

## Radiometer VLX-3W

### Description

The small and handy VLX-3W radiometer is modular in design and has three sensors for detecting UV radiation in the spectral range from 254 nm to 365 nm. With a wide measuring range from 0.1 to 250 mW/cm<sup>2</sup>, the measured values are immediately displayed on a large LCD display.

For measuring UV intensity, energy and irradiation time.

The radiometer VLX-3W displays the amount of UV energy on a surface for a certain time. The data is given in mJ/cm<sup>2</sup> (milli-Joule per square centimetre).

The UV radiation is measured directly by silicon photo-electric sensors. Advantage: no error-prone conversion of UV light into visible light.

The sensors can each be used individually and are available in 254 nm, 312 nm or 365 nm wavelength. Corresponding sensors must be ordered separately.

Depending on the spectral range to be measured, a suitable sensor is attached to the VLX-3W base unit.

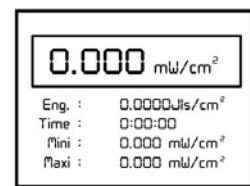
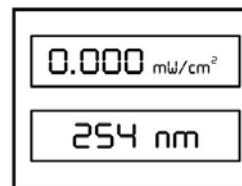
### Specifications

- Silicon photocell for direct measurement of UV radiation. No conversion to visible light is required.
- Interference filter to select the appropriate UV band and eliminate other unwanted radiation.
- Not sensitive to infrared.
- No electronic components in the sensor to avoid any temperature disparity.
- Protection by quartz disc on cellular filter
- Shielded carbon cable (1 metre).
- Microprocessor controlled.
- Designed to operate at 254 nm, 312 nm or 365 nm.
- Independent sensor (sold separately) for each wavelength.



Radiometer VLX

Sensor



VLX display example

### Benefits

- Photoelectric sensor
- Measure time or energy
- Microprocessor controlled
- Interchangeable sensors

### Order Information

Product Description	Order No.
Radiometer VLX-3W For 3 wavelengths, without sensors	110.0175
Sensor CX-254 Wavelength 254 nm	110.0177
Sensor CX-312 Wavelength 312 nm	110.0178
Sensor CX-365 Wavelength 365 nm	110.0179

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### Technical Data

General Technical Data	<ul style="list-style-type: none"> <li>• Display of UV intensity in mW/cm<sup>2</sup></li> <li>• Display of energy in joules/cm<sup>2</sup> and operating time</li> <li>• HOLD - Sets the measured value to a specific time</li> <li>• Display of minimum and maximum intensity</li> <li>• USB port for data output</li> </ul>
Measuring Range	<ul style="list-style-type: none"> <li>• Intensity: 0 up to 250 mW/cm<sup>2</sup></li> <li>• Energy: 0 up to 99999 Joules/cm<sup>2</sup></li> <li>• Time: from 0 up to 99 hrs</li> </ul>
Resolution	<p><b>Energy: Auto-range display:</b></p> <ul style="list-style-type: none"> <li>• 1. Range: 0.0000 up to 9.9999 mJ/cm<sup>2</sup></li> <li>• 2. Range: 0.01 up to 250.00 mW/cm<sup>2</sup></li> <li>• 3. Range: 100.00 up to 999.99 mJ/cm<sup>2</sup></li> <li>• 4. Range: 1000.0 up to 9999.9 mJ/cm<sup>2</sup></li> <li>• 5. Range: 10000 up to 99999 mJ/cm<sup>2</sup></li> </ul> <p><b>Intensity:</b></p> <ul style="list-style-type: none"> <li>• 1. Range: 0,001 up to 99.999 mW/cm<sup>2</sup></li> <li>• 2. Range: 0.01 up to 250.00 mW/cm<sup>2</sup></li> </ul>
Sensor	<ul style="list-style-type: none"> <li>• Sensor accuracy: +/- 5%</li> <li>• Linearity: +/- 0,5%</li> <li>• Silica photocell - interference filter</li> <li>• Protection by quartz disc on cellular filter</li> </ul>
Short wave UV sensor	<ul style="list-style-type: none"> <li>• SX-254 sensor, 254 nm shortwave UV.</li> <li>• Monochromatic bandwidth</li> </ul>
Mid wave UV sensor	<ul style="list-style-type: none"> <li>• SX-3124 sensor, 312 nm medium wave UV.</li> <li>• Bandwidth: 280 to 320 nm</li> </ul>
Long wave UV sensor	<ul style="list-style-type: none"> <li>• SX-365 sensor, 365 nm longwave UV.</li> <li>• Bandwidth: 355 to 375 nm</li> </ul>