



LP 471 PYRA 02.5  
 LP 471 PYRA 02.10  
 LP 471 PYRA 03.5  
 LP 471 PYRA 03.10  
 LP 471 PYRA 10.5  
 LP 471 PYRA 10.10



LP 471 Silicon-PYRA

**PROBES LP 471 PYRA 02.5 / LP 471 PYRA 02.10 - LP 471 PYRA 03.5 / LP 471 PYRA 03.10 - LP 471 PYRA 10.5 / LP 471 PYRA 10.10 - LP471 SILICON-PYRA**

The LP 471 PYRA... probes consist of a pyranometer LP PYRA 03, LP PYRA 02 or LP PYRA 10 equipped with the SICRAM module and a 5m or 10m cable for the connection of the pyranometer to the instruments D09847, HD2102.2, HD2102.1 and HD2302.0, so to get the reading in W/m<sup>2</sup> directly on the instrument's display. The LP PYRA 03 is a second class pyranometer, the LP PYRA 02 is a first class pyranometer and the LP PYRA 10 is a "Secondary standard", all according to ISO 9060. The instruments are supplied with their Calibration Report and M12 4-pole output connector. The manuals of the pyranometers LP PYRA 03, LP PYRA 02 and

LP PYRA 10 are available in our website [www.deltaohm.com](http://www.deltaohm.com): "Instruments > Environmental Analysis".

The SICRAM module of the LP 471 PYRA... shows the same serial number of the pyranometer and its setting takes into account the sensitivity shown on the calibration report of the pyranometer, therefore it is not possible to use the same module to perform measurements with different pyranometers.

**ORDERING CODES**

**LP 471 PYRA 10.5:** The probe consists of a Secondary Standard class pyranometer LP PYRA 10 with a cable 5m long and the SICRAM module. It is supplied with the ISO 9001 calibration report of the pyranometer connected to the cable and the SICRAM module. The probe can be connected to the instruments HD2302.0, HD2102.1, HD2102.2 and D09847.

*For technical specs, see the website [www.deltaohm.com](http://www.deltaohm.com) at the section Environmental Analysis (LP Pyra 10)*

**LP 471 PYRA 10.10:** The probe consists of a Secondary Standard class pyranometer LP PYRA 10 with a cable 10m long and the SICRAM module. It is supplied with the ISO 9001 calibration report of the pyranometer connected to the cable and the SICRAM module. The probe can be connected to the instruments HD2302.0, HD2102.1, HD2102.2 and D09847.

*For technical specs, see the website [www.deltaohm.com](http://www.deltaohm.com) at the section Environmental Analysis (LP Pyra 10)*

**LP 471 PYRA 02.5:** The probe consists of a first class pyranometer LP PYRA 02 with a cable 5m long and the SICRAM module. It is supplied with the ISO 9001 calibration report of the pyranometer connected to the cable and the SICRAM module. The probe can be connected to the instruments HD2302.0, HD2102.1, HD2102.2 and D09847.

*For technical specs, see the website [www.deltaohm.com](http://www.deltaohm.com) at the section Environmental Analysis (LP Pyra 02)*

**LP 471 PYRA 02.10:** The probe consists of a first class pyranometer LP PYRA 02 with a cable 10m long and the SICRAM module. It is supplied with the ISO 9001 calibration report of the pyranometer connected to the cable and the SICRAM module. The probe can be connected to the instruments HD2302.0, HD2102.1, HD2102.2 and D09847.

*For technical specs, see the website [www.deltaohm.com](http://www.deltaohm.com) at the section Environmental Analysis (LP Pyra 02)*

**LP 471 PYRA 03.5:** The probe consists of a second class pyranometer LP PYRA 03 with a cable 5m long and the SICRAM module. It is supplied with the ISO 9001 calibration report of the pyranometer connected to the cable and the SICRAM module. The probe can be connected to the instruments HD2302.0, HD2102.1, HD2102.2 and D09847.

*For technical specs, see the website [www.deltaohm.com](http://www.deltaohm.com) at the section Environmental Analysis (LP Pyra 03)*

**LP 471 PYRA 03.10:** The probe consists of a second class pyranometer LP PYRA 03 with a cable 10m long and the SICRAM module. It is supplied with the ISO 9001 calibration report of the pyranometer connected to the cable and the SICRAM module. The probe can be connected to the instruments HD2302.0, HD2102.1, HD2102.2 and D09847.

*For technical specs, see the website [www.deltaohm.com](http://www.deltaohm.com) at the section Environmental Analysis (LP Pyra 03)*

**LP 471 Silicon-PYRA:** Pyranometer with silicon photodiode with 5m fixed cable and open wires at the cable end. The probe can be connected to the instruments HD2302.0, HD2102.1, HD2102.2 and D09847.



