelectric relay output, programmable; temperature, pH/ORP output can be set for ON/OFF or PID control

Relay: Resistance load 50 mA maximum AC/DC 30V

Data Communication: RS485 Modbus protocol

Power Supply: DC 24V ±4V

Consumption: <5.5 W

Working Environment

Temperature: 0 to 50°C (32 to 122°F)

Relative Humidity: ≤85% RH (non-condensing)

Storage Temperature: -20 to 60°C (-4 to 140°F)

Relative Humidity: ≤85% RH (non-condensing)

Protection Level: NEMA 4 (IP65) with rear cover

Dimensions: 96 H × 96 W × 94 D mm (3.78 x 3.78 x 3.7")

Panel Cutout: 91 × 91 mm (3.58 x 3.58")

PHA-4-GAL

PHA-7-GAL

PHA-10-GAL



PHA-4



PHA-7



PHA-10



PHE-7351

All products shown smaller than actual size.

To Order	
Model No.	Description
PHCN-85	Panel mount pH/ORP transmitter and controller

Comes complete with operator's manual.

Accessories

Model No.	Description
PHE-7351-15-PT1K	Industrial pH electrode with temperature for in-line or submersible
PHE-6510B	Submersible pH electrode (mounting assembly sold separately)
ORE-6510B	ORP submersible electrode (mounting assembly sold separately)
PHEH-65-10	Mounting assembly for ORE-6510B or PHE-6510B (required)
PHA-4	Buffer solution, pH 4.00, 500 mL (1 pt) bottle
PHA-7	Buffer solution, pH 7.00, 500 mL (1 pt) bottle
PHA-10	Buffer solution, pH 10.00, 500 mL (1 pt) bottle