

UV Light Meter

Code: 86126A

User Manual V2.23

Please read this manual carefully before using and reserve it for reference.

I. Product introduction

The UV light meter is mainly for intensity and energy measurement of UVA light source. The meter features in an ultra-small probe design, suitable for measuring the UV intensity and energy of some small space where conventional probe is difficult to put in.

Standards for the product

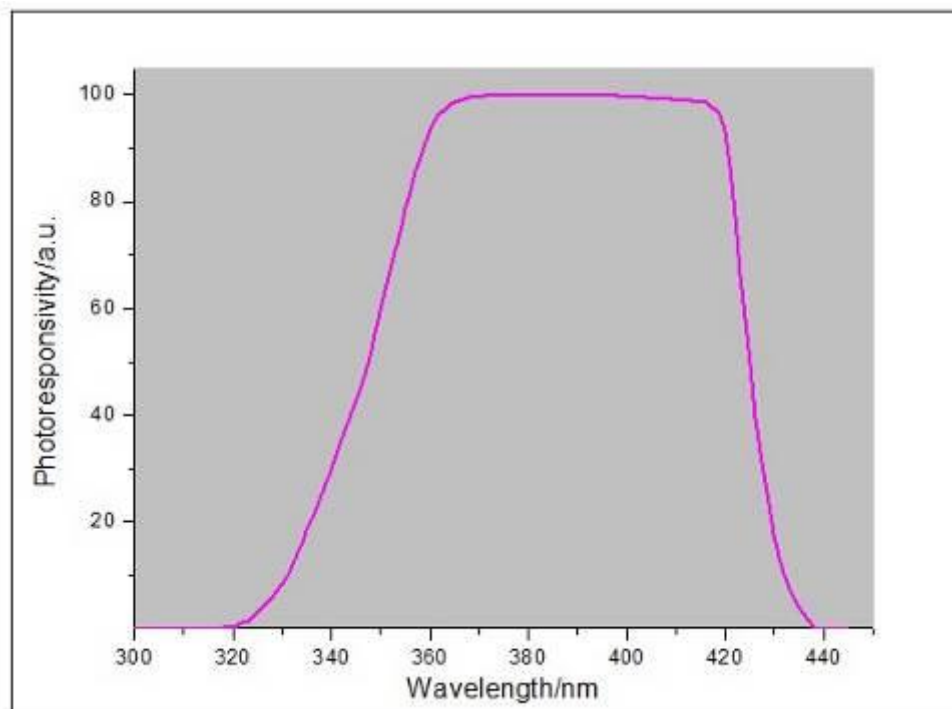
JJG 879-2015 Verification Regulation of Ultraviolet Radiometers

QB/T 2826-2017 Ultraviolet curing offset ink

II. Technical Parameters

1. Spectral response: 340nm-420nm, calibrated with 395nm UV LED light source
2. Measuring range: 0 - 20000mW/cm²
3. Resolution: 1mW/cm²
4. Energy measuring range: 0-99999999mJ/cm²
5. Record time: 0-99999s
6. Resolution (H is the standard value): $H < 50\text{mW/cm}^2$: $\pm 5\text{mW/cm}^2$, $H \geq 50\text{mW/cm}^2$: $\pm 10\%H$
7. Sampling speed: 2048 times/second
8. Optional unit: mW/cm² (default), W/cm², W/m²
9. Test Hole Diameter: $\Phi=3\text{mm}$
10. Probe size: 36mm long×7.2mm wide ×4.7mm thickness
11. Instrument size: 170mm long ×76mm wide ×26mm high
12. Probe wire length: 0.8m
13. Instrument weight: about 232 grams
14. Display: 240*160 dot matrix LCD
15. Battery: 4 AAA alkaline dry batteries
16. Supply Voltage: DC5V
17. Operating Current: 20mA
18. Operating Power Consumption: 100mW

III. Spectral response curve



IV. Product features

1. The probe is designed with ultra-small size; the narrowest width that can be put in is 7.2mm.
2. With a high-speed sampling speed of 2048 times per second, accurately calculate the UV energy value.
3. Have statistical function, directly display real-time value, maximum value, minimum value, average value and measurement duration.
4. Suitable for measuring the intensity and energy of UV LED light source for UV curing machine..

