

OM-CP-RFPH101A

Wireless pH and Temperature Transmitter Part of the NOMAD® Family



- Multiple Transmitter Configurations
- Works with OMEGA® PHE-4200 Series of pH Probes
- Real-Time Operation
- Automatic Temperature Compensation
- Automatically Converts a PC into a Strip Chart Recorder

The OM-CP-RFPH101A is a miniature, wireless, battery-powered, standalone pH and temperature transmitter. This portable, easy-to-use device will read and transmit pH and temperature measurements. When enabled, the wireless transmitter will transmit readings back to the host computer, where the data can be analyzed in real-time. These readings are also logged to the device's memory for added data security. A convenient slide switch turns the transmitter on or off.

The OM-CP-RFPH101A is a major leap in both size and performance. Numerous units can be used to transmit data to the same receiving station. The Windows software converts a PC into a real-time strip chart recorder. Data can be printed in graphical and tabular format or exported to a text or Microsoft Excel file.

Specifications

TEMPERATURE CHANNEL

Temperature Sensor: pH electrode with integral 100 Ω Pt RTD temperature sensor or external 100 Ω Pt RTD temperature sensor is required (a 100 Ω resistor be used if temperature compensation is not needed)

Measurement Range: -40 to 125°C (-40 to 257°F); 0 to 500 Ω

Temperature Resolution: 0.01°C (0.001 Ω)

Calibrated Accuracy: ±0.1°C @ 25°C ambient (±0.015 Ω)

Input Connection: Removeable screw terminal; 2, 3 or 4 wire

pH CHANNEL

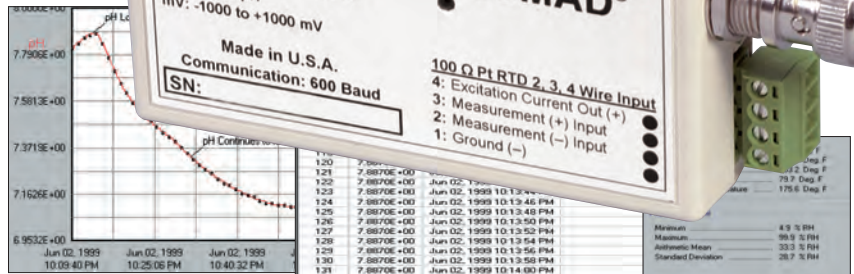
pH Range: 0 to 14 pH (-1000 to 1000 mV)

pH Resolution: 0.01 pH (0.1 mV)

Calibrated Accuracy: ±0.1 pH (±1 mV)

Input Connection: Female BNC jack

Input Resistance: 10¹² Ω typical



OM-CP-RFC200A, Windows software displays data in graphical or tabular format

GENERAL SPECIFICATIONS

Start Time: Software-programmable start time and date, up to six months in advance

Real-Time Recording: Can be used with PC to monitor and record data in real-time

Memory: 13,107 readings per channel; 26,214 total readings; software configurable memory wrap

Reading Interval: 1 reading every 30 seconds to 1 every 12 hours

Calibration: Digital calibration through software

Data Format: Date and time stamped; °C, °F, K, °R, Ω, pH, V, mV, engineering units specified through software

Time Accuracy: ±1 minute/month (20 to 30°C)

Computer Interface: PC serial, RS-232C COM or USB interface cable required; 57,600 baud

RF Baud Rate: 4800 baud

RF Carrier Frequency: 418 MHz

Maximum Output Power: < 0dBm typical (<1mw)

Range: 36.6 m (120') line of sight

Power: 9 V lithium battery included (user replaceable)

Battery Life: 1 year typical (1-minute reading rate @ 25°C)

Weight: 113 g (4 oz)

Software: XP SP3/Vista and 7 (32-bit and 64-bit)

Operating Environment: -5 to 50°C (23 to 122°F)

5 to 95% RH non-condensing

Dimensions: 114 H x 61 W x 25 mm D + 51 mm antenna (4.5 x 2.4 x 1.0" + 2.0" antenna)

Weight: (120 g) 4 oz

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)

Model No.	Description
OM-CP-RFPH101A	Wireless pH and temperature transmitter
OM-CP-RFPH101A-CERT	Wireless pH and temperature transmitter with NIST calibration certificate
OM-CP-RFC101A	Receiver package includes RF receiver, 1.2 m (4') RS-232 cable with DB9F termination, Windows software and operator's manual
OM-CP-RFC200A	Receiver package includes RF receiver, 3.7 m (12') USB cable, Windows software and operator's manual
OM-CP-BAT103	Replacement 9 V lithium battery
OM-CP-CONNECTOR-4	Replacement 4 position terminal block connector

Operator's manual, battery, USB cable and receiving antenna are included with the OM-CP-RFC200A Windows software (required to operate the data logger and sold separately). NIST calibration for temperature only.

Ordering Example: OM-CP-RFPH101A-CERT wireless pH and temperature transmitter with NIST calibration certificate, OM-CP-RFC200A Windows software and USB cable with receiving antenna

OM-CP-RFPH101A shown larger than actual size