



## Si-Photodetector with amplifier

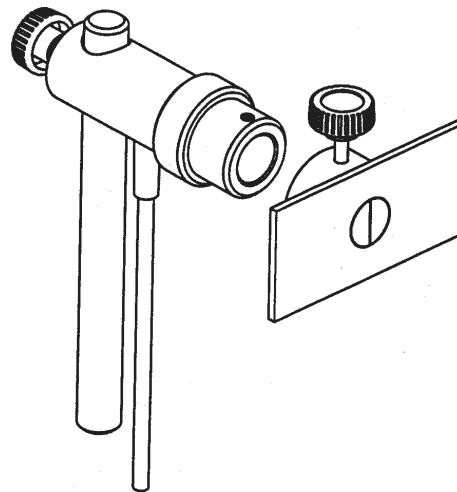
08735.00

PHYWE SYSTEME GMBH  
Robert-Bosch-Breite 10  
D-37079 Göttingen

Telefon (0551) 604-0  
Telefax (0551) 604-107



The unit complies  
with the corresponding  
EC guidelines.



### Operating Instructions

#### 1. PURPOSE AND DESCRIPTION

The silicon diode has a built-in transconductance amplifier (lin. current amplifier) and is designed for operation in connection with Control Unit 08735.99. It is suited for precise, linear photometric measurements over 6 decades at high interference levels.

The diode is supplied with a front lens which can be partly covered by a screw-on slit diaphragm (also supplied), for measurements of light intensities with a higher local resolution.

The height of the diode head can be adjusted and fixed by means of the rod supplied.

Connection to the Control Unit, which also supplies the voltage for the photodetector, is made with the diode plug on the 1.5 m cable, which is firmly fixed to the diode.

#### 2 NOTES ON OPERATION

This high quality unit fulfils the technical requirements summarised in the actual guidelines of the European Community. For this reason, the unit carries the CE-symbol.

Please observe the following when using the unit:

- The instrument can be so strongly influenced by electrostatic charges, or other electromagnetic phenomena, that it no longer works within the given specifications. The following measures reduce disturbing effects: Avoid fitted carpets; balance potentials; carry out experiments on a conductive, earthed underlay; use screened cables; do not operate high frequency emitters (radio sets, mobile phones) in the immediate vicinity.
- The connected cables may not be longer than 3 m.
- The usage of this unit is only allowed in residential, commercial or vocational zones (colleges, universities, laboratories, etc.).

#### 3. SPECIFICATIONS

Spectral range	390 nm...1150 nm
Max. sensitivity	900 nm
Dark voltage	0.75 mV
Sensitivity at 900 nm	860 mV/ $\mu\text{Wcm}^{-2}$
Band width	65 kHz
Diameter of lens aperture	approx. 8 mm
Diaphragm slit width	0.3 mm
Rod	110 mm long, 10 mm diameter

#### 4 GUARANTEE

We give a guarantee of 24 months on equipment that we have supplied; it does not include natural wear and tear and faults which are the result of improper handling.

The manufacturer can only be regarded as being responsible for the proper function and safety characteristics of the equipment if maintenance, repair and modifications have been carried out by the manufacturer or by agents expressly authorised by the manufacturer.