The first CCD micro-spectrometer in the world

Portable Lighting Measuring
Equipment with Display

CRI, CCT, CQS
Color, PPF
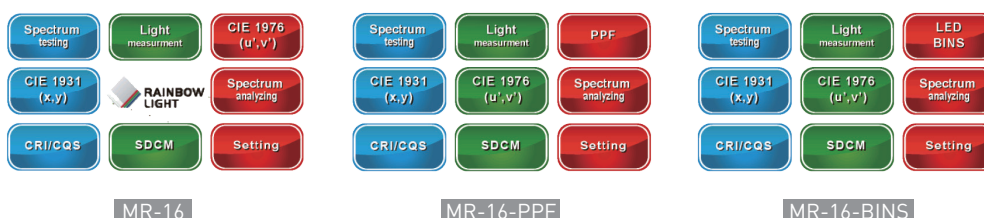
MR16

IX, IM, cd/m²

4,3¨   Hi-Res

Chinese English   SD

MR-16 / MR-16-PFF / MR-16-BINS

Technical data sheet :

Resolution	4.2-5nm FWHM
Spectral range	380-780nm
Electronic interface	CCD I/F
Number of pixels	2048
Measurement range	1 – 200 000lx
Integration time	1ms to 1s
Signal - to - noise range	<0.3%
Spectral deviation	0.12%
Spectroradiometric accuracy	0.04%
Storage Media	1 GB built-in Flash memery, optional Micro SD card 4 GB
Power	Power lithium-ion battery 2600 m Ah
Power consumption	~ 15W
Power supply	Input: AC 100-240V 50/60 Hz 0.1 A ~ 0.2 A Output: 5 V-3A
Ambient temperature	5-35°C
Dimensions	148.5mm x 96mm x 24mm
Weight	550g/630g

If you need to measure :

- Lux - illumination value
- CRI - color rending index according to CIE
- CCT - correlated color temperature
- CRI/CQS - color rendering index/color quality scale
- PPF - photosynthetic photon flux density
- COLOR - color coordinates according to CIE 1931 and CIE 1976

As the first CCD micro-spectrometer in the world, it can capture any visible light source and operate the device through touch panel intuitively, it will show you spectrum and testing data immediately.
We also provide PPF version and LED BINS for different application.

Spectrum testing	Light measurment	CIE 1976 (u',v')
CIE 1931 (x,y)	RAINBOW LIGHT	Spectrum analyzing
CRI/CQS	SDCM	Setting

MR-16

Spectrum testing	Light measurment	PPF
CIE 1931 (x,y)	CIE 1976 (u',v')	Spectrum analyzing
CRI/CQS	SDCM	Setting

MR-16-PPF

Spectrum testing	Light measurment	LED BINS
CIE 1931 (x,y)	CIE 1976 (u',v')	Spectrum analyzing
CRI/CQS	SDCM	Setting

MR-16-BINS

Portable Lighting Measuring Equipment with Display

Functions
Measurement of wavelength, CCT, CRI, illuminance, luminous flux, luminous intensity, BIN chart, PFF, and all other numerical measurements of light properties.

Applications
Light intensity and quality testing, engineering, acceptance test, lighting design,...

Light entrance + Integrating sphere

The integrating sphere works as a light collector.
The collected light can be used as a diffused illumination source or as a measurement source. The inside of the integrating is made of a material with a high diffuse reflection ratio (>98%) over a wide wavelength range (380-780nm).
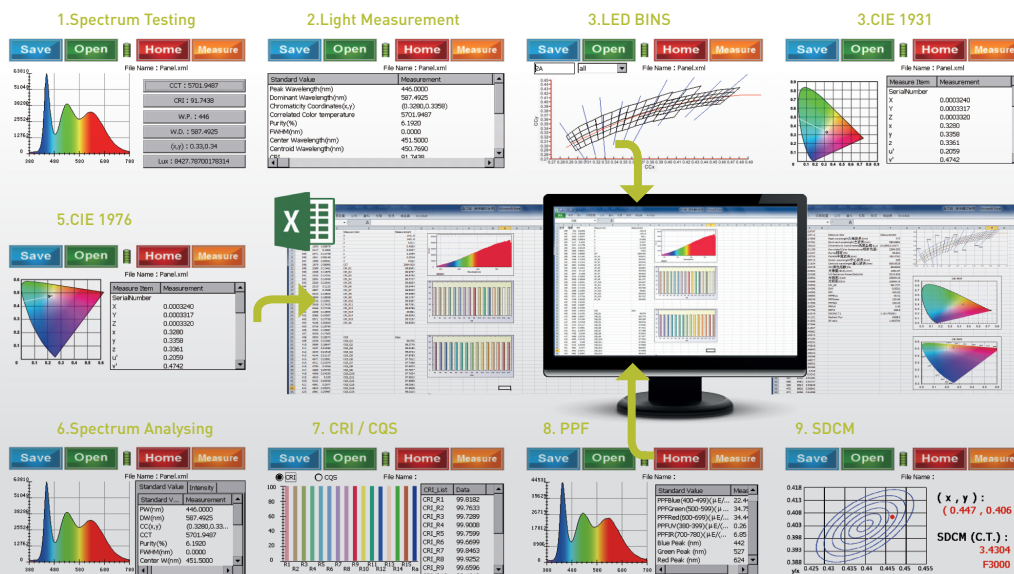
4.3inch touch screen

Portable Lighting Measuring Equipment with Display does not required a computer to take measurements and immediately shows spectrum and testing data on the color touch screen. The following parameters can be easily displayed:
- chromaticity diagram according to CIE 1931/ CIE 1976
- color coordinates (x,y)
- all lighting parameters like CCT, CRI, CQS and the individual R1 - R15 indices
- intensity oh each wavelength spectrum
- BIN chart, PPF

Storage media

All lighting parameters are saved as a file name according to the time on the 1GB built-in space or storage card. In addition, the measurement data can be transferred directly with PC connection.

1.Spectrum Testing 2.Light Measurement 3.LED BINS 3.CIE 1931
5.CIE 1976
6.Spectrum Analysing 7. CRI / CQS 8. PPF 9. SDCM

Please contact us now for more information