HT307 - HT309 - HT204
LUXMETERS AND POTABLE SOLAR POWER METERS

HT307 and HT309 are digital luxmeters to measure lighting up to 20kLux *(HT307)* and 400kLux *(HT309)* through silicon photodiode. HT309 permits also lighting measurement of LED sources with several colours setting the corresponding correction factors. HT204 is a digital solar meter to measure solar radiation up to 2000W/m² very useful in industrial photovoltaic installations for the evaluation of solar power incidence on panels.

FUNCTIONS	HT307	HT309
Measurement range (Lux/Fc)	0.01 ÷ 200kLux 0.01 ÷ 20kFc	0.01 ÷ 400kLux 0.01 ÷ 40kFc
Lighting measurement (Cd)		•
Lighting measurement of LED sources		•
Accuracy	±3%rdg	
Zeroing	Manual with trimmer	Digital
Autorange		•
Spectral response correction	•	•
Data HOLD, MAX/MIN	•	•(even AVG)
Internal memory		•
DC analogical output	•	
Auto Power OFF		•
Reference standards	Class A JIS C 1609:1993	Class A JIS C 1609:1993 + CNS 5119

FUNCTIONS	HT204
Measurement range	1 ÷ 1999 W/m² 1 ÷ 634 BTU/(ft² * h)
Resolution	1W/m² 1BTU/(ft²*h)
Accuracy	10 W/m² or 5% (whichever is the greater) 1 BTU/(ft² * h) or 5% (whichever is the greater)
Unit of measurement	W/m² and BTU/(ft²*h)
Zeroing	Manual with trimmer
Unit of measurement	W/m² and BTU/(ft² * h)
Manual range	•
Data HOLD, MAX/MIN	•

ACCESSORIES HT307-HT309
Standard
Jack for DC analogical output connection *(HT307 only)*
Trimmer adjustment screwdriver *(HT307 only)*
Carrying bag
Test certificate
Battery
User manual

ACCESSORIES HT204
Standard
Carrying bag
CE conformity declaration
Battery
User manual

1. TECHNICAL SPECIFICATIONS

Accuracy is indicated as [% rdg]. It is referred to the following reference conditions: 23°C ± 5°C with RH < 70%. The luxmeter is calibrated with standard incandescent lamp at color temperature 2856 K.

Measuring range and accuracy

Range (Lux)	20	200	2k	20k	200k
Resolution (Lux)	0.01	0.1	1	10	100
Accuracy	± (3% rdg)				

Range (fc)	20	200	2k	20k
Resolution (fc)	0.01	0.1	1	10
Accuracy	± (3% rdg)			

- 1fc=10.76Lux, 1Klux=1000Lux, 1Kfc=1000fc.
- For temperature/color different form reference, accuracy its 6%rdg

Specifications

Spectral response: CIE Photopic. (CIE human eye response curve).
Accuracy on angular deviation from cosine curve: 30° (± 2%)
60° (± 6%)
80° (± 25%)

DC Analogical output specifications

Range lux/fc	20	200	2k	20k	200k
DC Output (mV)	10	1	0.1	0.01	0.001

Spectral sensitivity

The photodiode with filters makes the spectral sensitivity almost meet the CIE photo-optic curve V(λ) as shown below.

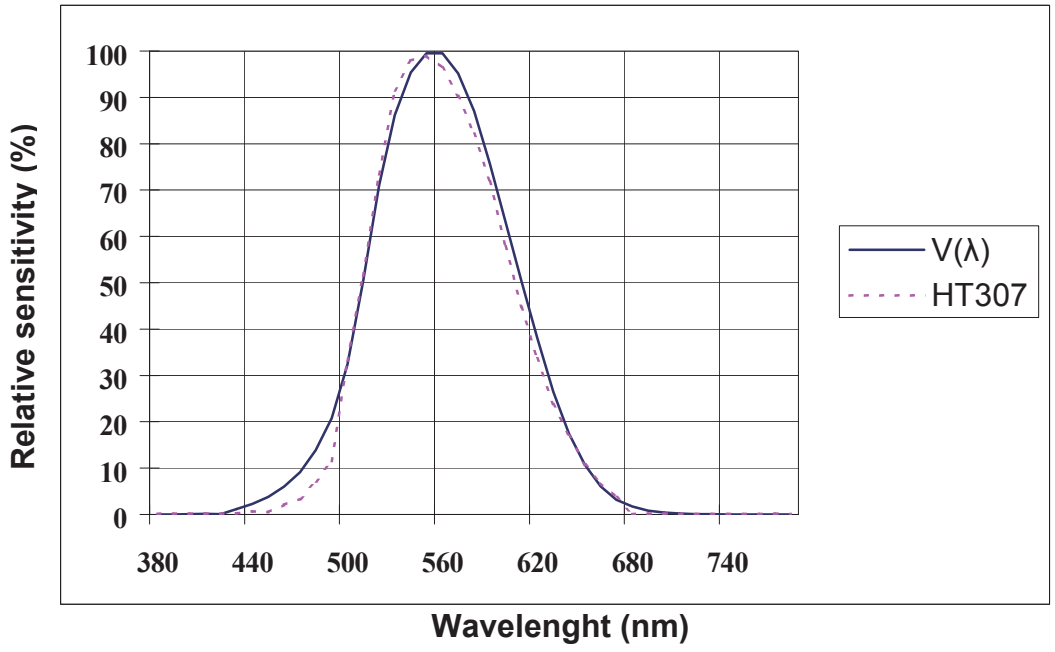

Photo detector

The photo detector is a silicon photodiode with spectral response filter.

2. GENERAL SPECIFICATIONS

Mechanical characteristics

Size:	172(L) x 55(W) x 38(H)mm
Weight (including battery):	about 250g

Supply

Battery type:	1 battery 9V type 6LR61
Low battery indication:	"🔋" is displayed when the battery level is too low.
Battery life:	About 200 hours (carbon zinc.).

Display

Characteristics:	5 digit LCD with “OL” indication.
Sample rate:	2.5 times/sec

Standards considered

Refer standard:	measure according to JIS C 1609:1993 and CNS 5119 general Class A specification

ENVIRONMENTAL CONDITIONS

Climatic conditions

Reference temperature:	23° ± 5°C
Operating temperature:	-10 ÷ 40 °C
Operating humidity:	<80% RH
Storage temperature:	-10 ÷ 50 °C
Storage humidity:	<70% RH
Internal use:	max. 2000m
Pollution degree:	2