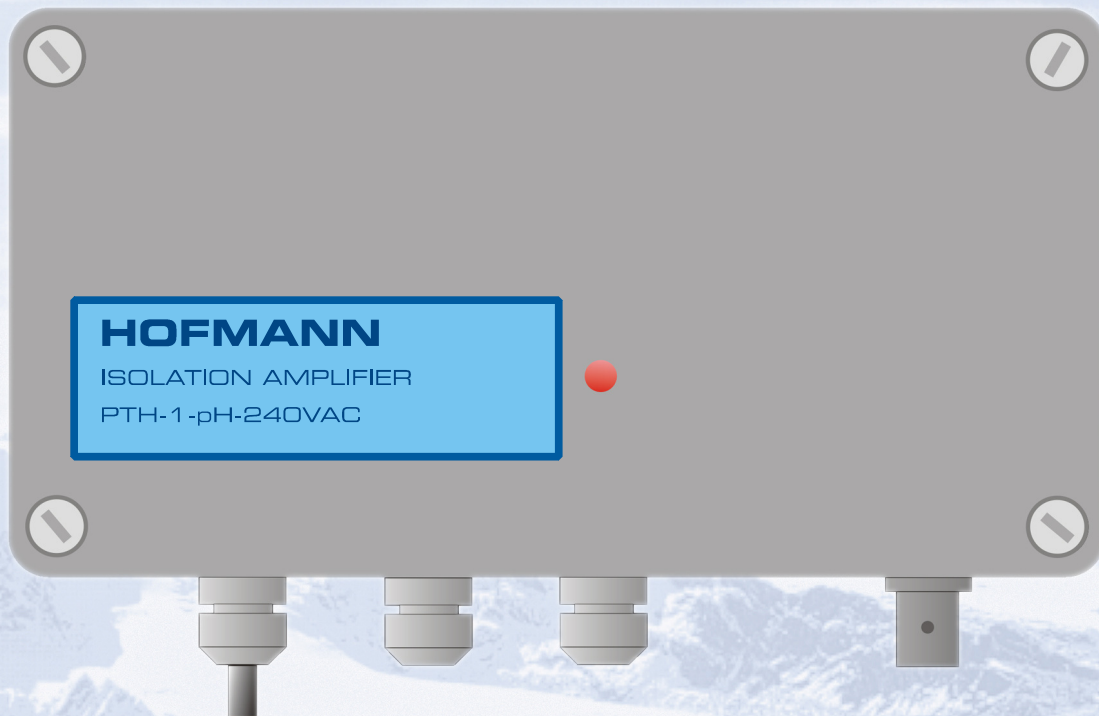


# ISOLATION AMPLIFIER PTH-1 / MTH-1



## FEATURES

- **PTH-I** operation for pH
- **MTH-I** operation for mV
- Temperature input for either PT100 or PT1000 sensors, isolated from pH/mV input
- Internal automatic temperature compensation can be selected for pH
- Precision 4-20mA constant current output, electrically isolated from power source, signal inputs and temperature output.
- Low impedance 0 - 1000mV output for temperature, isolated from pH/mV input.
- Using the optional programming board enables the operator to calibrate signal input & current output as well as change configurations for temperature and 4-20mA current range.
- **240VAC** / 7VA power supply input
- **24V AC/DC** power supply version available, also +12VDC

THE RIGHT CHOICE



**HOFMANN**

# ISOLATION AMPLIFIER PTH-1 / MTH-1

## SPECIFICATIONS

- Range PTH-1:** 0 to 14pH with 0.01pH resolution
- Range MTH-1:** 0 to 1999mV with 1mV resolution.
- Temp Input:** 2 input terminals provide connections for a PT100 or PT1000 temperature sensor.
- Calibration:** Connecting the programming board enables the operator to calibrate the pH/mV input and 4-20mA current output. The 4-20mA can be configured to span various pH/mV range. All calibration & configuration parameters are programmed into non-volatile memory.
- Electrode:** BNC, external of housing.
- Signal output:** 4-20mA software configurable over range 0-14pH. Screw terminals for fully isolated 4-20mA output located by removing front cover.
- Power:** 240VAC 50Hz 7VA max.
- Power (optional):** 24 to 30V AC or DC (*non polarised*) +12 VDC (*suitable for battery supply*)
- Housing:** Thermoplastic with opaque lid.  
Rated IP 55
- Dimensions:** (W)130mm x (H)94mm x (D)57mm.

## FEATURES

The use of computers as a central monitoring and control station especially in large industrial installations have increasingly gained acceptance as an economical and practical solution in manufacturing processes.

This concept also embraces the environmental industry with the ever more stringent pollution controls introduced in factories. The advantages of such a central processing system are immediately obvious especially when highly toxic chemicals are involved. The measurements of Temperature, pH, Oxidisation Reduction and Conductivity of these mediums provide the main link between a computer screen and the actual mediums held in tanks, containers or the presence of them in a manufacturing process.

The principle of pH, mV and Conductivity measurements require the electrode to be in electrical contact with water, a chemical or medium measured, unlike most sensors used in industrial applications.

A ground loop is created if there is no electrical isolation provided between instrumentations, showing totally false measurements at the computer monitor. A loop created if several front ends are combined will result in equally severe errors in measurements.

