Apacer

iiot.apacer.com

Apacer optical inspection solution

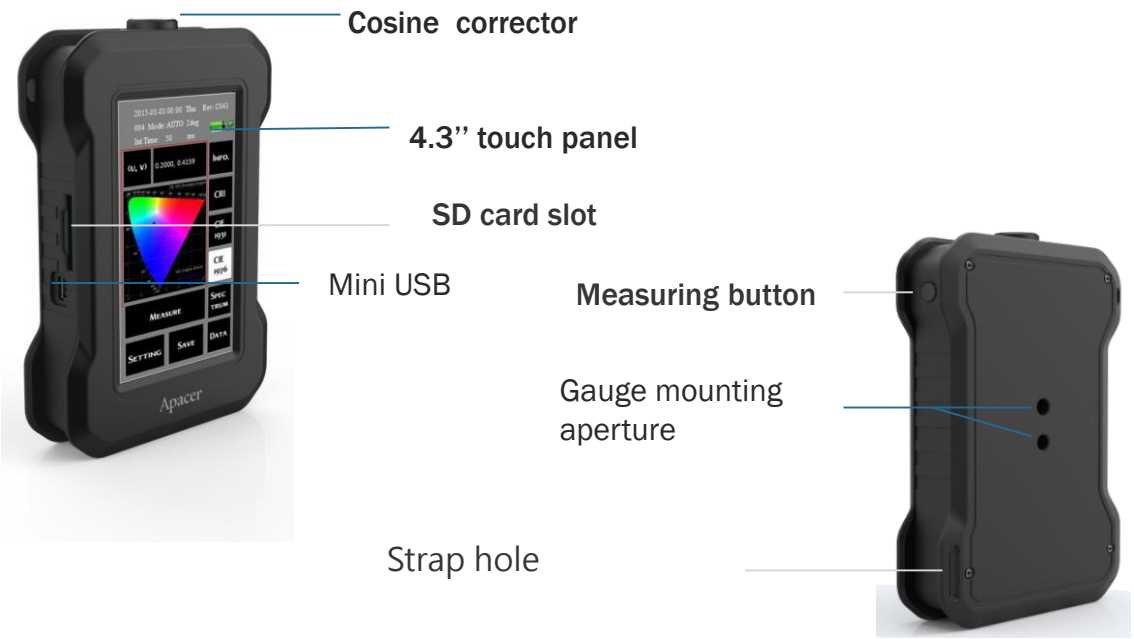
Spectral Irradiance Meter Ai101

V05-0123

Spectral Irradiance Meter Ai101

Product feature

- Up to 600,000 lx
- 4.3” touch panel
- Small and robust with MEMS Spectrometer
- Wavelength range 330nm-850nm
- Optical resolution 5.5nm
- 16GB SD
- Stand=alone operation
- Application： Television Lighting Consistency& LED industry



