

Optical Density Meter

DB22-TM271D

When you buy this instrument, you are taking a step forward in the field of precision measurement. The table is a computer as the core of the test tool, if the operation technique is correct, its robustness can be used for many years. Please read this manual carefully before use and keep it in an easily accessible place

1. Product application

Optical densitometer is mainly used to measure the optical density and transmittance values of materials, mainly applicable to the measurement of the following three categories of materials:

* Light transmittance of various diffuse transmission materials such as opal, fog, frosted surface

* Absolute optical density measurement of X-ray film, aluminum film and other materials

* Measurement of absolute optical density, relative optical density and dot area rate of various film films

2. Product features

1) The diffuse transmission light path is designed to meet the test requirements of fog materials.

2). Equipped with a fixed base and support, with two measurement methods.

3). Can measure light transmittance,

absolute light density, relative light density, dot area rate.

4). Suitable for film, patterned glass, mist glass, ceiling lamp cover, coating materials and other optical density and transmittance test.

5). Suitable for production, quality inspection, inspection and other occasions.

3. Product parameters

1. Transmittance measurement

accuracy : $\pm 2\%$ (1% -- 100%)

2. Optical density measurement range: 0.00OD-6.00OD

3. Dot area rate measurement range: 0-- 100%

4. Optical density resolution: 0.01OD

5. Measurement accuracy :

± 0.02 (0 -- 2.00OD)

$\pm 2\%$ (2.00 -- 6.00 OD)

6. Transmittance resolution: 0.1

7. Optical hole size: 5mm

8. Light source: compliant with ANSI/ISO visual standards

9. Weight: about 985 grams (including battery and fixed support)

10. Power supply: 4*1.5AAA alkaline dry battery

11. Dimensions of the instrument:

host: 140*76*32mm

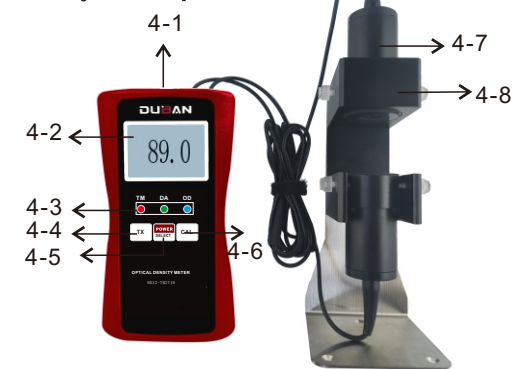
Sensor: 125* $\phi 38$

12: Standard: Host *1 Fixed support

*1 Manual *1 Packaging box *1

13: Optional: RS-232 wire, Bluetooth, Bluetooth printer

4. Key description



4-1: indicates the RS-232 interface

4-2: Display screen

4-3: indicator light

(Red: transmittance

Green: Optical density

Blue: dot area rate)

4-4: Data transfer key

4-5: Enable the key/Select key

4-6: Calibration key

4-7: Sensor

4-8: Fix the support

5. Operation instructions

1) Prepare the instrument, gently press the power button , turn on the power supply of the whole machine, the instrument automatically enters the measurement state, place the measured object in the probe, select the corresponding unit indicator light under the alignment state of the light source probe and the receiving probe can be measured directly.

2.) Zero calibration:

Press the measuring probe against a flat, opaque object Press the CAL key, the instrument will display as zero, and the calibration is complete. When correcting zero, the probe should avoid the entry of light, so as not to cause zero error.

5.2 Check the full degree

2.2-1 When the instrument is turned on, align the measuring head of the instrument, and after fitting tightly, tap

CAL to complete the calibration. Note:

Do not place anything in the middle of the card slot during measurement.

2.2-2 In order to ensure the accuracy of the full degree, it can be verified by measuring the same standard diaphragm multiple times.

6. Replace the battery

6.1 When the battery voltage is about 5V, the display will appear Battery symbol: The battery needs to be replaced.

6.2 Open the battery cover and take out the battery.

6.3 Install the battery correctly according to the label on the battery box.

6.4 If the device is not used for a long period of time Watch, please take out the battery to prevent the battery from rotting and damaging the meter.

7. Connect to a computer

With optional USB cable, Bluetooth adapter and software, it can communicate with PC computers to achieve data collection, processing, analysis and printing functions. For details, see the online instructions.