The PLC UV/VIS sensors serve as precision sensors for the measurement of UV irradiances and illuminances in systems with programmable logic controllers (PLCs). Spectral range, measuring range, operating voltage, and output signal can be selected to match the measurement task and the PLC. The integrated electronics generate a signal voltage that is transmitted with the low interference cable to the PLC. The built-in diffusers provide the required cosine correction. The sensors are calibrated with traceability to the PTB (Physikalisch Technische Bundesanstalt, the German national test authority); after being calibrated, they are shipped with a factory calibration certificate.

Excellent long-term stability is achieved through the use of appropriate materials. Of course, a repair and spare parts service is available for many years. Our product range includes eight spectral ranges and three measuring ranges for the sensors. This means that sensors can be optimally adapted to the application. Going further, the sensors are available for special cases and with customer-specific measurement and spectral ranges.

For small control tasks, the PLC sensors can be connected to an RM-32 panel meter. The RM-32 shows the current irradiance on a 3.5-digit digital display and switches two relay contacts with adjustable warning and alarm signals.

Applications:
- UV and illumination sensors for PLC
- Control of UV-LED and spot light sources
- Precise measurement of irradiance

HIGHLIGHTS
- Direct PLC operation
- Selectable signal output
- Long-term stability
- Recalibrateable sensors
- Integrated electronics
- Selectable measurement ranges
- Shutter & mount available
**TECHNICAL DATA**

- **Operation voltage**: 24 V, 12 V, 5 V or ±5 V
- **Current input**: < 15 mA
- **Signal output**: 4 – 20 mA, 0 - 10 V, 0 - 2 V
- **Measuring range**: 0 - 100 mW/cm²
  - 0 - 200 mW/cm²
  - 0 - 5000 mW/cm²
- **Dimensions**: 80 x 40 x 20 mm
- **Weight**: 150 g
- **Connector**: 5-pole M12
- **Operation temperature**: 0 to 40 °C
- **Storage temperature**: -10 to 40 °C
- **Humidity**: < 80% non-condensing

**SENSOR SPECTRAL RANGES**

- **UVC**: 200 - 280 nm
- **UVB**: 280 - 315 nm
- **UVA**: 315 - 400 nm
- **UVA+**: 330 - 455 nm
- **UVBB (broad-band)**: 230 - 400 nm
- **VISB**: 400 - 480 nm
- **VISBG**: 400 - 570 nm
- **LUX**: 380 - 780 nm, V(λ)

**OPTIONAL ACCESSORIES**

- Optional: panel meter RM-32

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Spectral sensitivity UVA, UVA, UVB and UVC sensors

Spectral sensitivity UVBB, VISB, VISBG and VISL sensors

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info@opsytec.com
certified according
DIN EN ISO 9001:2008
PART NUMBERS

<table>
<thead>
<tr>
<th>Part Description</th>
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<tr>
<td>PLC sensor</td>
<td>PLC [S] [V] [A] [M]</td>
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<td>RM-32, 230 V Version</td>
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<td>RM-32, 115 V Version</td>
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</table>

EXEMPLARY

PLC1111 = UVC-PLC sensor with operation voltage of 24 V with signal output 0-10 V and measuring range 0 - 100 mW/cm²

PLC3222 = UVA-PLC sensor with operation voltage of 12 V with signal output 0 - 2 V and measuring range 0 - 200 mW/cm²

SCOPE OF DELIVERY

PLC sensor, factory calibration certificate

Please specify type when ordering.

OPTIONAL: SHUTTER

To protect the sensor against contamination and aging (at extremely high irradiance and periodic reference measurements) we recommend our shutter. Shutter is operated at 24 V.

Dimensions shutter

Since 1981, Opsytec Dr. Gröbel GmbH manufactures UV sensors. All sensors are calibrated in our own laboratory.