Guarantee

User Name	Telephone	Post Code

Address

Product Model

Purchase Date

Serial Number

Invoice Number

Maintenance Record

Date	Fault Description	Content	Maintenance Time

1.The meter has one-year warranty and life-long maintenance.
2.During the guarantee period, any breakdown belongs to under normal usage circumstance because of the product' s own quality problem, the maintenance will be completed within two days excluding the transportation time.
3.During the guarantee period, the meter which has been repaired more than 3 times can be renewed for free because of the product' s own quality probelm, please reserve the guarantee card carefully.

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LS130 UV Energy Meter

User Manual V1.1

Aliexpress official store

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

LS130 UV Energy Meter User Manual V1.1

LS130 can measure the UV energy, UV irradiance at the same time. It can be used to measure the UV irradiance and energy of UV drying machine, exposure machine and printing machine, etc. It’ s suitable for the UV intensity and energy measurement of high pressure mercury lamp and the halogen lamp.

I.Parameters



Spectral range：315nm-400nm，λp = 365nm
Irradiance measuring range：0-2000mW/cm²
Irradiance resolution： 0.1mW/cm²
Energy measuring range：0-999999mJ/cm²
Energy measuring accuracy：±10%，±5% (typical)
Sampling speed：2048 times/second
Irradiance data storage interval：32 times/second
Recording period：32 minutes
Power supply：4 AAA alkaline dry batteries
Display: 240*160 Dot matrix LCD
Dimension:：160mm× 75mm×13mm(L*W*H)
Weight: 303 g

II.Operation

1. Parameter setting

In OFF mode, long press the “POWER” button for 3s and enter into the setting mode:

A. Trigger mode: (Auto/Manual)

Short press “▲” or “▼” to select Auto/Manual.

Select “Auto”- The auto trigger mode, the meter will start and stop automatically.

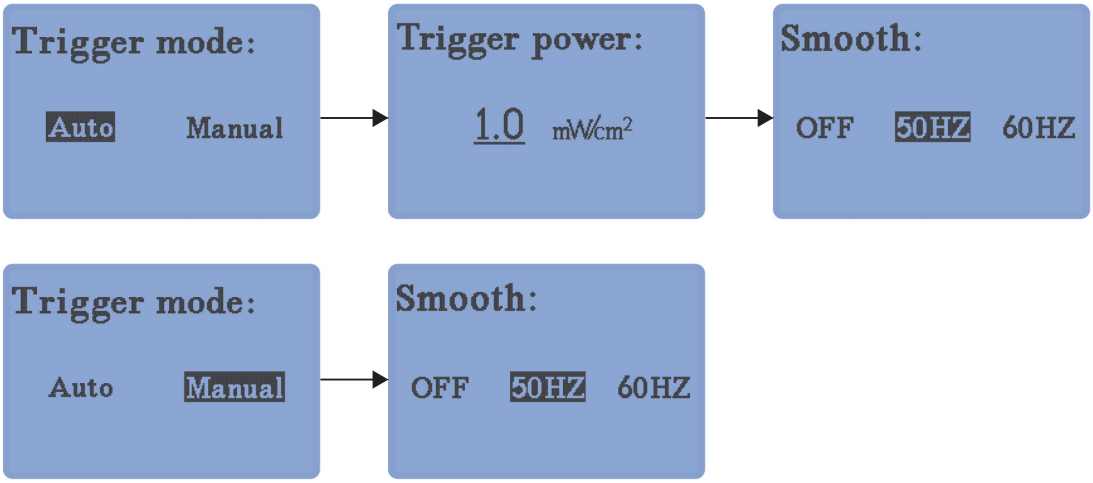
Select “Manual”- The measurement will start and stop manually.

Short press the “ENTER” button and enter into the next setting interface.

If Auto mode is selected, next setting interface is trigger threshold value.
If manual mode is selected, next setting interface is the smooth process.

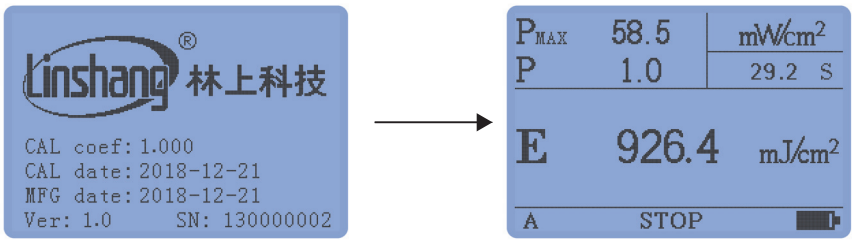
B. Trigger threshold (Trigger power: 0.1-5.0mW/cm^2 can be set)
Short press "▲" or "▼"to set the trigger threshold.
Short press the "ENTER" button and enter into the smooth process.

