Linshang LS125 Multiple Probe UV Light Meter User Manual

Contents

MIDIPLUS

Linshang LS125 Multiple Probe UV Light Meter User

Product Introduction

This instrument can support 9 kinds of UV probes according to different ultraviole t spectrum, measuring range, test hole diameter and application industry.

No.	Probe Model	Spectral response	Test Hole Diameter	Application Industry
1	UVC-X0	230nm-280nm	10mm	Intensity and energy measurement of 254nm UV sterilization mercury lamp
2	UVCWP-X1	230nm-280nm	10mm	Intensity and energy measurement of 254nm UV sterilization mercury lamp, waterproof
3	UVCLED-X0	230nm-315nm	10mm	Intensity and energy of 260nm-285nm UV LED sterilization lamp
4	UVB-X0	280nm-315nm	10mm	General UVB intensity and energy measurement
5	UVA-X0	315nm-400nm	10mm	Intensity and energy measurement of light source of high pressure mercury lamp in UV curing industry
6	UVA-X1	315nm-400nm	10mm	General low power UVA intensity and energy measurement
7	UVALED-X0	340nm-420nm	10mm	Intensity and energy measurement of area light source of UV LED in UV curing industry
8	UVALED-X1	340nm-420nm	1mm	Intensity and energy measurement of point light source of UV LED in UV curing industry
9	UVALED-X3	340nm-420nm	10mm	General UVA+UVV LED intensity and energy measurement, low power measuring range

Probe Parameters

UVC X0 probe

1. Spectral response: 230nm 280nm, λ p = 254nm
2. Power measuring range: 0 200000 μ W/ cm2
3. Resolution: 0.1 μ W/ cm2
4. Energy measuring range: 0 9999999 μ J/ cm2
5. Record time: 0 99999s
6. Measuring accuracy: ±10%
7. Sampling speed: 6 times/second

8. Optional unit: μ W/ cm2 (default), cm2 , m2
9. Test Hole Diameter: 10mm
10. Probe size: diameter 39mm thickness 15 mm

UVC WP X1 probe

1. Spectral response: 230nm 280nm, λ p = 254nm
2. Power measuring range: 0 200000 μ W/ cm2
3. Resolution: 0.1 μ W/ cm2
4. Energy measuring range: 0 9999999 μ J/ cm2
5. Record time: 0 99999s
6. Measuring accuracy: ±10%
7. Sampling speed: 6 times/second
8. Optional uni t: μ W/cm 2 (mW/ cm2 , m2
9. Test Hole Diameter: =10mm
10. Probe size: diameter 50mm thickness 20mm
11. Waterproof depth: 1m

UVCLED X0 probe

1. Spectral response: 230nm 315nm , suitable for testing 2 60nm 285 nm sterilization UV LED (wide spectral response range, avoid using in strong ambient light)
2. Power measuring range: 0 200000 μ W/ cm2
3. Resolution: 0.1 μ W/ cm2
4. Energy measuring range: 0 9999999 μ J/ cm2
5. Record time: 0 99999s
6. Measuring accuracy: ±10%8. Optional unit: μ W/ cm2 (default), cm2 , m2
7. Test Hole Diameter: 10mm
8. Probe size: diameter 39mm thickness 15 mm
9. Sampling speed: 6 times/second

UVB X0 probe

1. Spectral response: 280nm 3 15 nm, λ p = 310 nm suitable for measuring UVB light source that peak wavelength at 297nm, 308nm, 313nm etc.
2. Power measuring range: 0 200000 μ W/ cm2
3. Resolution: 0.1 μ W/ cm2
4. Energy measuring range: 0 9999999 μ J/ cm2
5. Record time: 0 99999s
6. Measuring accuracy: ±10%
7. Sampling speed: 6 times/second
8. Optional unit: μ W/ cm2 (default), mW/cm2, m2
9. Test Hole Diameter: 10mm
10. Probe size: diameter 39mm thickness 15 mm

UVA X0 probe

1. Spectral response: 3 15 nm 400nm, λ p = 365nm
2. Power measuring range: 0 2000mW/ cm2
3. Resolution: 0.1mW/ cm2
4. Energy measuring range: 0 9999999mJ/ cm2
5. Record time: 0 99999s
6. Measuring accuracy: ±10%
7. Sampling speed: 2048 times/second
8. Optional unit : cm2 (default), m2
9. Test Hole Diameter: 10mm
10. Probe size: length 39mm width 32mm thickness 15mm

UVA X1 probe

1. Spectral response: 315nm 400nm, λ p = 365nm
2. Power measuring range: 0 200000 μ W/ cm2
3. Resolution: 0.1 μ W/ cm2
4. Energy measuring range: 0 999999 9 μ J/ cm2
5. Record time: 0 99999s
6. Measuring accuracy: ±10%
7. Sampling speed: 6 times/second
8. Optional unit: μ W/ cm2 (default), cm2 , m2
9. Test Hole Diameter: 10mm
10. Probe size: length 39mm width 32mm thickness 15mm

