

UPRtek

Advanced LED spectrometers for LED professionals



ASMETEC

A ton of advanced technology in just half a pound



Dedicated designed for:

- LED manufacturers
- Lighting designers
- Sales support
- Purchase dept.
- RMA handling
- R&D dept.
- Technical support
- Film & Entertainment Industries
- Agriculture
- Trade shows
- Education & Training
- Laboratories
- Photographers





Model	MK350N PLUS	MK350S	MK350D
	Basic	Advanced	Compact
Spectral Bandwidth	Approx 12nm(Half)	Approx 12nm(Half)	Approx 12nm(Half)
Wavelength Range	360nm ~760nm	380nm~780nm	380nm~780nm
Integration Time Range	8 ~1000ms	6~1000ms	6~1000ms
Display	3.5"LCD 320x240 Touch Panel	4.3"LCD 800x480 Touch Panel	1.0" OLED Panel
Battery	2500mAh/Rechargeable Li-ion	2500mAh/Rechargeable Li-ion	750mAh/Rechargeable Li-ion
Data Outout Interface	SD Card/USB2.0	SD Card/mini USB2.0	Micro SD/mini USB2.0
Data Format	Office Excel / BMP image	Office Excel / JPG image	Office Excel
Wireless connection	WiFi	WiFi	Bluetooth
Dimensions / Weight	144.2x78x24nm(HxWxD) Approx 250 ± 20 g	163x81x25.8nm(HxWxD) Approx 250 ± 5 g	33x33x90nm(HxWxD) Approx 70 ± 5 g
Wavelength Data Increment	1 nm ± 1 nm	1 nm ± 1 nm	1 nm ± 1 nm
Wavelength Reproducibility	(Input source must be a stable light source.)	(Input source must be a stable light source.)	(Input source must be a stable light source.)
Color Accuracy	± 0.0025 in CIE 1931 x,y	± 0.0025 in CIE 1931 x,y	± 0.0025 in CIE 1931 x,y
Color Repeatability	± 0.0005 in CIE 1931 x,y	± 0.0005 in CIE 1931 x,y	± 0.0005 in CIE 1931 x,y

Device Mode

BASIC	v	v	v
SPECTRUM	v	v	v
CIE1931	v	v	v
CIE1976	v	v	v
CRI	v R1 – R15	v R1 – R15	v R1 – R15
COMPARE	x	v	x
LUX.G	x	v	x
LOG	x	v	x
BIN / SDCM	x	v	x
CHECKER	x	v	x
BROWSER	x	v	x



Model	MK350N PLUS	MK350S	MK350D
	Basic	Advanced	Compact

Measuring Capabilities on Device

	Ra & R1~R15	Ra & R1~R15	Ra & R1~R15
CRI	V	V	V
CCT	V	V	V
Lux	V	V	V
Color / x	V	V	V
Color / y	V	V	V
Color / u'	V	V	V
Color / v'	V	V	V
λ_p	V	V	V
λ_d	V	V	X
fc	V	V	V
Flicker	V (1-100 %) (10- 165 Hz)	X	V (1-100 %)
duv ($\angle_{uv}$)	V	V	X
Purity	V	V	X
Δx	V	V	X
Δy	V	V	X
Δu	V	V	X
Δv	V	V	X
PPF (400nm~700nm) $\mu\text{mol}^* \text{m}^{-2} \text{s}^{-1}$	X	V	X
PPF-R (600~699nm) $\mu\text{mol}^* \text{m}^{-2} \text{s}^{-1}$	X	V	X
PPF-G (500~599nm) $\mu\text{mol}^* \text{m}^{-2} \text{s}^{-1}$	X	V	X
PPF-B (400~499nm) $\mu\text{mol}^* \text{m}^{-2} \text{s}^{-1}$	X	V	X
PPF-UV (380~399nm) $\mu\text{mol}^* \text{m}^{-2} \text{s}^{-1}$	X	V	X
PPF-NIR (700~780nm) $\mu\text{mol}^* \text{m}^{-2} \text{s}^{-1}$	X	V	X



Application			
Apps Name	MK350N Plus	MK350S	MK350D
OS	iOS & Android	iOS & Android	iOS & Android
Connection	WiFi SD	WiFi SD	Bluetooth
Optional Accessory	yes (WiFi SD Card)	included (WiFi SD Card)	embedded
PC Software(uSpectrum)	Wing pack 3 in 1 included	included	included
Certificate			
CE	✓	✓	✓
FCC	✓	✓	✓
NIST Traceability Report	✓	✓	✓

PC software and wireless control



- Remote controlled measurement
- Tool for Quality Control during audit to supplier
- Real-Time test report
- Production line inspection tool





Software for QC

- Suitable for QC in IQC, IPQC, OQC as inspection equipment.
- Suitable for MFG as in-line inspection equipment.
- Real-Time & Easy inspection of LED product.
- Customized settings for specified continuous value measuring.
- Automatic continuous measurements with data-save to a SD card
- Suitable for RD, FAE, QC for detail analysis with statistic figuring.