V. Operations

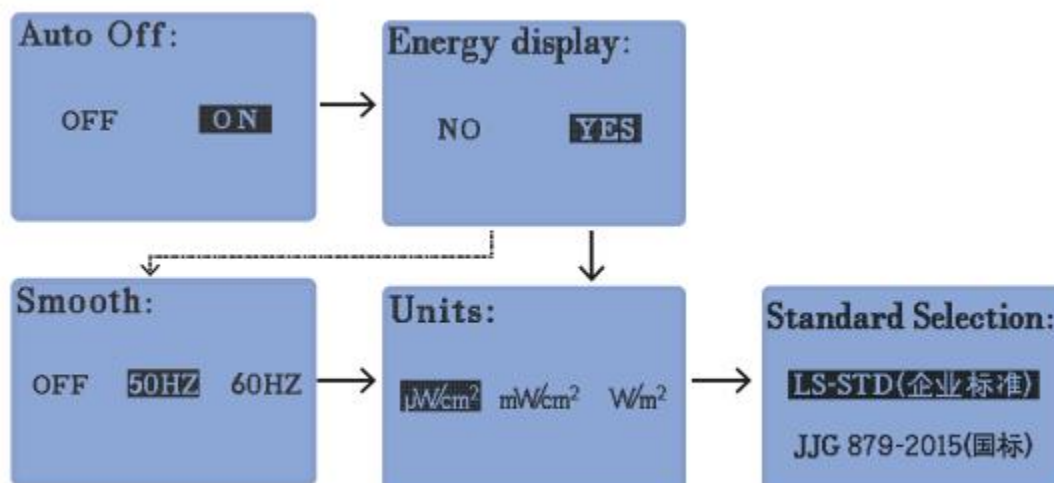
1. Power on/off

- **Power on:** Press the "ON" button to power on the instrument. After powering on, the instrument displays the calibration coefficient, calibration date, production date, version number, serial number and other information. Then enters the measurement mode.
- **Power off:** Long press the "OFF" button to power off; or the instrument will automatically power off in 10mins after no operation when Auto Off set ON.
- The data recorded before shutdown will be automatically saved to the history record.

2. Parameter settings mode

In the off state, long press the  button 3s to enter the parameter setting mode.

In the setting mode,  and  are Select buttons, and  is the Confirm button.




A. Select whether to automatically power off (Auto Off: ON/OFF)

Short press the  or  button to select ON/OFF


Selecting ON indicates that the instrument automatically powers off in 10mins after no operation.

Selecting OFF indicates that the user has to manually turn the instrument off, and the instrument will not automatically power off.

Short press  button to complete the setting and enter the next Set option.



B. Whether to display the energy value (Energy display: ON/OFF)

Short press the  or  button to select ON/OFF

Short press  button to complete the setting and enter the next Set option.

C. Smooth (OFF/50HZ/60HZ)


If UV light source powered by AC power supply, the AC frequency affects the power measurement, so that the smoothing process becomes necessary for those probes with high sampling speed (2048

times/second), enter the smooth setting mode, short press the  or  button to select.

OFF: Select this option, if UV light is DC powered and does not need smoothing

50HZ: Select this option for 50HZ AC

60HZ: Select this option for 60HZ AC

Short press  button to complete the setting and enter the next Set option.

D. Select the unit (Units: $\mu\text{W}/\text{cm}^2$, mW/cm^2 , W/cm^2 , W/m^2)

Short press the “▲” or “▼” button to select the unit required.


Short press “” button to complete the setting and enter the standard selection interface.

E. Select the standard (LS-STD, JJG 879-2015)

Short press the “▲” or “▼” button to select the standard.

