Spectrum Transmission Meter

Code: 86183

User Manual V5.12

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

I. Product Introduction

The instrument is able to simultaneously measure and display UV, VL and IR transmission values. This meter is self-contained light sources and self-calibration. No adjustment is needed. The users only need plug the power supply, turn on the switch and put the sample in the opening. The resulting performance data appear on the display.

Standards for the product

JJF 1225-2009 Calibration Specification for Transmittance Meter of Automobile

JJG 178-2007 Ultraviolet,Visible,Near-Infrared Spectrophotometers

GB/T 5137.2-2020 Test methods of safety glazing materials used on road vehicles—Part 2:Optical properties tests

GB/T 21300-2007 Plastics pipes and fittings - Determination of opacity

GB/T 2680-2021 Glass in building—Determination of light transmittance, solar direct transmittance, total solar energy transmittance, ultraviolet transmittance and related glazing factors
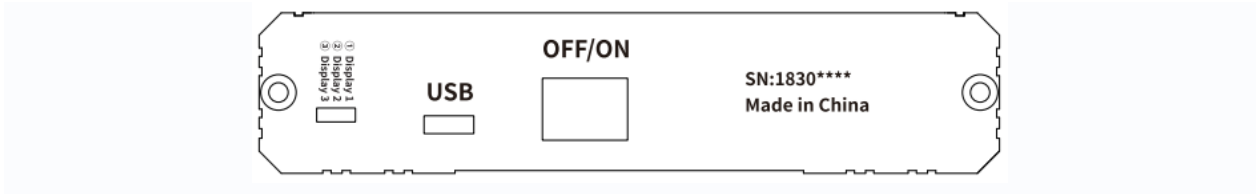
II. Parameter

1. Size: 216mm *134mm *29mm (L*H*W)

2. Testing opening: Wide 47mm * Height 91mm

3. Weigh: 590g

4. Sample thickness: < 47mm

5. Resolution: 0.1%

6. Accuracy: ±2%(Colorless and transparent material)

7. UV peak wavelength: 365nm

8. VL wavelength: 380nm - 760nm,conforming to the CIE photopic luminosity function

9. IR Peak wavelength : 940nm

10. Supply Voltage：DC5V

11. Operating Current：0.4A

12. Operating Power Consumption：2W

III. Structure

- "OFF/ON", Power Switch.

- "USB", the type-C power socket.

- "Display1, Display2, Display3", dial switch for three different display interfaces.

IV. Meter Operation
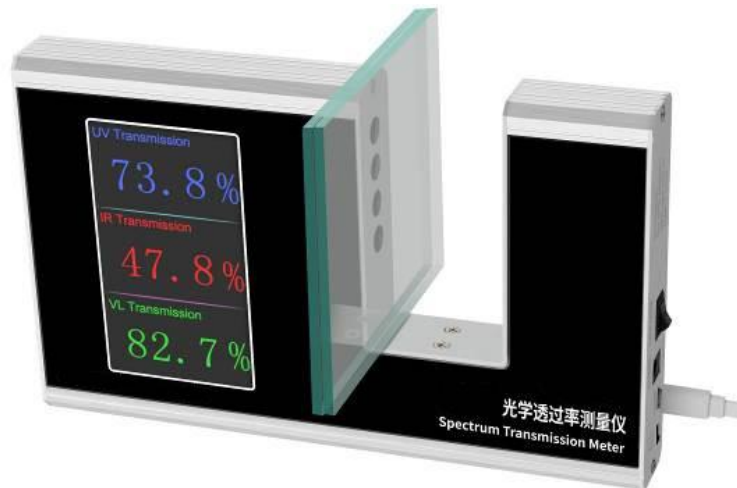
1. Power on self-test

Plug the power supply, keep the testing opening empty, turn on the switch, wait for the meter to self-test, when the self-test is successful, three "100%" will show on the LCD. If self-test failed, the following reasons for failed "Self-test":

a) Testing sample in the testing opening during Meter powering on.

b) Ambient Light too strong.

c) Too much dust in the testing hole, please clean the dust with air duster gun.

d) Equipment damage, need to send back to the factory repair.

2. Measurement

Place sample into the testing opening to measure the performance characteristics. Refer to the following picture demonstrations.

V. Feature

1. UV transmission meter, IR transmission meter, light transmittance meter. Three function in ONE device.

2. Self-calibration and auto-calibration, NO need any manual adjustments.

3. Simple operation, putting the testing sample in the opening, UV, VL and IR transmission values of the sample will simultaneously display.

VI. Packing list

No.	Description	Quantity	Unit
1	Spectrum Transmission Meter	1	pcs
2	DC5V Adapter	1	pcs
3	User Manual	1	pcs
4	Certificate / warranty card	1	pcs

VII. Service

1. The meter has one-year warranty. If the meter works abnormally, please send the whole meter to the company for maintenance.

2. Provide users with spare parts and lifelong maintenance services.

3. Provide the users with the meter inspection service for free.

4. Free technical support for long term.