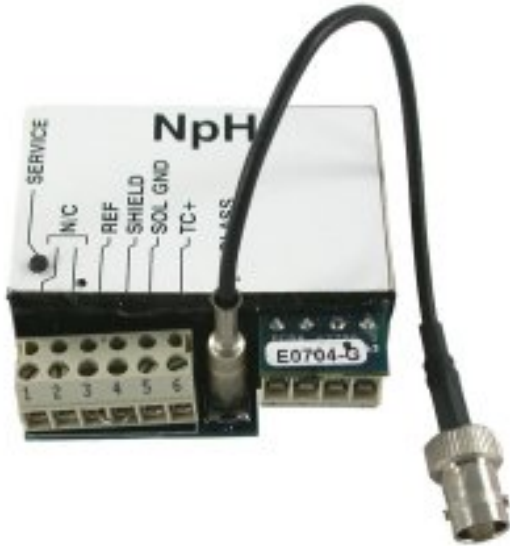


LAKWOOD INSTRUMENTS NpH NODE

NPH Part No. 1104522



The Model NPH pH and ORP Node is a LONWORKS®-compatible node that uses twisted pair communications. The NPH works with several different temperature compensation inputs and with pH or ORP sensors. These multiple-sensor input options allow for various sensors to be used. Temperature compensation is adjustable by pH per Celsius for use with various processes.. Up to four NpH nodes may be installed on the 2000 series controller.

One Network Interface Node (NIN) per 2000 Series Controller is required to operate network nodes such as the NDIG, and contain Rel 98 Firmware. All controllers shipped after 1 June 98 will have Rel 98 firmware.

Relay configuration and datalogging

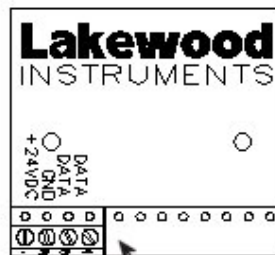
After a NpH is installed, not only will you be able to view additional inputs you will also be able to datalog information and control relays based on the external device.

Specifications

pH BNC connection 0 to 14 pH 59 mV per pH unit	ORP BNC connection -2000 to +2000 mV	Distance Between Two Furthest Nodes 400 m (1312 ft) maximum without a repeater	Power 24 VDC	Node Ambient Temperature 0-85°C (32-185°F)
				Temperature Compensation Inputs None 100 PTC 500 NTC 1K PTC 4K NTC 3K PTC 10K NTC 10K PTC Compensation is adjustable by % per °C
				Accuracy 1% of sensor reading
				Resolution 1% of reading

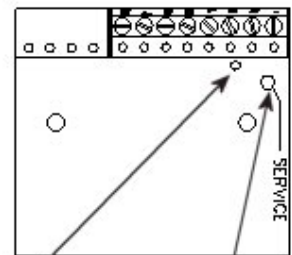
Sensor Connections

BNC	Sensor BNC
Pin 1	none
Pin 2	none
Pin 3	Reference
Pin 4	none
Pin 5	Solution Ground and Temperature Compensator
Pin 6	Temperature Compensator



Network and Power connections

Connection to NIN and other nodes as well as 24 VDC.



Service Light

Indicates node status.

Service Pin

Installs node on network.