

Dual Channel High Impedance Amplifier, type Ex02



Features

- Very high input impedance, suitable for Ph probes, reference electrodes and chemical selective electrodes.
- Input levels from -5 to +5 Volts, suitable for most situations
- Standard banana plug connectors
- Practical design: all connections are on one side in a conveniently small enclosure.
- The smart monitor led indicates power status, overload status and large AC signals on the input channels.

Technical specifications

Input range -5 .. +5 V Input current 100 fA max.

Input impedance $> 10^{15} \Omega$

Input offset less than 0.3 mV

Output range -5 ... +5 VOutput impedance 100Ω

Power requirement 12V DC regulated, less than 50 mA.

Power supply included.

Overview

The EX02 High impedance front-end amplifier for laboratory can be used as a high impedance input section for Ph-electrodes, reference electrodes or selective anion and cation electrodes.

The output is a buffered voltage signal which can be logged by a datalogger or displayed with a multimeter.

Using conventional inputs, such as datalogger inputs, with electrochemical measurement electrodes will degrade these electrodes due to the relatively high measuring current. Reference electrodes are reported to have an effective lifetime of only weeks when connected to a datalogger with 100kOhm input impedance.

Ph electrodes require a very high load impedance because of their own high output impedance. The Ex02 may be used instead of a regular Ph-readout unit.

The inputs of this amplifier have an extremely high impedance resulting in a nihil load on the measuring element and consequently a longer lifetime of the measurement element.