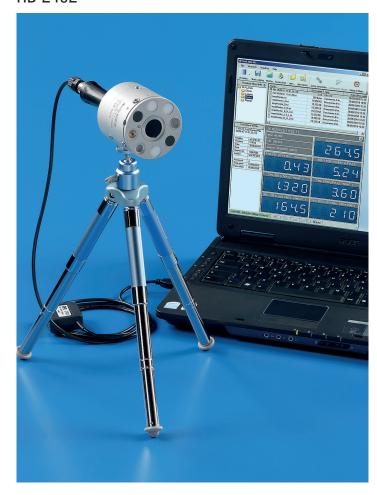


## HD 2402



# HD2402 **INCOHERENT OPTICAL RADIATION MONITORING**

The HD2402 is a portable photo-radiometer data logger for the measurement of noncoherent optical radiation in compliance with the European Directive 2006/25/EC and the legislative decree n. 81 of April 9th 2008.

The instrument is equipped with a series of sensors to cover different spectral portions and a small laser suitable to indicate the analyzed source.

- The various sensors work in the deliving spectral ranges:

  Photometric sensor for measuring illuminance (lux meter) in the spectral range 380...780 nm.
- Radiometric sensor for the UV band (220...400 nm) with spectral weighting factor  $S(\lambda)$ .
- Radiometric sensor for UVA band (315...400 nm)
- Radiometric sensor for the band 400...700 nm (blue) with spectral weighting factor B (λ).
- Radiometric sensor for the IR band (700...1300 nm) with spectral weighting factor R( $\lambda$ ). Thermopile sensor for the measurement of irradiance in the infrared spectral range
- 400...2800 nm.

The HD2402 can be power supplied either by the connection to a PC, receiving power supply directly from the USB port of the PC, or by an external power supply with USB output (code SWD05). The connection cable CP24H is equipped with an M12 connector on the instrument side and a USB type connector for the PC side or to the power supply SWD05 side.

By using the software DeltaLog13 from the version 1.0.1.0 and a PC, the HD2402 can be configured (calendar, date, time, starting time and duration of the logging) as well as performing the download and the analysis of the data stored and the acquisition of data in real time. Once configured, the data logger can be disconnected from the PC and connected to its external power supply for the acquisition and storage of data according to the programmed settings.

#### Instrument specifications

Instrument Dimensions (Length x Width x Height)

Weight Materials Protective shell

Operating conditions Working temperature Storage temperature

69x69x155 mm 74x74x155 mm with protective shell 500 q Aluminium alloy Rubber

-5 ... 50°C -25 ... 65°C Working relative humidity Protection degree

Power supply Power adapter (cod. SWD05)

Stored data security

Serial interface:

Storage capacity:

Storage interval:

Measuring ranges

Measurement of the illuminance in the spectral range 380...780 nm 1.0 ... 399.9 lux 0.010·103 ... 3.999·103 lux 0.10·10<sup>3</sup> ... 39.99·10<sup>3</sup> lux 1.0·10<sup>3</sup> ... 399.9·10<sup>3</sup> lux

Measurement of the UV radiation in the spectral range 220...400 nm with spectral weighting factor S(λ.) 0.10·10<sup>-3</sup> ... 39.99·10<sup>-3</sup> W/m<sup>2</sup> 1.0·10<sup>-3</sup> ... 399.9·10<sup>-3</sup> W/m<sup>2</sup> 0.010 ... 3.999 W/m<sup>2</sup> 0.10 ... 39.99 W/m<sup>2</sup>

Measurement of the ultraviolet radiation in the spectral UVA range (315...400 nm) 0.010 ... 3.999 W/m<sup>2</sup> 0.10 ... 39.99 W/m<sup>2</sup> 1.0 ... 399.9 W/m<sup>2</sup> 0.010·10<sup>3</sup> ... 3.999·10<sup>3</sup> W/m<sup>2</sup>

0 ... 85% RH no condensation IP 64

5Vdc/1A

unlimited

output for connection to the PC by using the USB cable CP24H 96,000 recordings, corresponding to approximately 26 hours of continuous data acquisition. fixed at 1 second.

Measurement of the radiation in the spectral range 400...700 nm (blue) with spectral weighting factor  $B(\lambda)$ 1.0·10<sup>-3</sup> ... 399.9·10<sup>-3</sup> W/m<sup>2</sup> 0.010 ... 3.999 W/m<sup>2</sup> 0.10 ... 39.99 W/m<sup>2</sup> 1.0 ... 399.9 W/m<sup>2</sup>

Measurement of infrared radiation in the spectral field 700...1300 nm, with spectral weighting factor R(λ) 0.010 ... 3.999 W/m<sup>2</sup> 1.0 ... 399.9 W/m<sup>2</sup> 0.010·103 ... 3.999·103 W/m2

Measurement of infrared radiation, spectral range 400...2800 nm 0.010·103 ... 3.999·103 W/m2

#### ORDERING CODES

HD2402: Multi-sensor instrument, data logger, for measuring noncoherent optical radiation. Equipped with: DeltaLog13 software (version 1.0.1.0) downloadable from Delta OHM website, to download, monitor and process the data on a personal computer, hardware key CH20-ROA to enable the software, CP24H connection cable, SWD05 external power supply, VTRAP20 tripod, manual, carrying case.

### Accessories:

CH20-ROA: Hardware key for PC with Windows® operating systems. Inserted into a USB port enables the use of PC software DeltaLog13 with the instrument HD2402.

CP24H: Connection cable to a PC or to the external power supply. M12 connector on the instrument side and USB type A- connector on the PC / Power Supply side.

SWD05: Stabilized external power supply 100...240Vac/5Vdc-1A. Output with USB connector type A.

VTRAP20: Tripod to fix the instrument, maximum height 270 mm.

