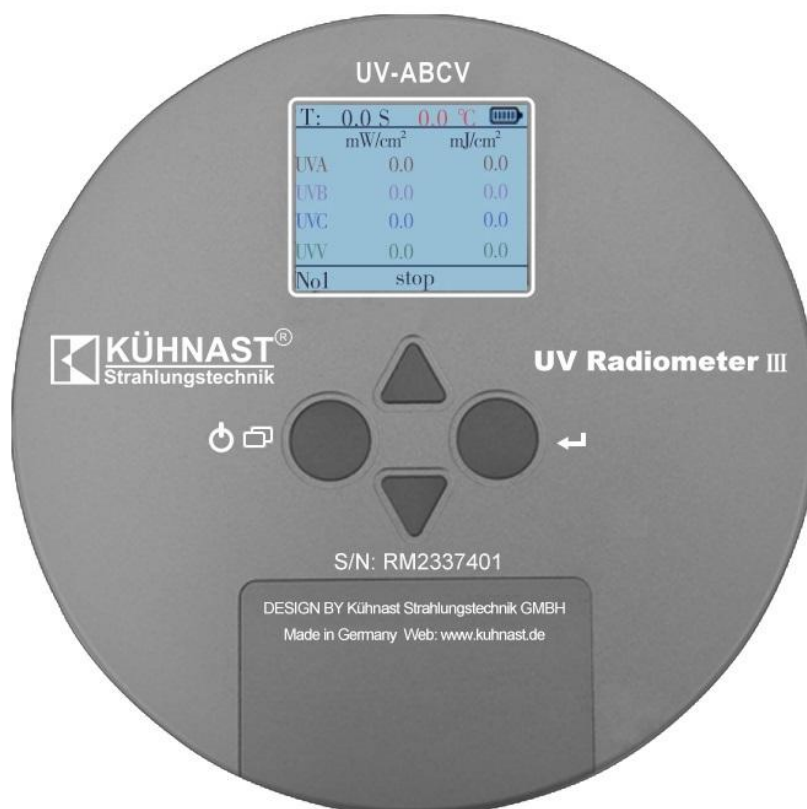


## UV-ABCV UV-Radiometer III



### KÜHNAST UV-ABCV Four Channel Multifunctional UV Radiometer III

## operation instructions

### overview

The new UV radiometer developed by Kuhnast is a monitoring device for ultraviolet light sources, observing whether the corresponding wavelength of the ultraviolet light source has reached its effective light intensity. Using precision components, color LCD display screens, and multiple selection modes, it solves various scenarios and needs of users. At the same time, PC communication software is also used to read data records and analyze curves, import and export them for process validation.

UV-ABCV four channel multifunctional irradiator is a multi-channel tester that can simultaneously test UV energy, power, temperature, and time in the UVA, UVB, UVC, and UVV bands. It has spectral curve display, can be connected to a computer to export data and print test reports.

It can be used to detect the UV energy and temperature of the UV curing device on the conveyor belt of the production line, and to detect whether the UV light intensity has decayed. It is applied to machine equipment such as UV dryers, curing machines, UV aging test boxes, etc.

### parameter

Spectral range: UVA (320-390nm), UVB (280-320nm), UVC (250-260nm), UVV (395-445nm)

Test range: 0.1-20000mw/cm<sup>2</sup> 0.1-999999mj/cm<sup>2</sup>

Temperature limit: -55-125 °C

Resolution: 0.1mw/cm<sup>2</sup> 0.1mj/cm<sup>2</sup>

Test error: ± (5+5% H) H represents the measured value

Storage interval: Power storage interval 0.1S/time Temperature storage interval 0.1S/time

Temperature error: -10 °C~85 °C: ± 0.5 °C - 55 °C~-10 °C: ± 1 °C; 85 °C~125 °C: ± 1 °C

