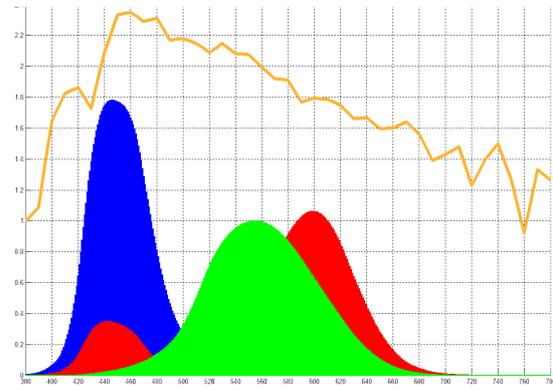


Spectrometer



CL800 series spectroradiometer is a portable illuminometer, independently developed by Huicolor Company. The illuminometer uses a high-precision concave grating as a spectroscopic component, which can collect the wavelength 320~800 nm (different types, different configurations). It outputs 1 nm interval irradiance spectrum, and the Ev range can reach up to 200,000 lx. The instrument is equipped with a 2.8-inch TFT capacitive touch screen, 4000 mAh Li-ion battery, Bluetooth / WIFI multi-function chip, Mass storage device.

The instrument can not only measure the irradiance spectrum, illuminance, CCT, CRI, white balance, but also measure the parameters of leds for plant growth, UVI index, blue light hazard, display color gamut, uniformity, CQS, TM-30, TLCI-2012, flicker and other parameters.



High optical resolution
Accurate measurement



Powerful
Widely used



User-friendly
Easy to operate



Portable design
High-scalability

PRODUCT FEATURES

- 1.Wavelength range of 320-800nm, 1nm output, with high accuracy and stable performance.
- 2.2.8-inch TFT capacitive TP, 4000 mAh Li-ion batteries,TypeC/bluetooth/WIFI, the portable design of artificial aesthetics.
- 3.Ev, CCT, CRI, leds for plant growth, UVI index, blue light hazard, uniformity, CQS, TM-30, TLCl-2012, flicker and so on.
- 4.Powerful measurement function, user-friendly function module to distinguish, simple operation.
- 5.Built-in D65, A, C, D50, D75 and other standard illuminator spectrum ,convenient for spectral comparison.
- 6.Screen can be locked to avoid maloperation; the measuring head can be detachable and installed 180 degrees reversely.
- 7.Type C and Bluetooth multiple interfaces (Customizable WIFI) have a wide range of application scenarios.
- 8.It is widely used in LED lighting,intelligent agriculture,display, multimedia,eye protection lamp,UV,laboratory,and so on.

APPLICATION INDUSTRY



lighting

engineering

display

leds for plant

Photobiological safety

multimedia

SPECIFICATION PARAMETER

Model	CL900	CL800	CL700
Standard	GB/T 7922 ,GB/T 5700,GB/T 5702,JJG 245,GB/T 24824,GB/T 36979,ANSI C78 377, GB 50034,CIE S 009,GB/T 20145,GB/T 9473,CIE S 025,GBT 32655,GB/T 15609		
Wave Range	320~800nm	350~800nm	360~780nm
Wave Interval	1nm		
Spectrophotometric Mode	Concave Grating		
Accuracy (Light source A)	Ev:±4%±1 display value xy:±0.0015(10 ~ 200000lx) / xy:±0.002 (5 ~ 10lx)		
Repeatability (Light source A)	Ev:0.5%±1 display value xy:0.0005(500 ~ 200000lx) / xy:0.001(100 ~ 500lx) xy:0.002(20 ~ 100lx) / xy:0.004(5 ~ 20lx)		
Cosine Response	Ev:<=4%		
Measurement Mode	Auto mode,Flash mode,Flicker mode(except CL700), Continuous mode, Average mode		
Measuring Time	Auto mode:0.2~20 s		
Observer Angle	2°(CIE1931)		
Color Space	Spectrum,CIE XYZ, Ev xy, Ev u'v'		
Colorimetric Index	1.Ev,CCT(K),CRI; CIE31x,y; CIE76u',v'; CIE31 X,Y,Z; Duv,SDCM,S/P,White Balance; Peak,Center,Centroid;λd,PE,PC;Ee,Evis,Euv,Eb,Eg,Er,Efr,Eir,Erb,R(%),G(%),B(%); 2.PAR,PPFD,YPFd,Kppfv,PPFD-uv,PPFD-R,PPFD-G,PPFD-B,PPFD-FR,PPFD-IR, E-ch A and E-ch B,E-p,Erb-p; 3.Flicker(Hz),Modulation(%);(except CL700) 4.Display screen Gamut,Gamut Area(%),ΔCuv; 5 Points/9 Points Uniformity; 5.CQS CRI,Color Fidelity Qf,Gamut Index Qg and Qp; TM-30 Color Fidelity Rf and Gamut Index Rg; TLCl-2012(except CL700); 6.UVA,UVI,Es-uv,Es-B,RG(BLH),PermitTime(S);(except CL700) 7.CIE31 xy diagram,CIE76 u'v' diagram,CRI/CQS histogram,CRI/CQS radar chart, MacAdam ellipse diagram,White Balance diagram		
Data Storage	Sample 10000 Pcs		Sample 8000 Pcs
Dimension	L*W*H= 154X62X37mm		
Weight	about 200g		
Battery	Li-ion battery,3.7V,4000mAh(8000 measurements within 24 hours)		
Display	2.8-inch TFT color LCD, Capacitive Touch Screen		
Data Port	Type C USB, Bluetooth 5.0(Customizable WIFI)		
Language	English, Chinese		
Operating Environment	-10~40°C(0~85%RH/no condensing)		
Storage Environment	-20~50°C(0~85%RH/no condensing)		
Standard Accessory	Power adapter,USB cable,manual,PC Software(Download from office website),Protective Cover, Wrist strap,Wiping cloth		