LP 471 PYRA 03.5









LP 471 PYRA 02.5  
 LP 471 PYRA 10.5

Light

## RADIOMETRIC-PHOTOMETRIC PROBES FOR PORTABLE INSTRUMENTS

| COD.             | Description   |  |
|------------------|---|--|
| <b>LP471PHOT</b> | Photometric probe for measuring the <b>ILLUMINANCE</b> , spectral response according to the photopic curve, <b>class B according to CIE N° 69</b> , cosine correction diffuser. Measuring range: 0.10 lux...200·10 <sup>3</sup> lux.  |  |
| <b>LP471LUM2</b> | Photometric probe for measuring the <b>LUMINANCE</b> , spectral response according to the photopic curve, angular field 2°. Measuring range: 1.0 cd/m <sup>2</sup> ...2000·10 <sup>3</sup> cd/m <sup>2</sup> .  |  |
| <b>LP471PAR</b>  | Quantum-radiometric probe for measuring the PHOTONS FLOW in the chlorophyll field <b>PAR</b> (photosynthetically Active Radiation 400nm...700 nm), μmol m <sup>-2</sup> s <sup>-1</sup> measure, cosine correction diffuser. Measuring range 0.10 μmol m <sup>-2</sup> s <sup>-1</sup> ...10·10 <sup>3</sup> μmol m <sup>-2</sup> s <sup>-1</sup> |  |
| <b>LP471RAD</b>  | Radiometric probe for measuring the <b>IRRADIANCE</b> in the spectral range 400nm...1050nm, cosine correction diffuser. Measuring range: 1.0·10 <sup>-3</sup> mW/m <sup>2</sup> ...2000 W/m <sup>2</sup> .  |  |
| <b>LP471UVA</b>  | Radiometric probe for measuring the <b>IRRADIANCE</b> in the <b>UVA</b> spectral range 315nm...400nm, peak at 360nm, quartz diffuser for cosine correction. Measuring range: 1.0·10 <sup>-3</sup> mW/m <sup>2</sup> ... 2000 W/m <sup>2</sup> .   |  |
| <b>LP471UVB</b>  | Radiometric probe for measuring the <b>IRRADIANCE</b> in the <b>UVB</b> spectral range 280nm...315nm, peak at 305nm ... 310nm, quartz diffuser for cosine correction. Measuring range: 1.0·10 <sup>-3</sup> mW/m <sup>2</sup> ... 2000 W/m <sup>2</sup> .   |  |
| <b>LP471UVC</b>  | Radiometric probe for measuring the <b>IRRADIANCE</b> in the <b>UVC</b> spectral range 220nm...280nm, peak at 260nm, quartz diffuser for cosine correction. Measuring range: 1.0·10 <sup>-3</sup> W/m <sup>2</sup> ... 2000 W/m <sup>2</sup> .  |  |
| <b>LP471BLUE</b> | Radiometric probe for measuring the <b>EFFECTIVE IRRADIANCE</b> in the spectral range of the Blue light 380nm...550nm, diffuser for cosine correction. Measuring range: 1.0·10 <sup>-3</sup> W/m <sup>2</sup> ... 2000 W/m <sup>2</sup> .   |  |

## RADIOMETRIC-PHOTOMETRIC PROBES FOR PORTABLE INSTRUMENTS

| COD.                      | Description  |   |
|---------------------------|--|---|
| <b>LP471P-A</b>           | <p>Combined probe for measuring <b>ILLUMINANCE</b> (lux), with standard photopic response, and <b>IRRADIANCE</b> (<math>\mu\text{W}/\text{cm}^2</math>) in the UVA spectral range (315...400 nm, with peak at 360 nm). Both the sensors are equipped with diffuser for the correction according to the cosine law.</p> <p>Illuminance measuring range: 0.10 lux ... 200·10<sup>3</sup> lux.<br/>Irradiance measuring range: 1.0 mW/m<sup>2</sup> ... 2000 W/m<sup>2</sup>.<br/>This probe provides the ratio between UVA irradiance and illuminance in <math>\mu\text{W}/\text{lumen}</math> (quantity of interest in museums).</p>  |    |
| <b>LP471A-Uveff</b>       | <p>Combined probe for measuring the <b>TOTAL EFFECTIVE IRRADIANCE</b> (<math>\text{W}/\text{m}^2</math>) weighted according to the UV action curve. The probe is made of two sensors for the correct measure of the Total Effective Irradiance in the range 250...400nm. Both these sensors are equipped with a diffuser for the correction according to the cosine law. This probe supplies the Total effective irradiance (E<sub>eff</sub>), the UV-CB effective irradiance and the UVA irradiance.</p> <p>Total effective irradiance measuring range: 0.010 W/m<sup>2</sup> ... 20 W/m<sup>2</sup>.<br/>B_C effective irradiance measuring range: 0.010 W/m<sup>2</sup> ... 20 W/m<sup>2</sup><br/>UVA irradiance measuring range: 0.1 W/m<sup>2</sup> ... 2000 W/m<sup>2</sup></p> |    |
| <b>LP471 Silicon-Pyra</b> | <p>Pyranometer with silicon photodiode for measuring the <b>GLOBAL SOLAR IRRADIANCE</b>, diffuser for cosine correction. Spectral range 400...1100 nm. Measuring range: 1.0·10<sup>-3</sup>...2000 W/m<sup>2</sup>. Fixed cable 5m long, terminated with open wires.</p>   |    |
| <b>LP471PYRA</b>          | <p>The probes LP 471 PYRA... consist of a pyranometer LP PYRA 03, LP PYRA 02 or LP PYRA 10 and a SICRAM module equipped with a 5 or 10m cable for the connection to the instruments D09847, HD2102.1, HD2102.2, HD2302.0 and get a reading expressed directly in W/m<sup>2</sup>.</p> <p>LP PYRA 03 is a second class pyranometer; LP PYRA 02 is a first class pyranometer; LP PYRA 10 is a "Secondary Standard" pyranometer.</p>  |   |
| <b>LP BL</b>              | <p>Supporting and leveling base for the LP471... probes. NOT suitable for LP 471 LUM2 and LP 471 PYRA.</p>   |  |
| <b>LP BL3</b>             | <p>Adjustable wall support for the LP471... probes. NOT suitable for LP 471 LUM2 and LP 471 PYRA.</p>  |  |

Light