C. Smooth Processing (Smooth：OFF/50Hz/60Hz)
If the UV lamp is powered with alternating current, the frequency of alternating current will influence the accuracy of the irradiance measurement. Short press "▲" or "▼" to select the power supply frequency of the light source.
OFF: This option can be selected if no smooth processing will be performed and the UV lamp is powered with direct current
50HZ: This option must be selected if frequency of the alternating current is 50HZ
60HZ: This option must be selected if frequency of the alternating current is 60HZ
Short press the "ENTER" button and enter into the "STOP" interface.



2. ON/OFF

- In OFF state, short press "POWER" button to power on the meter. Information such as calibration date, production date, version number, serial number will be showed on the meter after powering on and enter into the last measurement interface (STOP Interface).



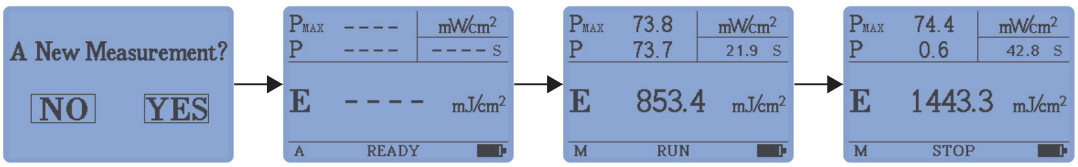
In the STOP interface, long press the “POWER” button to power off the meter.

- In the STOP interface, the meter will power off without any operation in 3 minutes.
- In the state of “READY”, the longest waiting time is 50 minutes .If the measurement cannot be triggered after 50 minutes, the meter will shut down automatically.

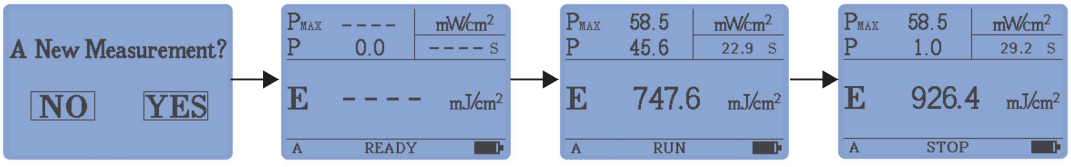
3. Measurement

READY: In the auto trigger mode, this means the meter is waiting for triggering to begin a measurement.
RUN: The meter is in the process of measurement.
STOP: The data measurement is over.
M: Manual Measurement Mode
A: Automatic measurement Mode
Manual Measurement：Short press the "POWER" button, Press "ENTER" to confirm the new measurement and clear last measured data (show "-----")

- and enters into the measurement state after 1 second (RUN state).Short press the “POWER” button or when the measurement time reaches 32 minutes, the measurement ends and enters into the STOP interface.

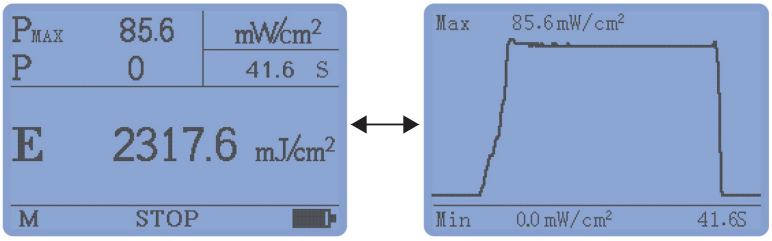


- Automatic measurement：Press the button to start the new measurement then enter into the “READY” state and clear last measured data, (show "-----" and flash) ,When the power value is greater than the set value of trigger power, the trigger condition is satisfied then enter into the measurement state (RUN state) .If the recording time reaches 32 minutes or the power value is less than the set value of trigger power, the measurement will be automatically ended and enters into the STOP interface.



