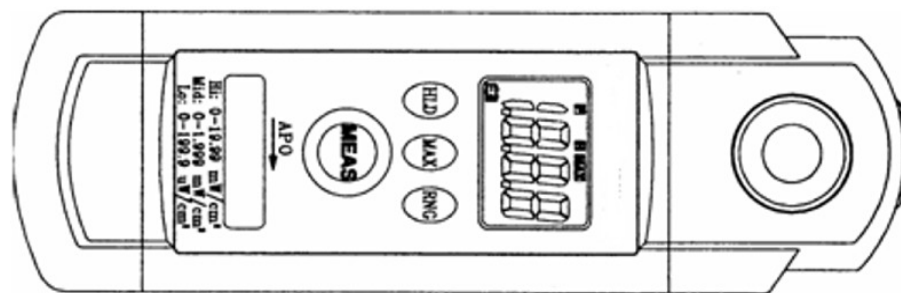




Handheld UV-A meter

Instruction manual



Please read carefully, before using your meter!

The information in this service manual is based on the latest information, and is provided subject to alterations. We reserve the right to change the construction and/or configuration of the product at any time without obligation to modify earlier versions of the product.

For further data: www.alcochem.nl



A) Read this manual carefully before taking action with the UV-A handheld meter

Congratulations with the purchase of this high quality UV-A handheld meter. Before using this meter we would like to ask you to read this manual carefully. If you have questions afterwards feel free to contact your local supplier.

The information in this manual is based upon the latest information, and is provided subject to alterations. We reserve the right to change the construction and/or configuration of the product at any time without obligation to modify earlier versions of the product. Store this manual carefully for future use.

B) Introduction

This instrument is a portable easy use 3¹/₂ digit, compact-sized digital UV-A meter, designed for simple one hand operation. The meter provides measurements in 199.9µW/cm² 1.999mW/cm² and 19.99mW/cm² units, MAX-HOLD and DATAHOLD facilities.

C) Safety information

- To avoid injury or fire hazard, do not use this product in an explosive atmosphere.
- To avoid eye injury, wear eye protection if there is a possibility of exposure to high-intensity rays.
- Do not immerse in liquids, clean the sensor head using only a damp cloth.
- Cover sensor head when not in use to extend silicon photodiode sensor life.

D) Specifications

Display	: 3,5 digit liquid crystal display (LCD) with maximum reading of 1999.
Over range	: If you see the system message "OL" in the display of the UV-A meter than the UV-A output level is more than excellent (over 20mW/cm ²) and a lamp replacement will not be in order in the upcoming 6 months. (" OL" is Outstanding Level)
Low battery indication	: The "battery indicator" is displayed when the battery voltage drops below the operating level.
Measurement rate	: 2.5 times per second.
Operating environment	: 0°C to 50°C at < 75 % relative humidity.
Storage temperature	: -20°C to 60°C, 0 to 80% R.H, with battery removed from meter.
Battery	: 3 pcs 1.5V (AAA size)
Battery life	: 200 hours typical (with carbon zinc battery).
Dimensions (H*W*D)	: 155 x 48 x 24mm.
Weight	: approx. 82gr without batteries.
Electrical range	: 199.9µW/cm ² - 1.999mW/cm ² - 19.99mW/cm ²

Resolution:

<i>Range</i>	<i>Resolution</i>
199.9µW/cm ²	0.1µW/ cm ²
1.999mW/cm ²	0.001mW/ cm ²
19.99mW/cm ²	0.01mW/cm ²

Accuracy	: 4% FS +/- 2 dgts (FS: full scale)
Stated accuracy	: at 23°C +/- 5°C, <75% relative humidity.
UV sensor spectrum	: band pass 320nm - 400nm
Wavelength Peak	: 365 +/- 5nm



E) Operating instructions

Push buttons

MEAS Button (MEASURE)

Press "MEAS" button to turn on the meter for measuring UV-A.

Press "MEAS" button again to turn off the meter.

Range Select Button

Press "RNG" button to select the desired range. Each time you press "RNG" button, the range (and the input range annunciator) increments, and a new value is displayed.

DATA HOLD Button

Press "HLD" button to enter the Data Hold mode. In the DATA HOLD mode, the "H" annunciator is displayed. Press the "HLD" button again cancels DATA HOLD mode, causing the UV-A meter to resume taking measurements.

MAX HOLD Button

Press "MAX" button to toggle in and out of MAX HOLD mode.

In the MAX HOLD mode, the "MAX" annunciator is displayed.

Operation

1. Press "MEAS" button to turn meter on, and then set to the desired range (using range button select 199.9/ μ W/cm², 1.999mW/cm² or 19.99mW/cm² range).
2. Remove the cover of sensor head.
3. Hold the sensor head steady .
4. Read the UV-A value from the display. If magnitude of UV-A is not known, press "RNG" button to the highest range 19.99mW/cm² and reduce the range until a satisfactory reading is obtained.
5. Cover sensor head to extend sensor life after use.
6. Press "MEAS" button measure and do not release to measure continuously.

APO Auto power function

Remove rubber cover on front case and slide the switch to right to enable "APO" function, the "P" annunciator is displayed. It will turn off automatically after approximately 15 minutes to lengthen battery life. Slide the switch to left to disable "APO" function.



F) Special considerations

- When UV-A is received from many directions simultaneously, take special care to avoid reflection or shadowing the sensor with anything.
- For best accuracy, repeat the measurement several times to ensure that the UV-A source has remained stable.

G) Maintenance

Battery Replacement

1. Power is supplied by three 1.5V (AAA size) batteries.
2. The "battery indicator" appears on the LCD display when replacement is needed. To replace the batteries, remove the screw from the back of the meter and lift off the battery cover.
3. Install three 1.5V batteries.
4. When the meter will not be used for a long time than remove the battery.
5. Don't keep the meter in a place with a high temp. or a high humidity.

Cleaning

Periodically wipe the case with a damp cloth and detergent, do not use abrasives or solvents