



IW 100

IW 200

Pre-amplifiers are ideal for monitoring pH or ORP at remote sites. The low impedance voltage signal produced by the pre-amplifier can be sent over long distances to a controller, a meter, recorder, data logger, or computer interface. The pre-amplifier needs no external power supply and can be connected directly on the top of a pH or ORP electrode equipped with a S7 or a SixPlug plug head connection system. Thus the pre-amplifier is a common unit with the electrode. Pre-amplifier with a built-in permanent battery eliminates the needs for special shielded measuring cable and is less susceptible to noise pickup.

The pre-amplifier IW 100 is to be connected with the S7-screw-mounted cap of a pH or Redox electrode and on the other side with a S7 connector of the cable. IW 200 features in addition to the pre-amplifying of the pH signal the transmission of the temperature signal if connected with a pH/temperature electrode. This pre-amplifier is equipped with the multi-pin SixPlug plug head connection system.

Specifications

Application

IW 100: Pre-amplifier for pH/redox(ORP) electrodes

IW 200: Pre-amplifier for a pH/temperature combination electrode with built-in temperature probe (The temperature signal is transmitted unchanged in four-wire connection only)

Dimensions

diameter about 20 mm; total length IW 100 about 70 mm, IW 200 about 100 mm

Electrical connections

IW 100: coaxial S7 plug head and cable socket, accompanying connection cable K 14-S7 (S7 cable socket / stripped ends)

IW 200: multi-pin SixPlug plug head and cable socket, accompanying connection cable K 14-SMEK (SixPlug cable socket / stripped ends)

Transmission range

± 1000 mV

Input impedance

$> 5 \times 10^{11} \Omega$

Input current

< 2 pA at 25 °C

External load

> 100 k Ω

Offset voltage

< 6 mV typical

Temperature drift

< 15 μ V/K

Linearity error

< 1 %

Operating temperature

-10 to 60°C

Protection standard

IP 66

Internal power

internal Li-battery CR-1/3 N-P (exchangeable)

Operation time

about 5 years if external load > 100 k Ω and at ambient temperature of about 25 °C; heavy temperature changes during operation and storage may reduce operation time

Weight

about 40 g