UVALED X0 probe

1. Spectral response: 340nm 420 nm, calibrated with 395nm UV LED
2. Power measuring range: 0 20000mW/ cm2
3. Resolution: 1mW/ cm2
4. Energy measuring range: 0 9999999mJ/ cm2
5. Record time: 0 99999s
6. Measuring accuracy: ±10%
7. Sampling speed: 2 048 times/second
8. Optional unit: mW/ cm2 (default), W/cm 2 , m2
9. Test Hole Diameter: 10mm
10. Probe size: length 39mm width 32mm thickness 15mm

UVALED X1 probe

1. Spectral response: 340nm 420nm, calibrated with 395nm UV LED
2. Power measuring range: 0 20000mW/ cm2
3. Resolution: 1mW/ cm2

4. Energy measuring range: 0 9999999mJ/ cm2
5. Record time: 0 9999 9s
6. Measuring accuracy: ±10%
7. Sampling speed: 2 048 times/second
8. Optional unit: mW/ cm2 (default), W/cm 2 , m2
9. Test Hole Diameter: 1mm
10. Probe size: length 39mm width 32mm thickness 15mm

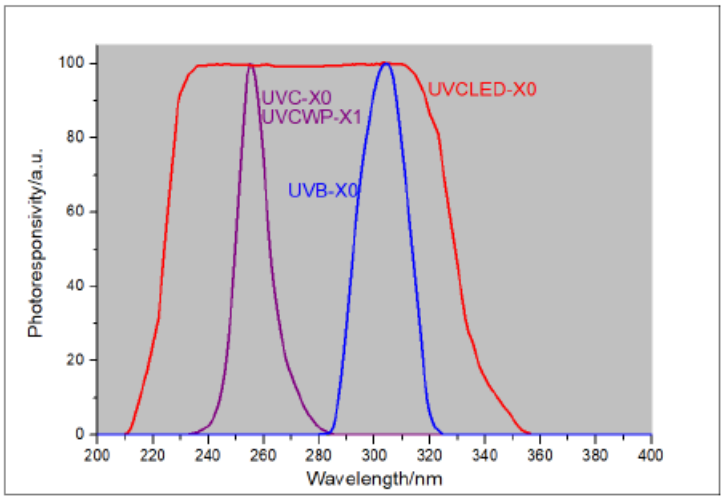
UVALED X3 probe

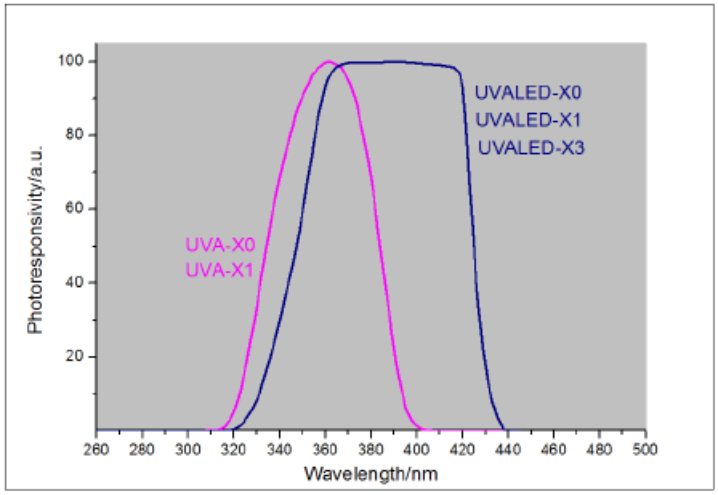
1. Spectral response: 340nm 420nm, calibrated with 39 5nm UV LED
2. Power measuring range : 0 200000 μ W cm2
3. Resolution: 0.1 μ W cm2
4. Energy measuring range: 0 9999999 μ J cm2
5. Record time: 0 99999s
6. Measuring accuracy: ±10%
7. Sampling speed: 6 times/second
8. Optional unit: μ W cm2 (default), mW cm2 , W m2
9. Test Hole Diameter: =10mm
10. Probe size: length 39mm width 32mm thickness 15mm

Host Parameters

1. Host weight: about 194g
2. Host size:148mm 76mm 26mm (L*W*H)
3. Display: 240*160 dot matrix LCD
4. Power supply: 4 AAA alkaline battery
5. Probe connection: p ush pull (Snap in st yle) Aviation socket.