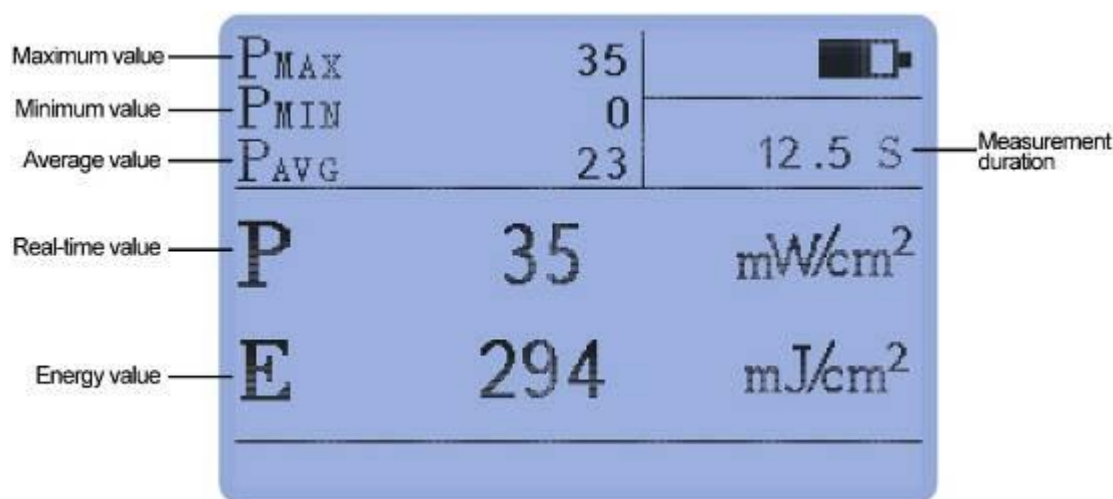
LS-STD(企业标准): Calibration in accordance with enterprise standard.






JJG 879-2015(国标): Calibration in accordance with China national standard.


Short press “” button to enter the measurement mode.

3. Measurement mode

- In the measurement mode. The system displays the real-time value, maximum value, minimum value, average value, measurement duration, energy value (Energy display =Yes)







- In the measurement mode, if the backlight is off, press the “” button to light the backlight; if the backlight is already lit, short press the “” button, and the “HOLD” icon will be displayed in the lower left corner of the interface. All data will be kept on the LCD, and the current data will be saved to the history record.
- In the “HOLD” state, if the backlight is off, press the “” button to light the backlight; if the backlight is already lit, short press the “” button to cancel the HOLD function and start a new measurement.
- In the measurement mode, if the backlight is off, short press the “” button to light the backlight; if

the backlight is already lit, press the  button to clear up the current data and start a new measurement.

- In the measurement mode, short press  or  to enter the record data query mode.

4. Record data query mode

- No.1 is the latest record data (up to 9 records are stored in the instrument, and the oldest record will be deleted automatically when exceed 9 records).
- Short press  or  to scroll up or down a record.
- Long press the  button 3 second to clear all records.
- Short press the  button to enter the measurement mode.

VI. Precautions

1. When not in use, please long press the “ ” button to power off the instrument.
2. Avoid contacting with corrosive materials and keep away from high humidity.
3. After shutdown, store it in a special packing box and keep it in a safe place. Protect the photosensitive part of the probe from polluting.
4. The recommended period of calibration is one year.
5. Because the UV probe is sensitive to humidity, the environment in which it is stored is important. When not in use for a long time, be sure to store the instrument in a low humidity environment.
6. When the instrument displays low battery, replace the battery.

VII. Packing list

No.	Description	Quantity	Unit
1	UV Light Meter	1	pcs
2	User manual	1	pcs
3	Calibration Report	1	pcs
4	Certificate/Warranty card	1	pcs
5	Plastic box	1	pcs

VIII. Service

1. The instrument has one-year warranty. If the instrument works abnormally, please send the whole instrument to our company for maintenance
2. Provide users with spare parts and lifelong maintenance services
3. Provide the users with the instrument calibration service
4. Free technical support for long term