HD2402

[**GB**] Non-coherent optical radiation monitor

HD2402 is a portable photo-radiometer data logger for the measurement of non-coherent optical radiation **in accordance with European Directive 2006/25/EC and the Legislative Decree No 81, April 9, 2008.**
The instrument consists of a series of sensors to cover different portions of the spectrum and a small laser which is used to indicate the analyzed source.

The various sensors operate in the following spectral fields:
• Photometric sensor for measuring the illuminance (lux meter) in the spectral range 380÷780 nm.
• Radiometric sensor for the UV band (220÷400 nm) with spectral weighing factor S(λ).
• Radiometric sensor for UVA band (315÷400 nm).
• Radiometric sensor for the band 400÷700 nm (blue) with spectral weighing factor B (λ).
• Radiometric sensor for the IR band (700÷1300 nm) with spectral weighing factor R(λ).
• Thermopile sensor for the measurement of irradiance in the infrared spectral range 400÷2800 nm.

The **HD2402** can be powered either by connecting it to a PC, receiving power directly from the USB port of your PC, or via an external power supply with USB output (code **SWD05**). The **CP24** connection cable is fitted with a M12 connec-

tor on the instrument side and an USB type A connector on the PC side or to the power supply **SWD05.**
Using the **software DeltaLog13 from version 1.0.1.0** and a PC, the **HD2402** can be configured (calendar, date, time, start and duration of logging), and you can download and analyze the stored data or acquire the real-time data. Once configured, the data logger can be disconnected from the PC and connected to its power supply for capturing and storing data according to the programmed settings.

instrument specifications

Instrument

Dimensions (Length x Width x Height)	69x69x155 mm
	74x74x155 mm with protective shell
Weight	500 g
Materials	Aluminium alloy
Protective shell	Rubber

Operating conditions

Working temperature	-5 … 50°C
Storage temperature	-25 … 65°C
Working relative humidity	0 … 85% RH no condensation
Protection degree	IP 64

Power supply

Power adapter (cod. SWD05)	5Vdc/1A

Stored data security	unlimited

Serial interface:	output for connection to the PC using the USB cable CP24
Storage capacity:	96,000 recordings, corresponding to approximately 26 hours of continuous data acquisition.
Storage interval:	fixed at 1 second.

Measuring ranges:

Measurement of the illuminance in the spectral range 380÷780 nm
$0 \div 399.9$ lux
$0 \div 3.999 \cdot 10^3$ lux
$0 \div 39.99 \cdot 10^3$ lux
$0 \div 399.9 \cdot 10^3$ lux

Measurement of the UV radiation in the spectral range 220÷400 nm with spectral weighing factor S(λ)
$0 \div 39.99 \cdot 10^{-3}$ W/m^2
$0 \div 399.9 \cdot 10^{-3}$ W/m^2
$0 \div 3.999$ W/m^2
$0 \div 39.99$ W/m^2

Measurement of the ultraviolet radiation in the spectral UVA range (315÷400 nm)
$0 \div 399.9$ W/m^2
$0 \div 3.999 \cdot 10^3$ W/m^2
$0 \div 39.99 \cdot 10^3$ W/m^2
$0 \div 399.9 \cdot 10^3$ W/m^2

Measurement of the radiation in the spectral range 400÷700 nm (blue) with spectral weighing factor B(λ)
$0 \div 399.9 \cdot 10^{-3}$ W/m^2
$0 \div 3.999$ W/m^2
$0 \div 39.99$ W/m^2
$0 \div 399.9$ W/m^2

Measurement of infrared radiation in the spectral field 700÷1300 nm, with spectral weighing factor R(λ)
$0 \div 399.9$ W/m^2
$0 \div 3.999 \cdot 10^3$ W/m^2
$0 \div 39.99 \cdot 10^3$ W/m^2
$0 \div 399.9 \cdot 10^3$ W/m^2

Measurement of infrared radiation, spectral range 400÷2800 nm
$0 \div 3.999 \cdot 10^3$ W/m^2

ORDERING CODES

HD2402: Multi-sensor instrument, data logger for the measurement of non-coherent optical radiation. Complete with: **DeltaLog13 software (version 1.0.1.0)** to download, monitor and process the data on personal computer, hardware key **CH20** to enable the software, **CP24** cable, power supply **SWD05**, manual, carrying case.

Accessories:

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

DeltaLog13: Additional copy of the software for PC connection, instrument configuration, and data download. For Windows® operating systems.

CP24: Connection cable to PC or power supply, with M12 connector on instrument side and USB type A- connector on PC / Power Supply side.

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

VTRAP20: Tripod to fix the instrument, maximum height 280 mm.

Manufacture of portable and bench top instruments
Current and voltage loop transmitters
Temperature - Humidity - Pressure
Air speed - Light - Acoustics - Vibration
pH - Conductivity - Dissolved Oxygen - Turbidity
Elements for weather stations - Thermal Microclimate

SIT CENTRE N°124

Temperature - Humidity - Pressure - Air speed
Photometry/Radiometry - Acoustics

CE CONFORMITY

• **Safety:** EN61000-4-2, EN61010-1 Level 3

• **Electrostatic discharge:** EN61000-4-2 Level 3

• **Electric fast transients:** EN61000-4-4 livello 3, EN61000-4-5 Level 3

• **Voltage variations:** EN61000-4-11

• **Electromagnetic interference sucseptibility:** IEC1000-4-3

• **Electromagnetic interference emission:** EN55022 class B