The spectral response curves of probes





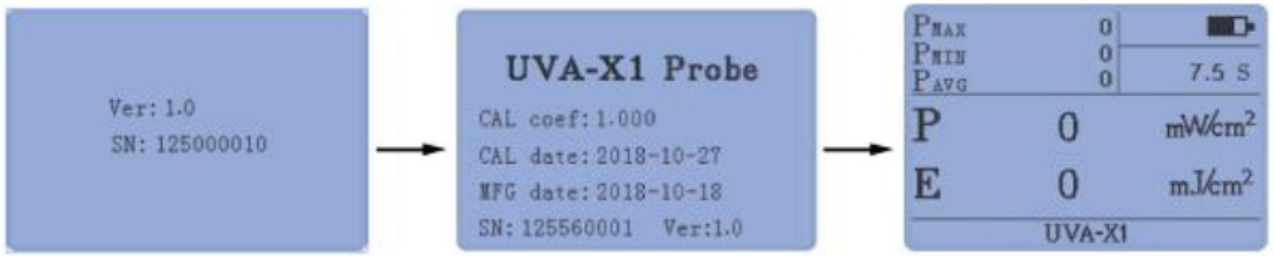
Product features

1. Replaceable probe design, support 9 UV probes.
2. Advanced digital probe technology, it has high precision and good anti jamming ability.
3. Instrument intel ligent recogniz e probe type and adjust the display interface intelligently.
4. A variety of spectral range, measuring range, test hole size of the probe to adapt to different application industries.
5. For LED point light source, 1mm test hole can make it more c onvenient to measure.
6. Statistical functions, real time value, maximum value, minimum value, average value, time, energy values are displayed at the same time.

Operations

Power on/off

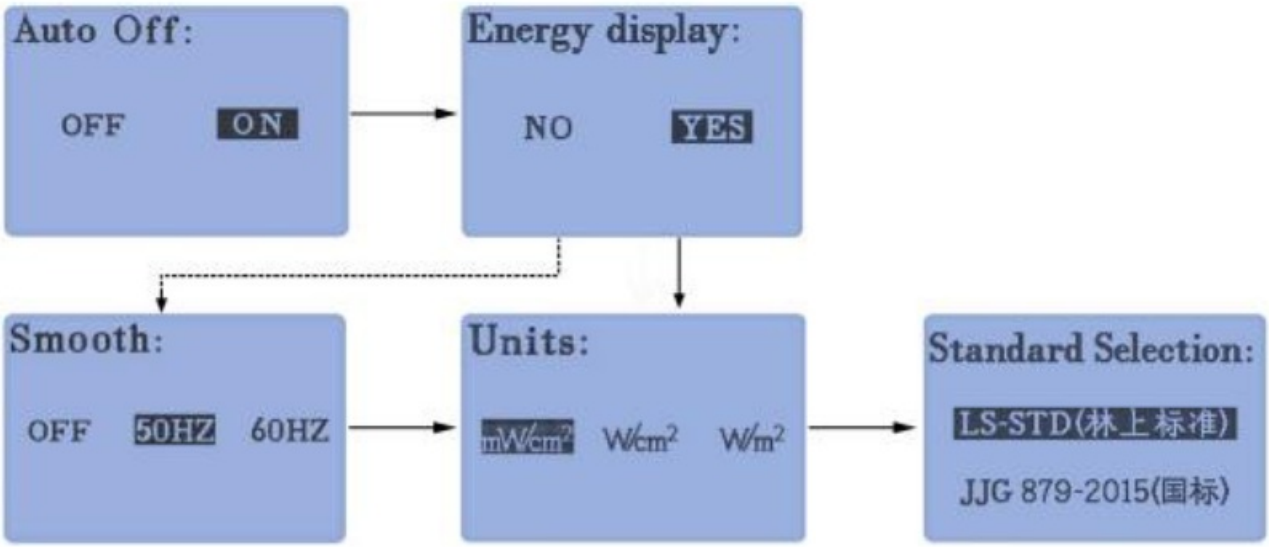
- **Power on :** Press ” to power on the instrument. After powering on, the in strument displays the instrument parameters and probe parameters, and enter the measuring interface, as shown below



- **Power off:** Long press the 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 during automatic shutdown. (No. 1, the latest record).

