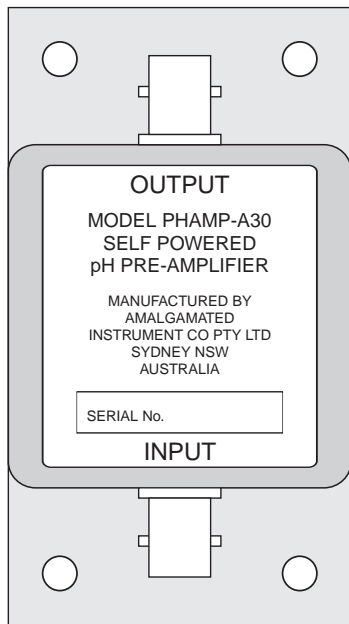


# Self Powered Inline pH Pre-Amplifier



- No power cable required
- Fully shielded diecast metal case
- Connects directly to standard pH monitor or controller
- 1:1 signal gain
- Ideal for pH, Redox and other ion selective electrodes

The PHAMP-A30 self powered pH pre-amplifier is a encapsulated high impedance pH electrode buffer/amplifier. The amplifier is designed for use when the pH electrode is installed at a location distant from the pH monitor/controller. Two configurations are available.

Model PHAMP-A30-BRK-1 is supplied with a pre-drilled surface mounting bracket.

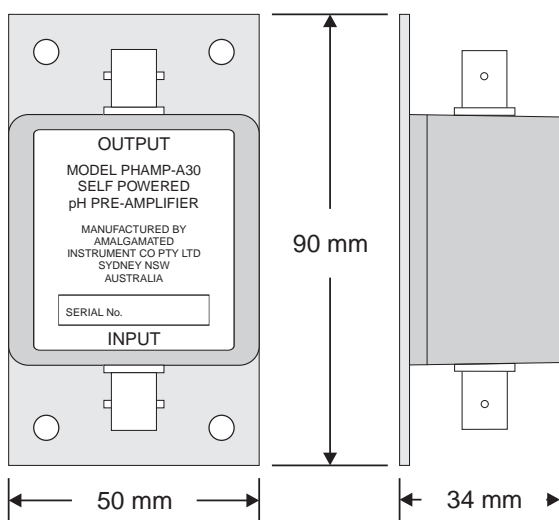
Model PHAMP-A30-ENC-2 is supplied in an IP65 wall mount enclosure with connector for a temperature sensor included.

Connections for the input and output of the pre-amplifier are BNC connectors. The die cast pre-amp enclosure is directly connected to the pH electrode shield.

The unique design of the pre-amp has an input impedance of greater than  $10^{12} \Omega$ . Power for the pre-amp is provided by two internal lithium cells with a lifetime of greater than 10 years. The input to output gain of the pre-amp has a ratio of 1:1, making the pre-amp ideal for connecting to the pH electrode input on standard pH monitoring equipment.

The buffered pH signal provided by the pre-amp ensures stability, reliability and a reduced susceptibility to noise. Ordinary 2 or 4 wire cable can be used at the output thereby reducing installation costs.

The amplified signal provided by the pre-amplifier may be transmitted in excess of 500 metres.



## Specifications

Input impedance:	Greater than $10^{12} \Omega$
Output resistance:	10k $\Omega$
Amplifier gain:	1 : 1
Voltage range:	$\pm 1.5$ VDC input and output
Battery life:	Greater than 10 years

## Order code

PHAMP-A30-BRK-1

PHAMP-1.1-0

**AMALGAMATED INSTRUMENT CO PTY LTD**

ACN: 001 589 439

Unit 5, 28 Leighton Place Hornsby  
NSW 2077 AUSTRALIA

Telephone: +61 2 9476 2244  
Facsimile: +61 2 9476 2902

e-mail: sales@aicpl.com.au  
Internet: www.aicpl.com.au

# pH Amplifier in ENC-2 Enclosure

The ENC-2 type enclosure for the PHAMP-A30 self powered pH pre-amplifier has the pre-amplifier mounted on a printed circuit board inside the enclosure. Dimensions are shown below other than the depth which is 65mm.

A BNC output connector with lead and a dummy input BNC connector are provided. The supplied dummy BNC input must be connected whenever the pH input connector is removed e.g. during storage. The dummy BNC connector is used to provide an input load which extends battery life. The input and output wires enter via the cable gland. The BNC connector from the pH electrode cable goes to the pH Input connector on the amplifier, the temperature sensor wire, if used, go to the "IN" terminals of the plug in screw connector. The supplied BNC connector and lead which takes out the amplified pH signal goes to the nearby screw connector. Use 4 core screened cable for the pH and temperature sensor output wiring. The pH output wiring goes to the terminals marked "pH OUT" "+" and "-" at the screw connector. The temperature sensor output wires go to the "OUT" terminals of the screw connector. Use adhesive backed sealing foam to ensure that the cable gland opening is sealed from dust and moisture (see separate sheet for fitting instructions).

## Order code

PHAMP-A30-ENC-2

