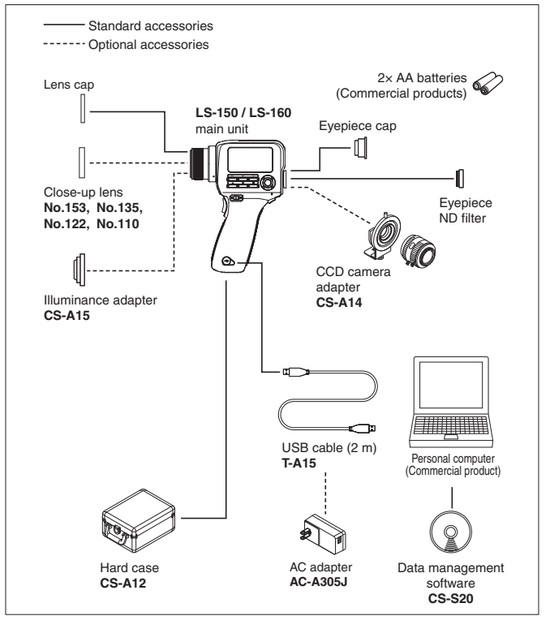
Specifi cations

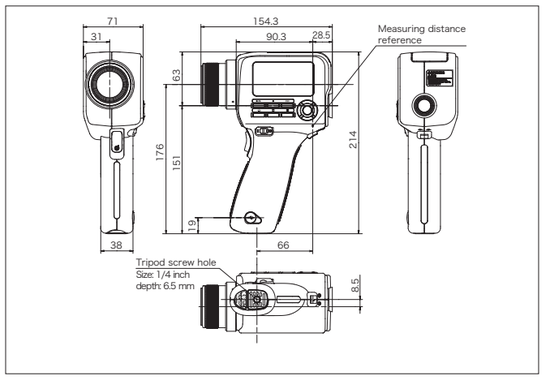
Model	LS-150	LS-160
Measuring angle	1°	1 ⁄ 3°
Optical system	SLR viewing system, f = 85 mm F2.8	
Angle of view	9° (visibility adjustment possible)	
Relative spectral responsivity	Close to standard spectral luminous efficiency (V (λ))	
Applicable standard	DIN 5032-7 Class B compliant	(N/A)
Minimum measuring area (diameter)	14.4 mm 1.3 mm (when the close-up lens is used)	4.5 mm 0.4 mm (when the close-up lens is used)
Minimum measuring distance (From the measuring distance reference)	1,012 mm 213 mm (when the close-up lens is used)	
Measurement mode	(Luminance) Instantaneous value, maximum/minimum value, luminance difference (Δ)/luminance ratio (%)	
Measurement time	AUTO: 0.7 to 4.3 seconds Manual: 0.7 to 7.1 seconds	
Luminance unit	cd/m² or fL	
Luminance range	0.001 to 999,900 cd/m²	0.01 to 9,999,000 cd/m²
Accuracy*1	(Luminance) ±2% ± 2 digits (1 cd/m2 or less) ±2% ± 1 digit (1 cd/m2 or more)	(Luminance) ±2% ± 2 digits (10 cd/m2 or less) ±2% ± 1 digit (10 cd/m2 or more)
Repeatability*1	(Luminance) 0.2% + 1 digit	(Luminance) 0.2% + 1 digit
Calibration standard	Konica Minolta standard/user-specified standard switchable	
No. of user calibration channels	10 channels	
Amt. of storable data	1,000 items	
External display (No. of significant digits)	(Luminance) 4 digits	
Internal display (No. of significant digits)	(Luminance) 4 digits	
Interface	USB2.0	
Power	Two AA batteries, USB bus power, or AC adapter (Option)	
Current consumption	When viewfinder display is lit: 70 mA average	
Operation temperature/ humidity range	0 to 40°C, relative humidity of 85% or less (at 35°C)	
Storage temperature/ humidity range	0 to 45°C, relative humidity of 85% or less (at 35°C)	
Size	71×214×154 mm	
Weight	850 g (excluding batteries)	
Standard accessories	Lens cap Eyepiece ND filter Eyepiece cap AA battery x 2 Case CS-A12 Wrist strap CS-A13 USB cable T-A15 Data management software CS-S20	
Optional accessories	Close-up lens No. 153/135/122/110 CCD camera adapter CS-A14 Illuminance adapter CS-A15 AC adapter AC-A305J/L/M	

* 1 "A"light source, reference distance, measurement time: Auto

System Diagram



Dimensions (Units:mm)



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SAFETY PRECAUTIONS

For correct use and for your safety, be sure to read the instruction manual before using the instrument.

- Be sure to use the specified power supply voltage. Improper connection may cause a fire or electric shock.

Certificate No : LRQ 0960094/A
Registration Date : March 3, 1995

Certificate No : JQA-E-80027
Registration Date : March 12, 1997

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http://konicaminolta.com/instruments/network

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KONICA MINOLTA

Luminance Meter LS-150/LS-160

NEW

The next-generation model of luminous meter! Outstrip the LS-100/110 in performance!

Luminance Meter LS-150
Can measure chroma across a 0.001 - 999,900 cd/m2 range in 1˚ steps.

