

FEATURES

- Backlit function
- Data Hold Function
- Auto Ranging (7 step)
- Accurate and Instant response
- Max/Min/AVG function

RS PRO Light Meter, 9.999 fL, 9.999 cd/m² to 580 kfL, 1999 kcd/m², ± 3 (Calibrated to Standard Incandescent Lamp (2856 K

RS Stock No.: 146-4653



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

From the trusted RS PRO brand, this digital light meter is a high-quality solution for light measuring applications in all manner of environments. The excellent quality light sensor attaches to the digital reader by a long wire allowing you to be flexible in where you take your readings from. The digital reader has a variety of useful functions, and features a 4 digit LCD display screen meaning that measurements can be taken quickly and easily.

General Specifications

Model Number	RS - 137
Sensor Type	Photodiode
Display Type	4-Digit LCD
Data Logger Capacity	micro SD CARD 4GB
Data Memory Capacity	200 sets. (Direct reading from LCD display)
Features	User calibration factor and colour-correction functions
Temperature Characteristics	$\pm 0.1\%/^{\circ}\text{C}$
Interface	USB
Calibration Availability	Yes
Applications	lighting of streets, lighting of sports, lighting in museums

Light Measurement

Measuring Range	9.999cd/m ² to 1999Kcd/m ² / 0.001fl to 580.0kfl
Minimum Light Level	9.999cd/m ² , 9.999fl
Maximum Light Level	580kfl, 1999kcd/m ²
Accuracy	$\pm 3\% \text{rdg} \pm 5 \text{dgt}$
Resolution	0.001cd/m ² , 0.001fL
Measurement Rate	5 times per second
Measuring Angle	2°
Spectral Response	CIE photopic
Spectral Accuracy	CIE V λ function f'1 $\leq 6\%$

Electrical Specifications

Power Source	Battery
Battery Included	Yes
Battery Type	AAA
Battery life	50 Hours

Mechanical Specifications

Dimensions	150mm x 72mm x 35mm
Width	72mm
Depth	150mm
Height	35mm
Weight	235 g
Casing Material	Plastic
Photosensor Cable Length	90cm (approx.)
Photosensor Dimensions	40f × 158(L)mm

Operation Environment Specifications

Relative Humidity	<80%
Operating Temperature Range	0°C to 50°C
Storage Temperature Range	-10°C to 60°C

Approvals

Compliance/Certifications	EN 61340-5-1:2007
Declarations	RoHS Certificate of Compliance



FEATURES

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| <ul style="list-style-type: none"> ☐ Dual Display, 4-digit LCD reading ☐ Spectral Sensitivity close to CIE photopic Curve ☐ Measuring Levels Ranging 0.001 to 1999k cd/m², 0.001 to 580.0k fL, Autoranging 7 step ☐ Accurate and Instant response ☐ Luminance ratio A/B, deviation %A, different B-A and peak luminance measurements ☐ User calibration factor and color-correction functions | <ul style="list-style-type: none"> ☐ Accumulation luminance measurement ☐ Max/Min/AVG function ☐ Backlit function ☐ Comparator function ☐ Data Hold function. ☐ Data memory and read function ☐ Data logger function. ☐ USB Interface |
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APPLICATIONS

The Luminance meter is a handy, easy to use and precision measuring instrument. It allows the accurate measurement of the luminance in cd/m² or fL.

$$1 \text{ cd/m}^2 = 0.2919 \text{ fL} = 0.0929 \text{ cd/ft}^2$$

$$1 \text{ fL} = 3.426 \text{ cd/m}^2 = 0.3183 \text{ cd/ft}^2$$

$$1 \text{ cd/ft}^2 = 10.76 \text{ cd/m}^2 = 3.142 \text{ fL}$$

Contact Measurements

Placed directly on the surface to be measured:

Suitable for measuring

- monitors
- television screens
- light boxed
- light displays

Measuring at a Distance

The measuring angle being 2 degree.

Suitable for measuring

- monitors taking the existing ambient light into consideration
- lighting of streets areas
- lighting of sports areas
- lighting contrasts at work stations
- lighting in museums
- uniform illumination of projection screens