# PHOTODIODE AMPLIFIER: CONNECT

### **Photocurrent Amplifier with Relay Output**





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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 –5V and 5V. The amplifier has a potential free relay output with configurable threshold for switching of alarms, lamps or shutters. Three gains are chosable for conversion and measurement of photocurrents between 100pA and 40µA.

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 device comes with a power supply, a case and a BNC cable.

#### Feature Overview

**Measurement properties** One measurement signal; gain factors 10<sup>5</sup>, 10<sup>6</sup> and 10<sup>7</sup>V/A;

photocurrent input via BNC plugr

Outputs Voltage –5V...5V and potential free relay output, both via

banana plugs

**Housing** Powder-coated aluminium housing with good EMC

conditions; rubber feet

**Accessories** Power supply, BNC cable, case

**Optional Accessories** Photodiodes from the sglux offer, integrated into a housing

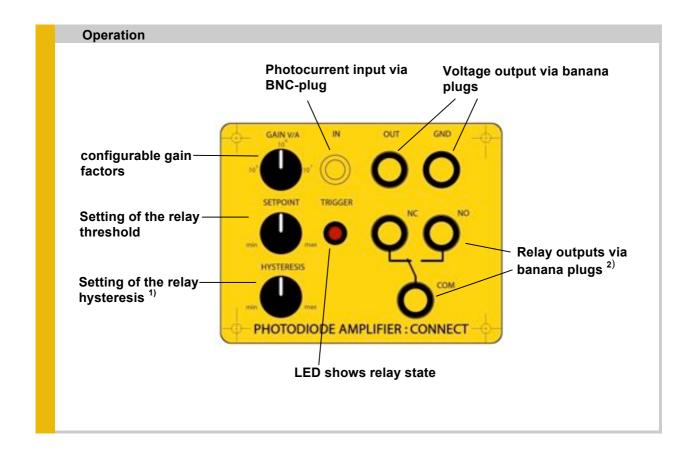
with BNC output

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Specifications	Wert	Einheit
Degree of protection	IP54	-
Operating temperature	-40+80	°C
Storage temperature	-40 +85	°C
Power supply	518	$V_{DC}$
Power consumption (24V)	10	mA
Weight	0,54	kg



<sup>&</sup>lt;sup>1)</sup> 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.

<sup>&</sup>lt;sup>2)</sup> 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.