

# Optical Density Meter

- ☐ AT-175D3
- ☐ AT-175D4
- ☐ AT-175D5
- ☐ AT-175D6

when you buy this instrument, you are marking a step forward in the field of precision measurement. The Table System is a computer @-@ based testing tool that can be used for many years if operated properly. Before use, read this instruction carefully and keep it in a place that is easily accessible.

## 1. Product APPLICATION

A photodensitometer is primarily used to measure the optical density and transmittance values of materials, and is mainly applicable to the measurement of the following three major categories of materials:  
\*transmittance of various diffuse radiation materials, such as white, frosted, and frosted-grain surfaces  
\* Absolute optical density measurement of materials such as X-ray films and aluminum films  
\*absolute LIGHT DENSITY, RELATIVE LIGHT DENSITY, AND NET AREA RATES OF THE DIFFERENT FILM TYPES

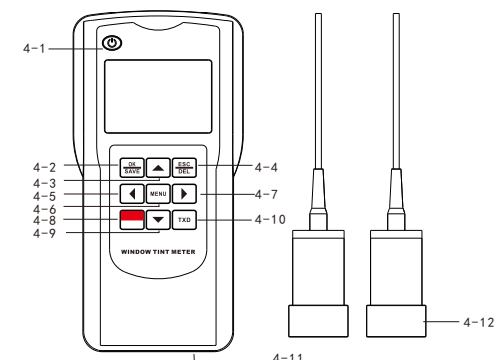
## 2. Product FEATURES

- 1) The design of the transillumination pathway was adopted to meet the testing requirements of the fog-like material.
- 2) the fixation and support were matched, and two methods of measurement were used.
- 3) Measurable transmittance, absolute optical density, relative optical density, and area ratio of mesh points.
- 4) Applicable to light density and transmittance measurement tests for film, patterned glass, frosted glass, ceiling lamp covers, and coated materials.
- 5) Applicable to various scenarios including production, quality inspection, and cargo verification.

## 3. Product Parameter

1. Accuracy of transmittance measurement:  $\pm 1\%$  (1% -1 0 0%)
2. Optical density measurement range: D3: 0.0 0 -3.0 0  
D4: 0. 00 - 4. 00  
D5: 0. 00 - 5. 00  
D6: 0. 00 - 6. 00
3. range of net area rate measurements: 0-10 0%
4. Optical density resolution: 0.0 1 OD
5. Measurement accuracy:  $\pm 0.0 2$
6. transmittance / point area discrimination rate:  
D 3: 0. 01  
D 4: 0. 01  
D 5: 0. 001  
D 6: 0. 0001
7. Pore size: 5 mm
8. Light source: LED light source (D 6 5)
9. Instrument weight: approximately 975 grams (including battery and fixed bracket)
10. Power Supply: 4 x 1.5 AAA batteries  
Transducer:  $\Phi 37\text{mm} \times 136\text{mm}$
11. Instrument dimensions: Main unit:  $70 \times 140 \times 30\text{mm}$

## 4. KEYS



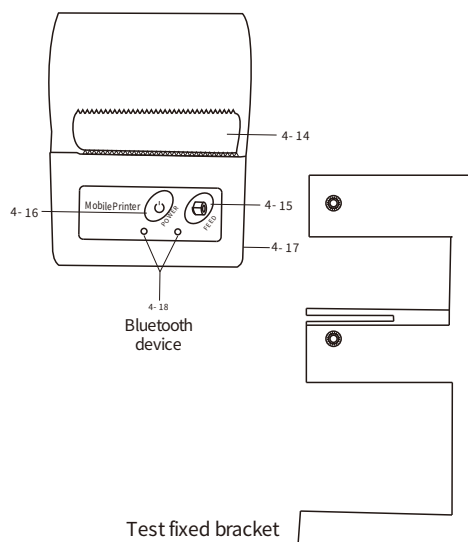
- |                            |                               |
|----------------------------|-------------------------------|
| 4-1: Power button          | 4-2: Confirm/Save Key         |
| 4-3: Up Key/Display Switch | 4-4: Delete/Exit key          |
| 4-5: Left button           | 4-6: Menu keys                |
| 4-7: Right-click           | 4-8: Power button             |
| 4-9: Press/Show toggle     | 4-10: Data Transfer/Print Key |
| 4-11: 232 ports            | 4-12: Probe                   |

## 5. Accessories

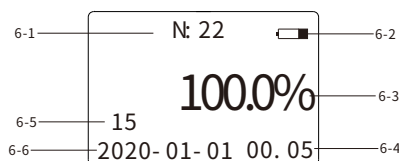
Package: Host computer \*1, Packaging box \*1, Instruction manual \*1

Optional: RS-232, Bluetooth, Bluetooth printer, test fixed bracket

## 6. Panel Description



- |                              |                      |
|------------------------------|----------------------|
| 4-14: Thermal Printing Paper | 4-15: Print key      |
| 4-16: Power button           | 4-17: USB power port |
| 4-18: Indicator light        |                      |



- |                              |                     |
|------------------------------|---------------------|
| 6-1: Number of storage units | 6-2: Battery Symbol |
| 6-3: Measurement Data        | 6-4: Clock          |
| 6-5: Save data volume        | 6-6: Date           |

## 7. Operation Instructions

- 7-1: Menu key

press Press the menu key to access the calibration/set function. 7-1.1 Date setting Adjust date

### 7-1.2 Set shutdown time

Use the up/down keys to adjust the automatic shutdown time. "0" means no shutdown. calibration zero.

### 7-1.3 Zero Calibration

Cover the sensor, press the OK key and wait until the progress bar reaches 100%. Long-press the OK key for 2 seconds to save.

### 7-1.4: Schooling

Align the sensor, press OK to wait until the progress bar reaches 100%, then hold OK for 2 seconds to save.

### 7-1.5: Reading Mode

Press and hold the up/down keys to enter reading mode. Press the up/down keys to view stored data. Press the DEL key to delete the current data.

7-2: Bluetooth connection (not supported on non-printing models)

Turn on the Bluetooth printer and hold it down /

Press the Bluetooth on/off button and check the indicator light on the Bluetooth printer

## 8. Bluetooth Printer

1. Press and hold the key; the green light flashes with one beep to power on. Press and hold the key; two beeps sound and the light turns off to power off.
2. Long press The key is the thermal paper. The key light is always on.
3. Open the lid to replace the thermal paper.

## 9. Precautions

1. Pay attention to the polarity of the battery and use alkaline batteries.
2. Do not mix new and old batteries or batteries of different brands.
3. If the meter is not in use for 7 days, remove the battery to prevent discharge and subsequent leakage.
4. Battery leakage causing instrument damage is not covered by the warranty.
5. Insufficient battery power to configure Bluetooth printer connection.
6. If a Bluetooth printer is not used for a long time, it must be charged every 3 months.