

Photodiode Amplifier Connect

Photocurrent amplifier with relay output

▶ 1/2

GENERAL FEATURES



Properties of the Photodiode Amplifier Connect

The Photodiode Amplifier Connect is a photocurrent amplifier with integrated relay output. The instrument is used for amplification of very low currents like they are generated by a photodiode. These currents are converted into a voltage between -5 V and 5 V. The amplifier has a potential free relay output with configurable threshold for switching of alarms, lamps or shutters. Three gains are choosable for conversion and measurement of photocurrents between 100 pA and 40 micro A.

The threshold and hysteresis settings can be done stepless via two control dials. The relay activation is additionally shown by a LED on the panel. The input signal is integrated via a BNC plug, the output voltage and the relay signal is read out via banana plugs.

The amplifier is primarily used in measurement laboratories and in experimental setups. All sglux photodiodes are available with BNC output and can be used with the amplifier. The devices comes with an 18 VDC external power supply.

FEATURE OVERVIEW

Measurement properties	One measurement signal, gain factors 10^5 , 10^6 and 10^7 V/A; photocurrent input via BNC plugs
Output	Voltage -5 V ... 5 V and potential free relay output, both via banana plugs
Housing	Powder-coated aluminium housing with good EMC conditions, rubber feet
Accessories	Power supply
Optional accessories	Photodiodes from the sglux offer, integrated into a housing with BNC output

SPECIFICATIONS

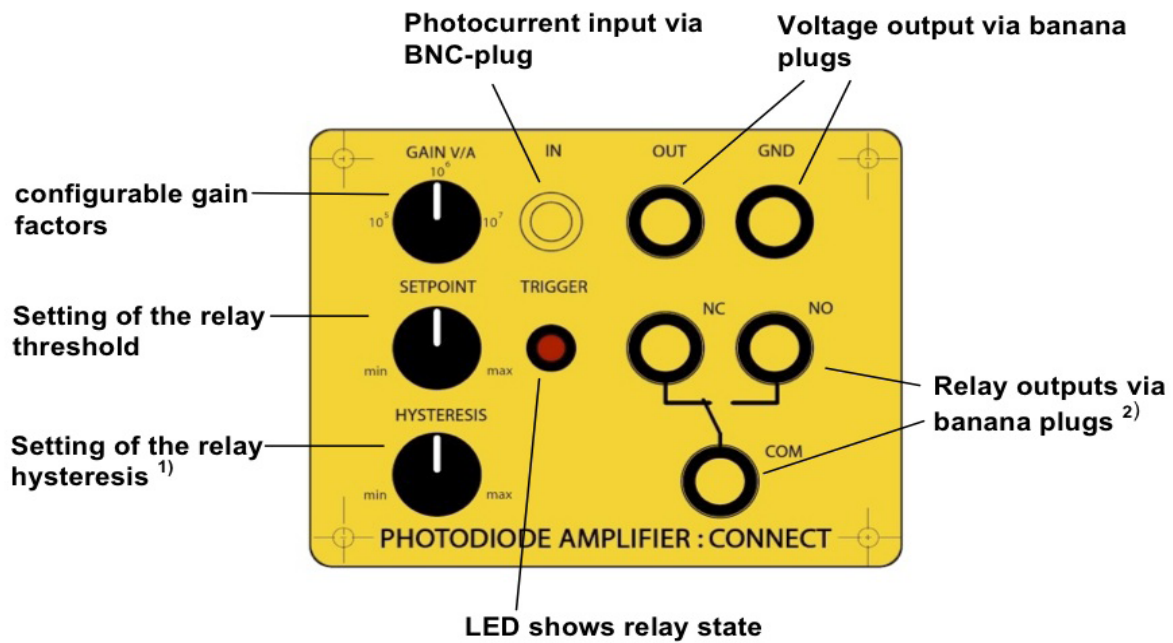
Parameter	Value
Degree of protection	IP54
Operating temperature	-40 ... +80 °C
Storage temperature	-40 ... +85 °C
Power supply	5 ... 18 VDC
Power consumption (24V)	10 mA
Weight	0.54 kg

Photodiode Amplifier Connect

Photocurrent amplifier with relay output

OPERATION

2/2



¹⁾ The activation of the threshold hysteresis is necessary, if the measurement value is fluctuating around the threshold value and small variations should not activate the relay.

²⁾ This is a potential free relay output. If connections NC (normally closed) and COM are used, the switching circuit is closed and will be opened by the relay activation. If connections NO (normally open) and COM are used, the switching circuit is open and will be closed by the relay activation.