UVITEC
Cambridge

VLX-3W CE

RADIOMETER WITH MICROPROCESSOR

I - TECHNICAL CHARACTERISTICS

- **The VLX-3W is designed for operating in 254nm - 312nm and 365nm**
- **The selection of the sensor is determined by the user**
- **In additionnal equipment there is a choice of 4 independent sensors**

1. RX-003 ELECTRONIC CASE

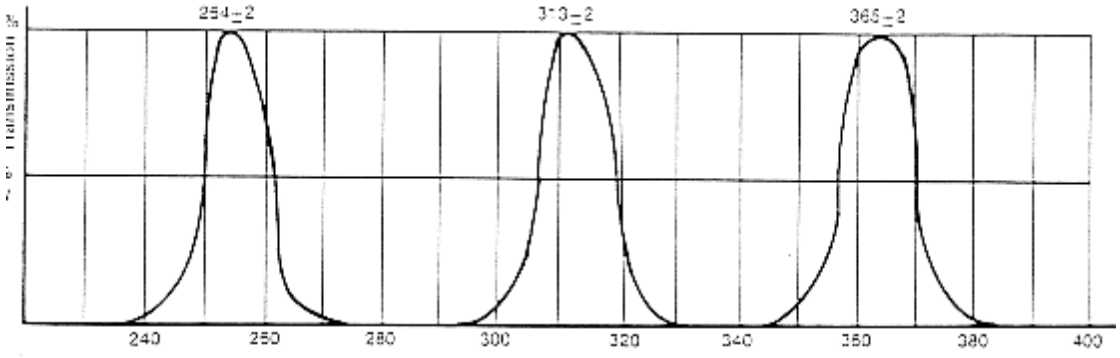
- **Range of measure in intensity**
  - **Accuracy and linearity : ± 0,2 %**
  - **Range of measure : 0 to 250 mW/cm²**
  - **Resolution : 0,001 mW/cm² from 0,000 to 99,999 mW/cm²**
    : 0,01 mW/cm² from 100,00 to 250,00 mW/cm²
  - **Automatic change of range**
  - **USB Output/input for supply and (or) data output**
- **Range of measure in Joules**
  - **Accuracy : 0,1 mJ/cm²**
  - **Range of measure : 0 to 99999 J/cm²**
  - **Resolution : 0,0001 J/cm² from 0,0000 to 9,9999 J/cm²**
    : 0,001 J/cm² from 10,000 to 99,999 J/cm²
    : 0,01 J/cm² from 100,00 to 999,99 J/cm²
    : 0,1 J/cm² from 1000 to 9999,9 J/cm²
    : 1 J/cm² from 10000 to 99999 J/cm²
  - **Automatic change or range**

2. SENSOR

- **Accuracy of the measure** : ± 5 % by comparison with the radiometer calibrated by the L.N.E. (Laboratoire National d'Essais)
- **Linearity** : ± 0,5 %
- **Temperature coefficient** : ± 0,05 %/°C from 0 to 40°C

INTERFERENCE FILTER

SPECTRAL RESPONSE



Wavelength (nm)

Half bandwidth (HBW)	: 12 nm ± 2	
Blocking range - Filter	: 400 to 1200 nm	: 0,01 %
Blocking range - Silicon cell	: > 1200 nm	: 0 %

- **Conditions of use**
  - **Temperature** : 0 to 50°C
  - **Relative humidity** : 30 to 60%

II - OPERATING INSTRUCTIONS AND CONNECTION

The VLX-3W includes :

- 1 electronic case
- 4 "Alkaline" batteries - AAA / 1,5 V (Ø 10 - L.44mm)

Additionnal equipment :

- Choice of sensors SX depending of the wavelength used

• DESCRIPTION

Front plate of electronic case

- 128 x 64 Graphic LCD display with large Characters
- 1 programmation keyboard

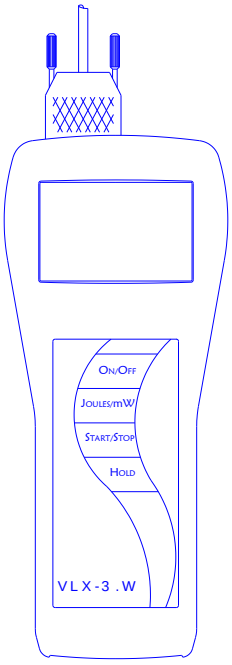
• KEYBOARD

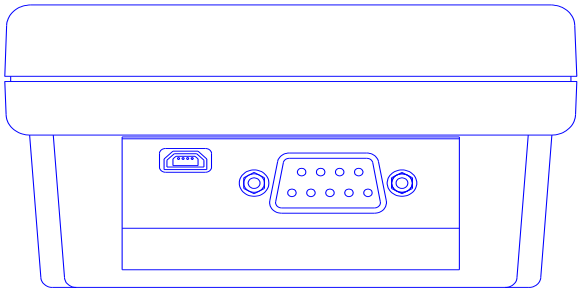
HOLD Fix the measure reading at a given time