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



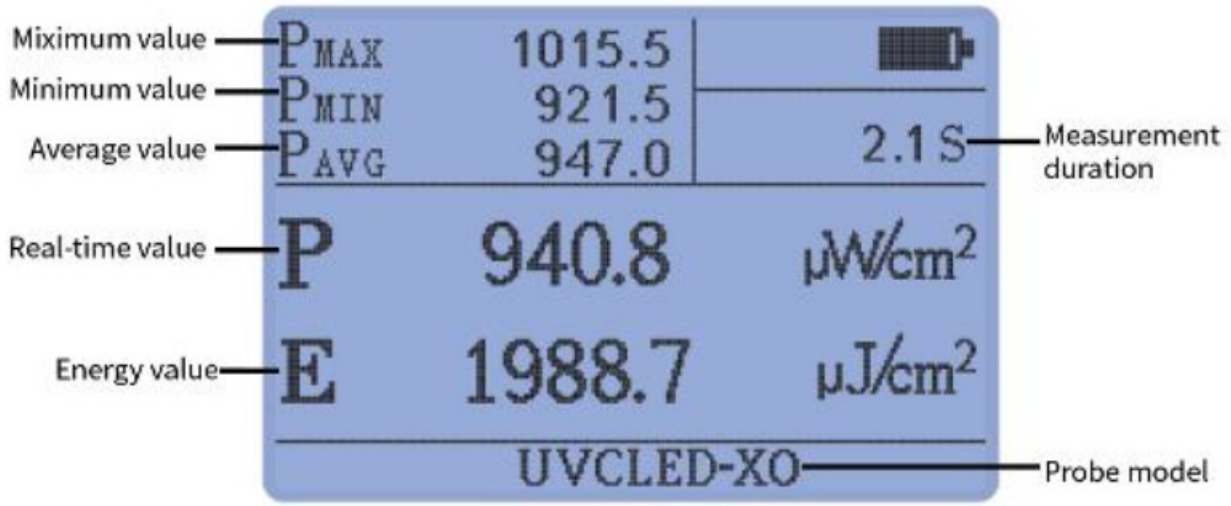
- Select whether to automatically power off (Auto Off: ON/OFF) Short press the or button to select ON/OFF Selecting ON indicates that the instrument automatically powers off in 10mins after no operation. Selecting OFF indicates that the user has to manually turn the instrument off, and the instrument will not automatically power off. Short press " " button to complete the setting and enter the next Set option.
- Whether to display the energy value (Energy display: NO/YES) Short press the or button to select NO YES Short press " " button to complete the setting and enter the next Set option.
- Smooth (OFF/50HZ/60HZ, only probes with high sampling speed have this option) If UV light source powered by alternating current (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 50H Z : Select this option for 50H Z AC 60H Z : Select this option for

60H Z AC Short press “ ” button to complete the setting and enter the next Set option.

- Select the unit (Units: μW/cm2 , mW/cm2 , W/cm2 , W/m2) Short press the or button to select the unit required (Different probes have different options). Short press button to complete the setting. When the probe model is UVALED-X0, UVALED-X1 and UVALED-X3, the meter enter the next setting item. If not, the meter enter the measurement mode.
- Standard Selection Short press the “ ” button or “ ” button to select the standard. LS STD (Enterprise standard): The me ter is calibrated according to Linshang standard. JJG 879 2015 (Chinese standard): The meter is calibrated according to Chinese standard. Short press the “ ” button to confirm the setting and the meter enters the measurement mode.

Measurement mode

- In the m easurement 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, i f the backlight is off, short press the “ ” button to light the backlight; if the backlight is already lit, short press the “ ” button to cancel the HOLD state 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.



Record data query mode

- Short press “ ” or “ ” to scroll up or down a record data. No.1 is the latest recorded data (up to 9 records can be stored, and the oldest record will be deleted automatically when exceed 9 recorded data).
- Long press the “ ” button 3Second to clear all re corded data.
- Short press the “ ” button to enter the measurement mode.

Aviation plug connection

When plugging out the probe, make sure not to violently rotate and pull the connector, but plug out the plug by the way as shown in the following diagram.

Pr ecautions

1. When not in use, please long press the ” 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 photosen sitive part of the probe from polluting.
4. The recommended period of calibration is one year.
5. Because the UV probe is sensitive to humidity changes, the environment in which it is stored is important. When not in use for a long time, be sure to store the ins trument in a low humidity environment.
6. When the instrument displays low battery, replace the battery.

Packing list

No.	Description	Quantity	Unit
1	UV Light Meter	1	pcs
2	Probe	According to the numbers of probe ordered	
3	AAA battery	4	pcs
4	User manual	1	pcs
5	Certificate/Warranty card	1	pcs
6	Plastic box	1	pcs

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 meter calibration service
4. Free technical support for long term

Manufacturer: Shenzhen Linshang Technology Co., Ltd. Website www.linshangtech.com Service hotline: 086-755-86263411 Email: sales21@linshangtech.com

Documents / Resources

	Linshang LS125 Multiple Probe UV Light Meter [pdf] User Manual LS125, Multiple Probe UV Light Meter, LS125 Multiple Probe UV Light Meter, Probe UV Light Meter, UV Light Meter, Light Meter, Meter

References

- Transmission Meter | UV Light Meter | Coating Thickness Gauge - Linshang