

pH/ORP Preamplifiers

- ✓ Sends pH Electrode Signals 300 Metres Over Ordinary Wire and Connectors or Coaxial Cable
- ✓ Interfaces pH Electrodes Directly with Inexpensive mV Meters and Recorders or Sophisticated Process Controllers and Data Acquisition Systems
- ✓ Extends Useful Life of pH Electrodes
- ✓ Available With/Without Automatic Temperature Compensation

OMEGA's PHTX-20 Series preamps are unity gain preamplifiers which convert the high impedance mV signal of a pH or ORP electrode to a low impedance signal. This signal can travel up to 300 metres using ordinary wire and connectors to high impedance input pH meters and controllers (such as OMEGA's PHCN-37) and to standard process meters and controllers such as the DP24-E and DP41-E, which could not otherwise interface with the high impedance signal. In many applications, PHTX-20 Series preamps are able to extend the useful life of expensive pH electrodes. By lowering the output impedance of aging electrodes, the PHTX20 allows them to continue to function and provide a measurable signal.

The PHTX-21 is powered by lithium batteries with an estimated life of 5 years when used with high input impedance instruments. The electronics are entirely encapsulated in an epoxy-filled stainless steel enclosure. The input and output connections are industry standard BNC. The output can be split from coaxial to separated leads using a 3073 adaptor.

The PHTX-22 is a 10-40 volt dc powered preamplifier. Power can be provided by the excitation of a process meter (such as the DP24-E) or the optional PSU-12V power supply. The electronics are entirely encapsulated in a compact epoxy-filled enclosure designed for easy mounting in a manufacturing process. The PHTX-22 offers outputs from either a BNC connection, terminal strip or both at the same time.

The PHTX-23-ATC is the same as the PHTX-22 (above) with the added feature of automatic temperature compensation. With the output of a PHTX-23-ATC automatically compensated for temperature variations, it is possible to use an inexpensive but sophisticated process meter or controller such as DP24, DP25, or i series™ to monitor and control pH in place of more expensive dedicated pH units. The automatic temperature compensating element required is a 1,000 ohm RTD. (ATC is not used on ORP measurements.)

Specifications

Common Specifications

Output Offset: 1 mV typical; 2 mV max. which corresponds to .033 pH

Input Impedance: 10¹³ ohms

Output Impedance: 20K ohms

Output Voltage: -2000 mV to +2000 mV

Operating Temperature: 0 to 60°C (32 to 140°F)

PHTX-21 Internal Battery Powered Model

Dimensions: 95 L x 18 mm D

Weight: 5.7 g (2 oz)

Battery Life: Approximately 5 years

PHTX-22 and PHTX-23-ATC External Powered Dual Output Model

Power: 10 to 40 Vdc

Dimensions: 38.1 H x 76.2 W x 38.1 mm D

Model PHTX-21
Battery Powered pH
Preamplifier



PHTX-20 Series
£48⁵⁰
Basic Unit



Model PHTX-22
10-40 Vdc Powered
pH Preamplifier



PHE-6500 Series
electrode, see
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Model HHM2 Talking Multimeter/Dual Type-K Input Thermometer,

- ✓ Voice Annunciation of Measured Parameters in a Choice of 5 Languages
- ✓ True RMS ac Measurement
- ✓ Dual Type-K Temperature Measurement with Differential Measurement Function

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Model PHTX-22 Connected to the Model HHM2 Multimeter via Model 3073, BNC-to-Banana Plug Adaptor Accessory

IN STOCK FOR FAST DELIVERY!

To Order (Specify Model Number)

Model No.	Price	Description
PHTX-21	£48.50	pH preamplifier, single output, battery powered
PHTX-22	65.00	pH preamp, 10 to 40 Vdc powered
PHTX-23-ATC	106.00	pH preamp, 10 to 40 Vdc, auto temp comp

Each unit supplied with operator's manual.

Ordering Example: PHTX-21 pH preamplifier, 3073 BNC to banana plug adaptor, £48.50 + 12.25= **£60.75**

Accessories

Model No.	Price	Description
3073	£12.25	BNC to Banana Plug adapter
BNC-C-36	12.25	BNC-(M) to BNC-(M) 1m exten. cable
PSU-12V-UK	12.25	12 Volt dc power supply-230 Vac