Data storage: 5 sets of data, with a total duration of 15 minutes

Measurement mode: automatic measurement mode, manual measurement mode

Data transmission: Yes

Analysis software: Yes

Print report: Yes

Sampling speed: 0.01 seconds/time

Unit switching: mw/cm<sup>2</sup> W/cm<sup>2</sup> W/m<sup>2</sup>

Screen: Color LCD screen

Power supply: 2 No. 7 alkaline batteries

Instrument size: circular diameter 120mm \* height 13mm

Instrument weight: Net weight: 180g















Packaging weight: 1200g

Outer box size: 240mm \* 205mm \* 80mm

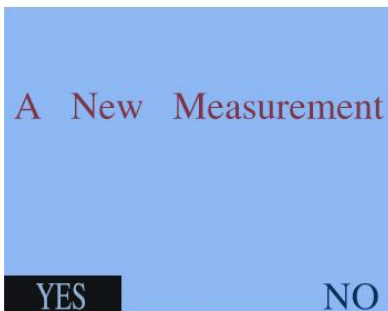
## Product Features

- ★ Intelligent UV energy radiation recorder, automatic identification of testing wavelength range, simultaneous measurement of four channels
- ★ Color screen displays UV energy, UV light power, temperature, and test duration
- ★ USB interface data transmission, connected to computer software to read recorded data, perform data analysis, and export test reports
- ★ High precision temperature sensor, fast and real-time response to test temperature
- ★ Large capacity data storage, manual mode can store 5 sets of 3-minute data sets cyclically, and automatic mode can store continuously for 15 minutes
- ★ The stored data will not be lost after power failure, and the system will automatically ask whether to delete the previous data upon startup

## Operation

- 1、  Turn on, select measurement mode, press instrument up  downward Select   
Manual, Auto,  confirm。
- 2、 After determining the measurement mode,  、  Select whether to clear data records, select YES to enter a new test, and the instrument will automatically delete all previous data; Select NO to keep the previous test data. After selecting, press OK 
- 3、  Start testing, "running" appears in the testing status, data testing is in progress, press the selection key again to stop testing  , The instrument shows 'stop '. Automatically display recorded data.
- 4、 Short press the page turning button 
  - 4.1 Temperature curve and radiation intensity curve interface
  - 4.2 By setting the interface  、  Set instrument parameters,  confirm。  
Triger: Trigger value (automatic mode) Unit Set: Unit Settings  
UVA Curve: UVA curve; UVB Curve: UVB curve; UVC Curve: UVC curve;  
UVV Curve: UVV curve; TEMP Curve: temperature curve
- 5、  Long press to shut down。

## Introduction to the operation interface



Do you want to conduct a new test?

YES ( Delete all previously stored data )

NO ( Do not delete all previously stored data )

T:	6.7S	27.1°C	
	mW/cm <sup>2</sup>	mJ/cm <sup>2</sup>	
UVA	235.4	380	
UVB	5.3	8.8	
UVC	0.0	0.0	
UVV	81.7	102.9	
NO1	running		

Instrument testing interface

T: 6.7S test duration

Temperature: Real time variation value

Irradiation intensity: current value

Energy value: cumulative value

T:	6.7S	27.1°C	
	mW/cm <sup>2</sup>	mJ/cm <sup>2</sup>	
UVA	235.4	380	
UVB	5.3	8.8	
UVC	0.0	0.0	
UVV	81.7	102.9	
NO1	stop		

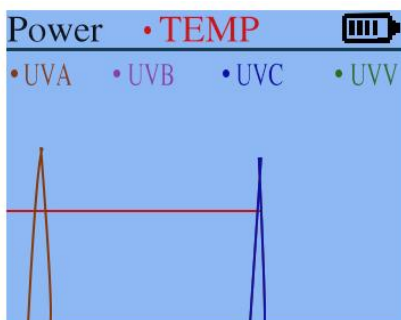
Stop testing interface

T: 6.7S total test duration

Temperature: maximum temperature value

Irradiation intensity: maximum value

Energy value: cumulative value



Test curve interface

(Up and down keys activate/move cursor/change trigger value, select and switch)

SET	
Triger :	1.0 mW/cm <sup>2</sup>
Unit Set :	mW/cm <sup>2</sup>
<input type="checkbox"/> UVA	Curve
<input type="checkbox"/> UVB	Curve
<input type="checkbox"/> UVC	Curve
<input type="checkbox"/> UVV	Curve
<input type="checkbox"/> TEMP	Curve

Setting interface

## Matters needing attention

1. The UV-ABCV UV energy irradiation recorder uses two No. 7 alkaline batteries. After opening the battery cover, install the battery according to the positive and negative pole markings (see inside the battery box). Please do not install it upside down. When the battery on the instrument display screen is low, the battery should be replaced in a timely manner.
2. This instrument belongs to optical precision instruments and should avoid severe impacts. And try to use it in a dry and clean environment as much as possible; When not in use, please place the detection window facing downwards to avoid contamination of the sensing window glass; After the measurement is completed, please be sure to turn off the power and place the instrument in a clean place inside the instrument box for the next measurement.
3. If not in use for a long time, please remove the battery to prevent it from rotting and damaging the machine.
4. Do not wipe the sensing window glass with your hands, keep the sensing window clean.
5. To ensure the consistency of instrument data, instrument data calibration can only be carried out through the manufacturer's calibration software debugging, and customers cannot debug the data themselves.

## Software operation

By installing software on a USB drive, data analysis, importing and exporting data, and printing test reports can be performed

