

# Digital Light Meter With RS-232 Capability



## Features

- Microprocessor circuit ensure high accuracy
- Super large LCD display with contrast adjustment for best viewing angle
- Dual function display
- Heavy duty & compact case
- Records Maximum, Minimum and average readings
- Data hold
- Auto power off
- Operates from 9V battery
- RS 232 PC serial interface.
- Spectrum of photo sensor meets C.I.E.
- Wide range measurement both for LUX & Foot candle units
- Relative % light measurement
- User selectable lighting type (Tungsten, Fluorescent, Sodium or Mercury)
- Zero adjustment by push bottom

## General Specifications:

Circuit	Custom one-chip microprocessor LSI circuit	
Display	13mm (0.5") Super large LCD	
	Dual function display	
Lighting Type Selection	Daylight, Tungsten, Fluorescent and Mercury lamp	
Measurement & ranges	LUX	0 - 50,000 LUX, 3 ranges
	Foot-candle	0 - 5,000 Ft-cd, 3 ranges
	Relativity	0 to 1,999% (Relative to the range selected and the measured value)
Sensor	Exclusive photo diode & colour correction filter, spectrum designed to meet C.I.E.	
Memory Recall	Records Maximum, Minimum and Average readings with RECALL facility.	
Sample Time	Approx. 0.4sec.	
Zero Adjust	By push button	
Power off	Manual off by push button, or Auto shut off after 10 minutes.	
Data Output	RS 232 PC serial interface.	
Over Load Indication	"- - -"	
Operating Temperature	0°C to +50°C (+32°F to +122°F)	
Operating Humidity	Max. 80% RH.	
Power Supply	DC 9V battery (heavy duty) or equivalent.	
Power Current	Approx. DC 5.3mA.	
Weight	335g / 0.77LB (included batteries)	
Size	Main instrument: 185mm × 78mm × 38mm ( 7.3 inch × 3.1 inch × 1.5 inch)	
	Sensor probe: 85mm × 55mm × 12mm (3.2 inch × 2.2 inch × 0.5 inch).	
Accessories Included	Instruction manual. Sensor with protective cover.	
Optional Accessories	Software (Windows version), 72-6701A RS232 cable, 72-6702	



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## Electrical Specifications (23°C ±5°)

Measurement	Range	Max. In-range Display
LUX	2,000 Lux	0 - 1,999 Lux
	20,000 Lux	1,800 - 19,990 Lux
	50,000 Lux	18,000 - 50,000 Lux
Foot-candle	200 Ft-cd	0 - 186 Ft-cd
	2,000 Ft-cd	167 - 1,860 Ft-cd
	5,000 Ft-cd	1,670 - 5,000 Ft-cd

Range	Resolution	Accuracy
2,000 Lux	1 Lux	±(4% +2 dgt)
20,000 Lux	10 Lux	
50,000 Lux	100 Lux	
200 Ft-cd	0.1 Ft-cd	
2,000 Ft-cd	1 Ft-cd	
5,000 Ft-cd	10 Ft-cd	
Note : Accuracy tested by a standard parallel light tungsten lamp of 2,856K temperature.		

## RS232 PC Interface

The instrument features an RS232 output via 3.5mm Terminal (3-15).

The connector output is a 16 digit data stream which can be utilized to the user's specific application.

An RS232 lead with the following connection will be required to link the instrument with the PC serial input.

Optional Accessories	Software (Windows version), 72-6701A RS232 cable, 72-6702
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Meter (3.5mm jack plug)	PC (9W 'D' Connector)
Centre Pin	Pin 2
Ground/shield	Pin 5

The 16 digit data stream will be displayed in the following format:

D15	D14	D13	D12	D11	D10	D9	D8	D7	D6	D5	D4	D3	D2	D1	D0
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Each digit indicate the following status

D0	End Word
D1 to D4	Upper Display reading, D1 = LSD, D4 = MSD
D5 to D8	Lower Display reading, D5 = LSD, D8 = MSD

D9	Decimal Point(DP) for Upper display. 0 - No DP, 1 = 1 DP, 2 = 2 DP, 3 = 3 DP
D10	Decimal Point(DP) for Lower display. 0 - No DP, 1 = 1 DP, 2 = 2 DP, 3 = 3 DP
D11 & D12	Anunciator for Upper Display
	15 = Lux    03 = % 16 = Ft-cd    00 = No Symbol
D13	Anunciator for Lower Display
	0 = No Symbol
D14	Reading Polarity for the Display 0 = Both upper & lower display value are "+" 1 = Upper "-", Lower "+" 2 = Upper "-", Lower "+" 3 = Both upper & lower display value are "-"
D15	Start Word

## Part Number Table

Description	Part Number
Digital Light Meter with RS-232 Capability	72-7250

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