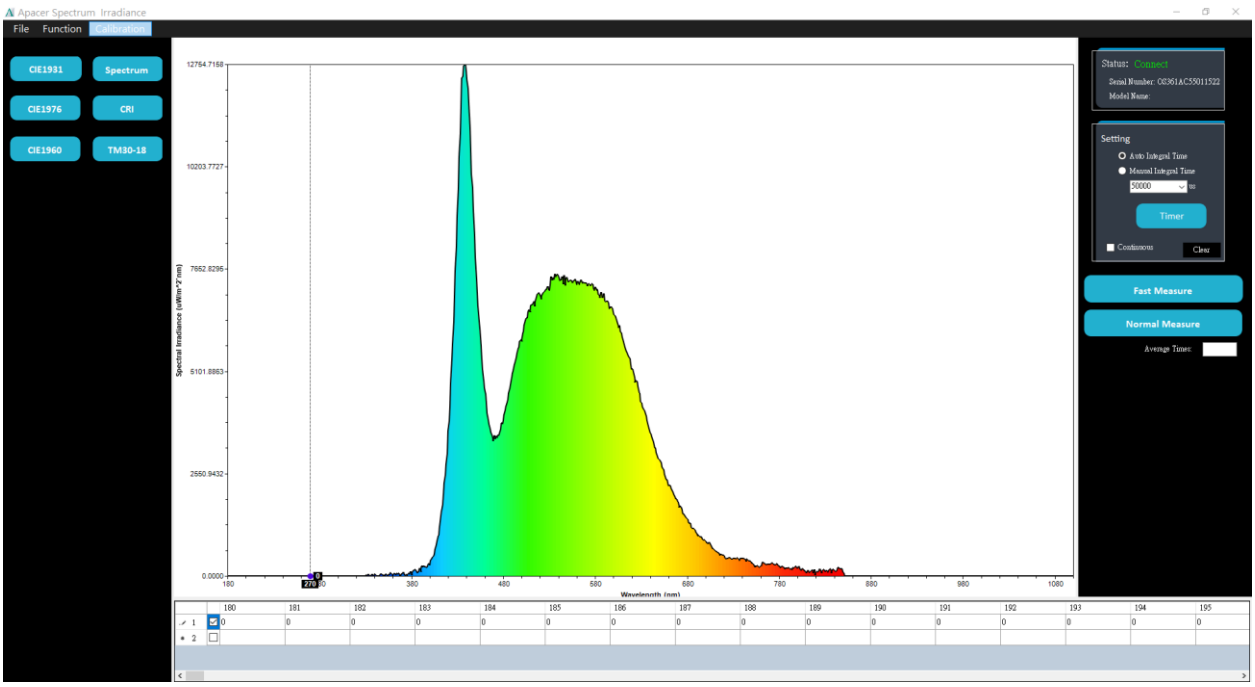
Spectral Irradiance Meter Ai101

Specification

Liquid-Crystal Display (LCD)		4.3" touch panel
Device Measuring Functions		Spectrogram (330~850 nm), Illuminance, Irradiance, TM30-15 (RF/RG), Correlated Color Temperature (CCT, Duv),), XYZ Tristimulus Values, Dominant Wavelength (λD), Peak Wavelength (λP), Peak Wavelength Value (λPV), Purity, Color Quality Scale (CQS), Color Rendering Index (CRI R1-R15, Ra), Chromaticity Coordinates CIE1931(x,y)/CIE1976 (u',v'), Television Lighting Consistency Index (TLCI)
Light Receiver		Cosine Corrector (active range: Φ8mm)
Measurable Illuminance Range		1-600000 lx
Repeatability (2σ) (Standard Illuminant A))	Iluminance	99% (10-600000 lx)
	Chromaticity	x:0.0015 y:0.0015
Accuracy (Standard Illuminant A)	Iluminance	97% (10-600000 lx)
	Chromaticity	0.002 (illuminant at least 10 (lx) or above)
Wavelength Data Increment		1nm
Spectral Resolution (FWHM)		5.5nm
Measuring Time		1ms-60s
Dimensions (L/W/H)mm		150×97×32mm (includes the cosine corrector)
Over-Exposure Warning		Presented in Red Digits of Illuminance
Storage		SD Card for device/PC for connecting with ASI software
Gauge Mounting Aperture		M6、¼ 20UNC
Weight		350□
Battery Capacity		3350 mAh
Operation/Storage Environment		0℃~40℃<70%RH
Software		ASI
SDK語法		Support VC、VB SDK