4. The last measurement data view

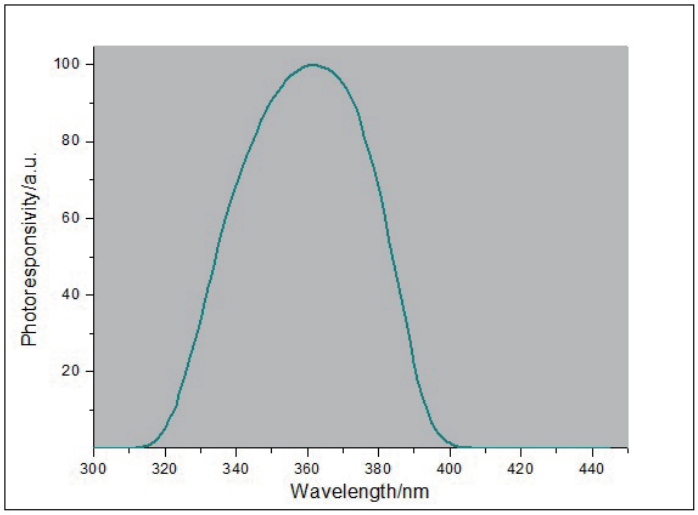
After starting up, the meter enters into the STOP interface, which displays the real-time value, maximum power, energy, measurement time and power curve measured last time.
In the STOP interface, short press the "ENTER" button to toggle between the measurement result and power curve.



5. Low Power Alarm

When the battery power is low, the battery symbol "▭" on the bottom right of the screen will flash, indicating that the battery needs to be replaced.

III.Spectral response curve



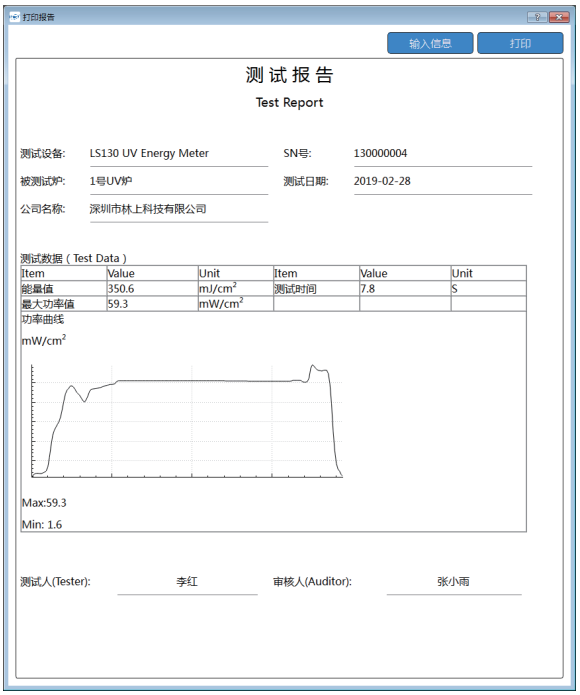
IV.PC software instruction

In the STOP interface (other interfaces cannot be connected to the PC software),plug in the USB cable, open "UV Energy meter Vx.x" software then the meter can be connected to the computer for you to read the data. The software has various functions, such as parameter configuration, data reading, UV irradiance curve , report printing and power data saving to EXCEL.



The report generation and printing function should be specially explained. For test data, the software can generate a report automatically and print, and if a PDF printer is installed, the electronic version report can be printed in PDF format. This is convenient for the recording and archiving of test data.

Record data can be read by connecting USB cable with computer directly (when the meter is connected to the computer USB port for the first time, the computer needs to be restarted so as to load the driver automatically). Currently, the software supports Windows operating system.



V.Characteristics of Meter

1. It is the real smart UV energy meter with a large LCD to display.
2. It is equipped with a USB port, and the detailed record data can be read through pc software, generating data curve and print out test reports.
3. Equipped with metal shell, high temperature resistant design can operate at 100°C for long time.
4. Equipped with large-capacity memory, which can record up to 60,000 pieces of power data.
5. The stored data will not be lost when the power is off and the last test data will be displayed automatically when power is on; the test data can only be deleted manually.
6. It is with high accuracy, and has passed many tests of authoritative testing organizations and got certificates.
7. It is with a built-in timer, and can record the UV curing time accurately.

VI.Precautions

1. The meter sensor needs to be facing towards the UV light source.
2. When not in use, please turn off the meter.
3. Avoid contact with corrosive materials and keep away from high humidity.
4. Please put it in the plastic case after power-off and keep properly.
5. The suggested calibrating period is one year, and our company has the standard light source and provides calibration service. (The previous calibration time “Cal date: year/month/day” will be displayed on the boot screen.)
6. For the UV sensor is very sensitive to humidity, the storage environment is very important. For long time storage, please be sure to keep the meter in dry environment.

VII.Standard packing list

No.	Description	Quantity	Unit
1	LS130 UV Energy Meter	1	pcs
2	USB cable	1	pcs
3	Software USB flash disk	1	pcs
4	AAA battery	4	pcs
5	Small cross screwdriver	1	pcs
6	User Manual	1	pcs
7	Certificate/Warranty card	1	pcs
8	Plastic Case	1	pcs

VIII.Service

1. The meter has one-year warranty. If the meter works abnormally, please send the whole set of meter 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.