

# Transmission Meter

Code: 86162/86162A

User Manual V5.05

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

**Note:** IR Peak wavelength: 86162 is 940nm, 86162A is 1400nm

## I. Product Introduction

The instrument is able to simultaneously measure and display UV, IR rejection value and visible light transmission value. This meter is self-contained light sources and self-calibration. No manual adjustment is needed. The users only need power on the meter and put the testing 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*

*GB/T 31849-2015 Film mounted motor vehicle glass*

*GA/T 744-2013 Automotive solar control window films*

## II. Parameters

1. Size: 120mm \*75mm \*25mm (L\*W\*H)
2. Weigh: 165g
3. Thickness of testing sample: < 8mm
4. Resolution: 0.1%
5. Accuracy: ±2%
6. VL wavelength: 380nm-760nm, CIE function of photopic vision
7. UV Peak wavelength: 365nm
8. Display: Segment LCD
9. IR Peak wavelength: 940nm / 1400nm
10. Power Supply: 4\*AAA alkaline battery
11. Supply Voltage: DC5V
12. Operating Current: 10mA
13. Operating Power Consumption: 50mW

### III. Operation

#### 1. Power on

When the meter is off, press the “ON/Hold” button.

#### 2. Power off

Press “ON/Hold” button and hold for longer than 3 seconds, the meter will be powered off.

#### 3. Auto off

No button is pressed in 3 minutes, and then the meter will power off automatically.

#### 4. Manual hold

If “ON/Hold” button is short pressed during measure status, transmission value will hold on the LCD, “HOLD” symbol is displayed on the LCD. Press the “ON/Hold” button again will release the “Hold” mode.

#### 5. Measurement

When UVR (Ultraviolet Rejection) and IRR (Infrared Rejection) display 0.0 and VLT (Visible light transmission) display 100, insert the testing sample in the “OPENING”, VLT, UVR and IRR value will display simultaneously.

### IV. Feature

1. UV rejection meter, IR rejection meter, light transmittance meter. Three function in ONE device.
2. Small size, portable product for transmission value measurement.
3. Test any sample thickness up to 8mm.

### V. Notes

1. When battery symbol is empty and flash, please replace the battery.
2. When not use for a long time (e.g. several months), please take the battery out.
3. Keep the “OPENING” is empty before turning on the meter. Otherwise the meter will display “E” interface or testing interface, empty the “OPENING”, turn off and turn on again.
4.  $\pm 2\%$  Accuracy is for colorless and transparent material, for colorful or optical coating product etc, it will be low accuracy.
5. Avoid contact with corrosive agents and prevent from high temperature and high humidity environment.

## VI. Standard packing list

No.	Description	Quantity	Unit
1	Transmission Meter	1	pcs
2	User Manual	1	pcs
3	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.