ASI Software

Commercial lighting

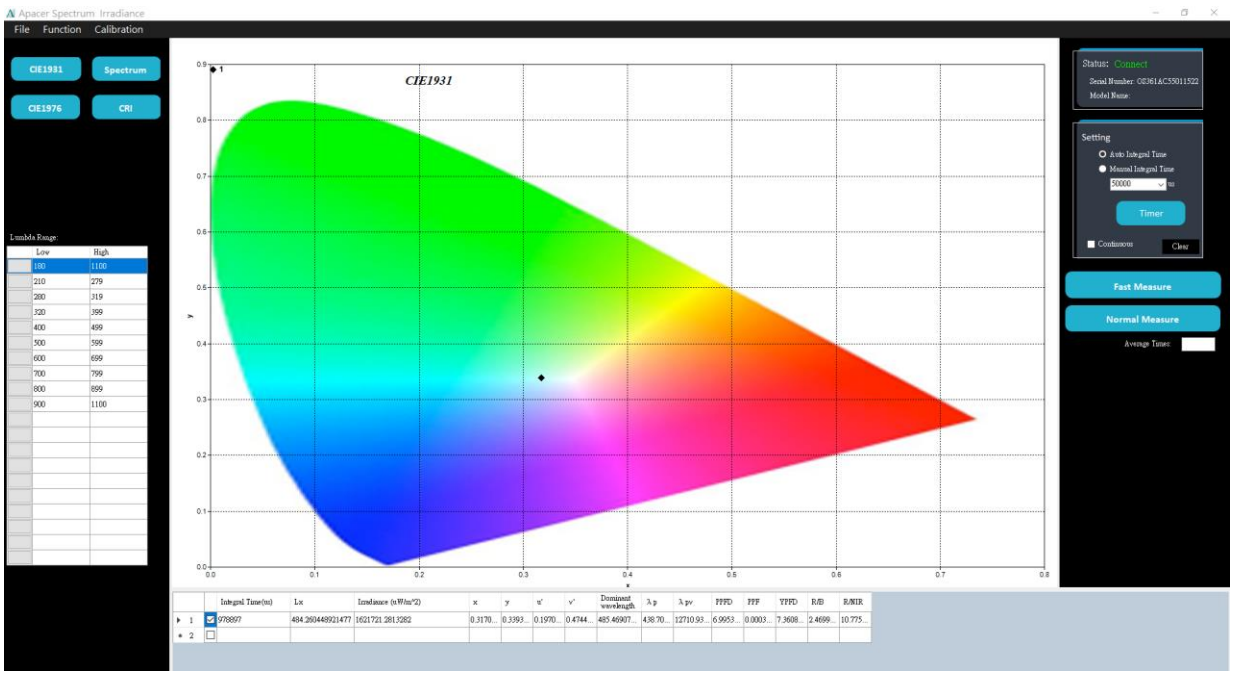


Data

- Integral time(us)：measuring time
- Lx：
- Irradiance： uW/m²
- x · y ： CIE 1931 x · y
- u′ v′ ： CIE1976 u′ · v′
- X · Y · Z
- CCT
- Duv
- Dominant Wavelength
- Purity
- Λp
- λpv
- FWHM
- S/P radio
- TLCI
- EB · RG · Risk
- Total Lx
- Chlorooic Lux · Cyanopic Lux · Mel Irradiance · Mel Daylight lux
- Rf · Rg：TM30
- Spectrum(330nm-850nm)
- R1-R15 · Ra：CRI
- CQS1-CQS15

ASI Software

Horticultural Lighting



➢ Function

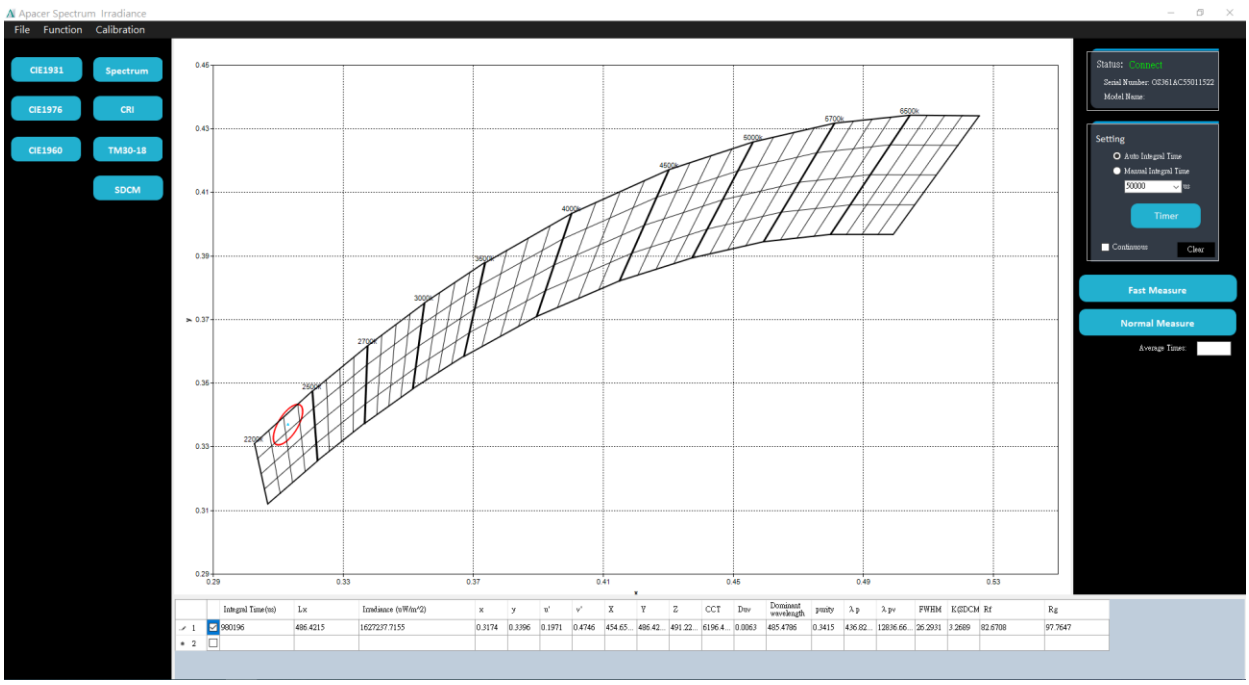
- User define wavelength range。

➢ Data

- Lx
- Irradiance：uW/m²
- x · y ： CIE 1931 x · y
- u′ v′ ： CIE1976 u′ · v
- X · Y · Z
- CCT
- Duv
- Dominant Wavelength
- Purity
- λp
- λpv
- PPFD
- PPF
- R/B · R/NIR：(compare 620~750nm of irradiance with 475~495nm of irradiance) · (compare 620~750nm of irradiance with 750~850nm of irradiance)
- Spectrum(330nm-850nm)
- R1-R15 · Ra
- CQS1-CQS15

ASI Software

LED Lighting



Data

- Lx
- Irradiance：uW/m²
- x · y ： CIE 1931 x · y
- u’ v’ ： CIE1976 u’ · v’
- X · Y · Z
- CCT ,
- Duv
- Dominant Wavelength
- Purity
- λp
- λpv
- FWHM
- K(SDCM)
- Rf · Rg
- Spectrum(330nm-850nm)
- R1-R15 · Ra： CRI：
- CQS1-CQS15