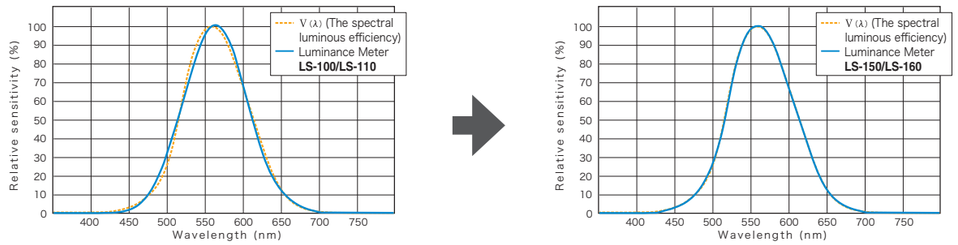
Luminance Meter LS-160
Can measure chroma across a 0.01 - 9,999,900 cd/m2 range in 1/1˚ steps.

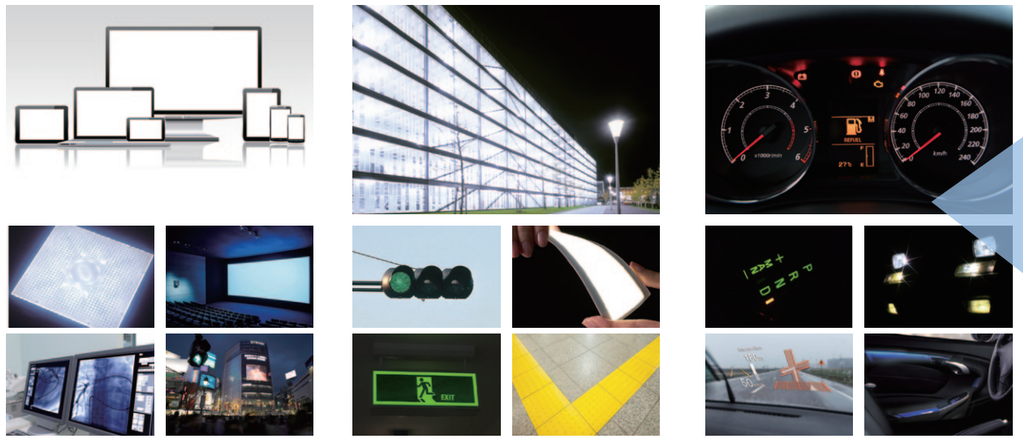
Giving Shape to Ideas

1 High precision

Conforms to DIN 5032-7 Class B
(LS-150)

The CS-150 and CS-160 are highly accurate tristimulus (XYZ = red, green and blue) colorimeters that use the output of 3 newly incorporated sensors that tune sensitivity to the spectral response (CIE 1931 color-matching functions) of the human eye.

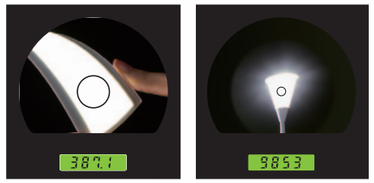




2 Incredibly easy to use

Bright, highly visible viewfinder that easily captures measurement targets

LS-150 LS-160



These new colorimeters feature an automatic mode that automatically sets the measurement time to the brightness of the target.

Easy-to-hold grip.
Smooth focusing during measurement.

Can be used in dark places thanks to a backlit display.

Measurement subjects

3 Numerous options to choose from

Close-up lenses
The lineup sports 4 lenses (Nos. 153, 135, 122 and 110) for measuring tiny surfaces.

Measuring distance and measuring area (Units: mm)

(Measuring angle)	Minimum measuring area 1/3°	Minimum measuring area 1°	Maximum measuring area 1/3°	Maximum measuring area 1°	Minimum measuring distance	Maximum measuring distance
None	4.5	14.4	∞	∞	1,012	∞
No.153	2.5	8	5.9	18.8	627	1,219
No.135	1.6	5.2	2.7	8.6	455	625
No.122	1.0	3.2	1.3	4.3	331	378
No.110	0.4	1.3	0.5	1.5	213	215

***Measuring distance is the distance from the standard plane for distance measurements**

The use of an optional C-mount CCD camera adaptor allows the colorimeter to be used for stationary measurement.

An adaptor is available as an option allowing the viewfinder of the colorimeter to be coupled to an industrial C-mount CCD camera.
* CCD cameras are sold separately.

Luminosity can also be measured using a separately sold luminosity adapter.

Measurable luminosity range
- LS-150:
  Equivalent to 0.015 - 999,900 lx
- LS-160:
  Equivalent to 0.15 - 9,999,900 lx

* This simplified luminosity measurement function does not comply with JIS.

4 Easy-to-understand utility software

Using the included software, colorimeters can be controlled from a PC. Measurements can be conducted at set intervals and data can be displayed on graphs and lists, and sent to spreadsheet applications.

Supported OS: Windows® 7 Professional and later Features

Colorimeter control	1-shot measurement Continuous measurement Interval measurement … 2 - 5,000 meas/3 - 3,600 sec (1-sec intervals) Triggered measurement Colorimeter setup Export of data saved in the colorimeter to a PC User calibration
References	Registration Download of data from a PC to the colorimeter
Data list	List displays and editing of references and measured data (Delete, Copy & Paste)
External I/O	Text creation, saving in CSV format, copying of list to/from clipboard