For animated demo movies please visit our youtube channel

www.youtube.com/uprtekeurope



NEW: Advanced flicker spectrometers



Operation Modes:

- Flicker mode
Flicker index / Percent flicker / VESA FMA / Frequency
- FFT mode
Flicker frequency-domain diagram
- Light-wave mode
Flicker time-domain diagram
- BASIC mode
CCT / CRI / LUX / λP / i-Time
- SPECTRUM mode
Visible light spectrum



MF250N Flicker Meter

Spectrum	Sensor	CMOS Linear Image Sensor
	Spectral Bandwidth	Approximately 15 nm (half bandwidth)
	Receptor Size	$\phi 6.6 \pm 0.1 \text{ mm}$
	Wavelength range	380~780nm
	Integration time range	6~1000ms
Flicker	Measurement Range	70~70000 Lux
	Sampling rate	5K/Sec
	Frequency range	5~2000Hz
	Frequency resolution	5Hz
	Measurement Range	30~60000 Lux
General	Standard	IES/ ASSIST/ ENERGY STAR/ VESA
	Measure response	<1.0S
	Measuring Modes	1. Basic Mode
		2. Spectrum Mode
		3. Flicker Mode
		4. FFT Mode
		5. Lightwave Mode
Measuring Capabilities	Measuring Capabilities	1. Flicker Index
		2. Flicker Percentage
		3. VESA FMA
		4. FFT Frequency
		5. Flicker frequency-domain graphic
General	Measuring Capabilities	6. Flicker time-domain graphic
		7. CCT
		8. CRI (Ra)
		9. Illuminance (LUX)
		10. λP
General	Measuring Capabilities	11. iTime
		12. Spectrum Graphics
	Illuminance Accuracy	Illuminant A @ $\pm 5\%$
	CCT Accuracy	2856K $\pm 3.5\%$
	CRI Accuracy @ Ra	at 20000 Lux $\pm 2.5\%$
	Flicker Accuracy	$\pm 5\%$
General	Display	2.8" TFT LCD, 240x320 Pixel, 262K color
	Battery	AA Battery x4
	Dimension	180*65*30mm (H x W x D)
	Weight	250 g ± 20 g
	Operating Temperature Range	0~35°C
General	Storage Temperature Range	-10~40°C

FLICKER Capture	
Fidx	0.002
Fcen	0.014
VFMA	0.028
Freq(HZ)	0120
Gain	83%



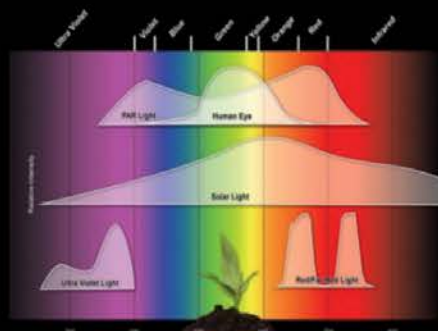
PPF – Photosynthetic Photon Flux Density



Capacity for Measuring of PPF

PPF UV(380nm~399nm) / $\mu\text{mol m}^{-2} \text{s}^{-1}$	PPF(400nm~699nm) / $\mu\text{mol m}^{-2} \text{s}^{-1}$
PPF B(400nm~499nm) / $\mu\text{mol m}^{-2} \text{s}^{-1}$	PPF G(500nm~599nm) / $\mu\text{mol m}^{-2} \text{s}^{-1}$
PPF R(600nm~699nm) / $\mu\text{mol m}^{-2} \text{s}^{-1}$	PPF NIR(700nm~780nm) / $\mu\text{mol m}^{-2} \text{s}^{-1}$

MK350S Advanced only



inquisitive?



Please contact us for questions, inquiries or demos

We are looking forward to support you

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