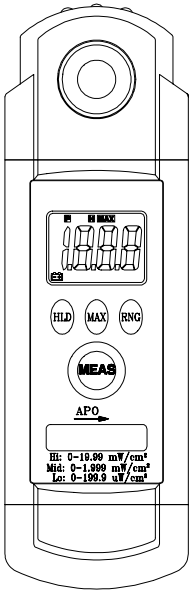
OPERATING INSTRUCTIONS

TECPEL 830 CE

DIGITAL UVA METER



INTRODUCTION

This instrument is a portable easy use 3½ digit, compact-sized digital UVA designed for simple one hand operation. The meter provides measurements in 199.9µW/cm² and 19.99mW/cm² units , MAX-HOLD and DATA-HOLD facilities.

SAFETY INFORMATION

It is recommended that you read the safety and operation instructions before using the UVA meter.

WARNING

- 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.

SPECIFICATIONS

GENERAL

Display:
3½ digit liquid crystal display (LCD) with maximum reading of 1999.

Overrange:
(OL) is displayed.

Low battery indication:
The " " is displayed when the battery voltage drops below the operating level.

Measurement rate:
2.5 times per second, nominal.

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) UM-4 R03.

Battery Life:
200 hours typical (with carbon zinc battery).

Dimensions:
155mm(H) x 48mm(W) x 24mm(D).

Weight:
approx. 2.9 oz. (81.2g) including battery.

ELECTRICAL

Range: 199.9µW/cm²
1.999mW/cm²
19.99mW/cm²

Resolution:

Range	Resolution
199.9µW/cm²	0.1µW/cm²
1.999mW/cm²	0.001mW/cm²
19.99mW/cm²	0.01mW/cm²

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

OPERATING INSTRUCTIONS

Push buttons

MEAS (MEASURE) Button

Press "MEAS" button to turn on the meter for measuring UVA. 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) incremants, 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 UVA 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 199.9µW/cm², 1.999mW/cm², 19.99mW/cm² range).
2. Remove the cover of sensor head.
3. Hold the sensor head steady .
4. Read the UVA value from the display. If magnitude of UV 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 off) 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 automaticaly after approximately 15 minutes to lengthen battery life. Slide the switch to left to disable "APO" function.

SPECIAL CONSIDERATIONS

- When UVA 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 source has remained stable.

MAINTENANCE

Battery Replacement

1. Power is supplied by three 1.5V (AAA size) batteries.
2. The " " 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 not use for long time remove battery.
5. Don't keep in place with high Temp. or high humidity.

Cleaning

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