

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
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[Http://www.100y.com.tw](http://www.100y.com.tw)

TENMARS

LUX / FC LIGHT METER



TM-201
TM-202
TM-204
TM-205



User's manual

HB2TM2010010

1. DESCRIPTION

Measures light from visible luminaries equipped with fluorescent, metal halide, high-pressure sodium and incandescent sources.

2. SAFETY PRECAUTION



CAUTION

Take extreme care for the following conditions while measuring

- Do not operate the meter under the environment with explosive gas (material), combustible gas (material) steam or filled with dust.
- In order to avoid reading incorrect data, please replace the battery immediately when the symbol "⎓" appears on the LCD.
- In order to avoid the damage caused by contamination or static electricity, do not touch the circuit board before you take any adequate action.
- Operating Environment: Indoors use. This instrument has been designed for being used in an environment of pollution degree 2.
- Operation Altitude: Up to 2000M.
- Operating Temperature & Humidity: $-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$, 0%~ 80%RH.
- Storage Temperature & Humidity: $-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$, 0%~ 70%RH.
- EMC:EN61326(1997)+A1(1998)+A2(2001)

3. PREFACE

The flux of light received in a unit area of a certain side being shone is popularly known as illumination. In both United Kingdom and America its unit is known as footcandles light, but in Europe it is known as meter candlelight.

One foot-candles light is the illumination of light that falls on one side that lies in a distance one foot away from a one foot-candlelight and exactly intersecting the light. Its abbreviated form is written as $1 \text{ Fc} = 1 \text{ Lm/ft}$, similarly, one-meter candlelight is the illumination of light that falls on a side that lies in a distance one meter away from a one meter candlelight and exactly intersects the light. It is also called Lux i.e. the flux of light being received in each sq. meter is called the illumination of one lumen.

As one foot candle = 10.764 Lux, therefore, Nbr. of foot (meter) candlelight =

Nbr. of Lumen

Area(sq. foot or sq. meter)

Nbr. of Lumen = Nbr. of foot (or meter) x area

Foot-candle/Lux conversion

1 foot-candle = 10.764 lux

1 lux = 0.09290 foot-candles

(sq. foot or sq. meter)

4. FEATURES

- Low cost highest precision.
- Overload Indication: LCD will show "OL" in the left highest position.
- Low battery Indication.
- Sampling Rate: 2.5 times per second for digital display.
- Spectral response close to CIE luminous spectral efficiency.
- Cosine Angular corrected.
- According to JIS C 1609:1993 and CNS 5119 general A class Specifications.
- Measuring lights source include all visible.
- Measuring intensities of illumination in Lux or footcandles.
- Many applications include: Warehouses, factories, office buildings, restaurants, schools, library, hospitals, photographic, many video, parking garages, museums, art galleries, stadiums, building security.
- DC analog output (TM-202).
- Data hold.
- Zero adjustment.
- Large integrated circuit design.
- Auto Range (TM-205)

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5. SPECIFICATIONS

Display	2000 count, large LCD display, easier to read.	
Sensor	Silicon photodiode and filter	
Measuring Range	20(TM-202/205),200,2000, 20000,200000 Lux 20,200,2000,20000 Footcandles	
Accuracy	± 3 % (Calibrated to standard incandescent lamp 2856° K) 8% other visible light source, (TM-201/204) 6% other visible light source, (TM-202/205)	
Angle deviation from cosine characteristics	30 °	± 2 %
	60 °	± 6 %
	80 °	± 25 %
Power Supply	9V NEDA 1604, IEC 6F22, JIS 006P battery x 1pc	
Battery life	About 200 hours	
Dimensions	Meter: 38 (H) x 55(W) x 130(L) mm(TM-201/202) 1.5(H)x 2.2(W) x 5.1(L) inch(TM-201/202) 38 (H) x 55(W) x 172(L) mm(TM-204/205) 1.5(H)x 2.2(W) x 6.8(L) inch(TM-204/205) Sensor: 25(H) x 55(W) x 80(L) mm(TM-201/202) 9.8(H)x 2.2(W) x 3.1(L) inch(TM-201/202)	
Weight	250 g (include battery)	
Accessories	User's manual,carrying case,9V battery,3 ϕ plug (TM-202)	
Length of wiring for light sensor:Approx. 1.5M (TM-201/202)		