Joules/mW Change the main display on the large display

START/STOP Start or stop the energy calculation in Jls/cm²

ON/OFF Key "ON/OFF"
START or STOP of VLX-3W Radiometer





III - OPERATING MODE

KEYS	DISPLAY	COMMENTS
ON/OFF	0000 mW/cm² 312 nm	**INTENSITY DISPLAY** ➢ Wavelength of the sensor connected ➢ Intensity in mW/cm²
START/STOP	mW/cm² -Eng. : 000 Jls/cm² -Time : 0:00:00 -Mini. : 000 mW/cm² -Maxi : 000 mW/cm²	**ENERGY DISPLAY** ➢ Intensity in mW/cm² ➢ Energy in Jls/cm² ➢ Running time in "hour/minutes/seconds" ➢ Display of the Mini and Maxi intensities
	0.641 mW/cm² -Eng. : 0.0418 Jls/cm² -Time : 0:01:01 -Mini. : 0.627 mW/cm² -Maxi : 0.715 mW/cm²	
HOLD	0.641 mW/cm² -Eng. : 0.0418 Jls/cm² -Time : 0:01:01 -Mini. : 0.627 mW/cm² -Maxi : 0.715 mW/cm²	• Display blocking • Internal calculation of the energy received and of the running time.
HOLD	0.599 mW/cm² Hold -Eng. : 0.0871 Jls/cm² -Time : 0:02:09 -Mini. : 0.590 mW/cm² -Maxi : 0.773 mW/cm²	• Return to **"ENERGY DISPLAY"**
JOULES/mW	0.1230 Jls/cm² Int. : 0.658 mW/cm² Time : 0:03:10 Mini. : 0.520 mW/cm² Maxi : 0.773 mW/cm²	

IV - WARRANTY

Our products (except Compact Flash®, light tubes and filters) are warranted against faulty construction or defective material for a period of TWO YEARS from the date of supply. Our products are not warranted for damage due to carelessness, incorrect use or bad maintenance.
The following defects are also specifically excluded:
- Defects caused by improper operation.
- Repair or modification done by anyone other than UVITEC or an authorised agent.
- Corrosion caused by improper solvents or samples.
- Use of spare parts supplied by anyone other than UVITEC.
- Damage caused by accident or misuse.
- Damage caused by disaster.

This instrument should not be modified or altered in any way. Modification or alteration of this instrument will:
1. Void the manufacturer's warranty.
2. Void the conformity certifications.
3. Create a potential safety hazard.

The Compact Flash®, the tubes and the filters are not covered by our warranty.

The use of consumable products or non-original spare parts not recommended by our service department is at the user's own risk and therefore automatically invalidates the warranty.

Tubes, filters, batteries and consumable products are not included in the warranty.

We reserve the right to decide where the faulty goods will be repaired (in our workshop or elsewhere), and whether or not the faulty part is to be replaced; all other freight charges incurred being at the cost of the purchaser.

Returned goods will not be accepted for repair unless previous written authorisation is obtained from our service department. A request for authorisation must be accompanied by an itemised list of products, model numbers and the corresponding invoice numbers under which they were originally shipped.

All returned goods should have a certificate of decontamination.

The Buyer must bear all costs and risks incurred during the transportation of the goods from their collection at UVITEC warehouse.

In the case UVITEC incorporates some devices or equipment from another supplier in the manufacture of its products, the extent and the duration of the warranty will be those conceded by the suppliers or sellers.

Manufacturer cannot be held responsible for any loss, bodily injury or material accident incurred by any failure of this supply, whatever the origin of this failure may be.

The responsibility of Manufacturer is strictly limited to its staff and to its own supplies.

In the case of dispute, only the commercial court of Cambridge (United Kingdom) shall be competent, even in third party claims proceedings or when there are several co-defendants.

NOTE: UVITEC is not responsible for any injury or damage caused by use of this instrument for purposes other than those for which it is intended, or by modifications of the instrument not performed by UVITEC.

<u>Decontamination, collection and elimination of waste</u>

The buyer ensures and finances the decontamination, the collection and the disposal of waste electrical and electronic equipment (WEEE) under the conditions provided
in the Articles 21 and 22 of the Decree No. 2005-829 dated of 20 July 2005.

Improper disposal may be harmful to the environment and human health.

V - DECLARATION OF CONFORMITY

CE

The materials complies with the requirements of the EC Directive 89/336/EEC, 73/23/EEC and EN 61010-1 (electro-magnetic compatibility and low voltage).

The electro-magnetic susceptibility has been chosen at a level that gains proper operation in residential areas, on business and light industrial premises and on small-scale enterprises, inside as well as outside of the buildings. All places of operation are characterized by their connection to the public low voltage power supply system.