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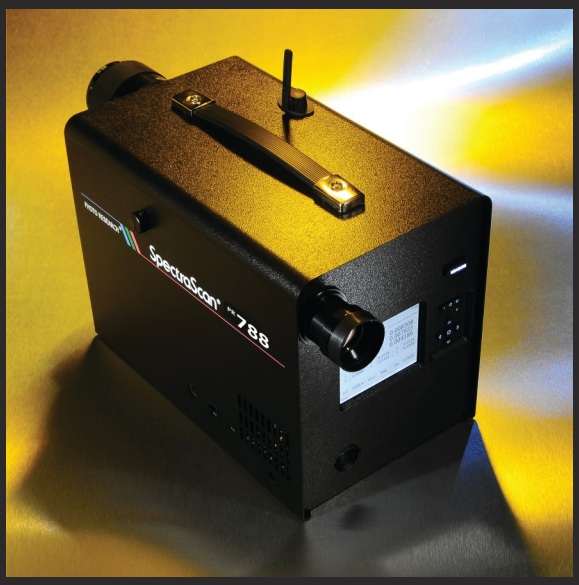
The Reference in Color and Light Measurement Solutions



PR-788

Extended Dynamic Range Spectroradiometer

Proven Technology

The PR-788 Extended Dynamic Range Spectroradiometer is based on the ultra-sensitive PR-74X series of spectral measuring systems currently being used in R&D, QC, QA and on the production floor.

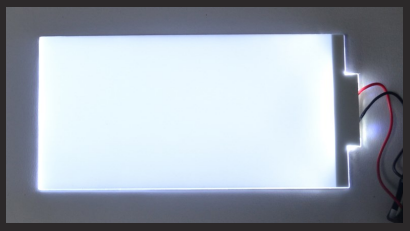
Extended Dynamic Range

The industry leading **1,000,000,000:1 dynamic range** of the PR-788 provides the solution for measuring the output of your device from black to full white without the necessity of adding external attenuation or changing the optical geometry (e.g. measuring field size) - at the fastest cycle times available.

Features / Benefits

Feature	Benefit
Wide Dynamic Range	Test any display / backlight without adding external filtration or changing apertures
Variable Spectral Bandwidth	Spectral resolution capability for any display technology from LCD to laser projectors
High speed cycle times	Dramatic reduction of total time required to test / calibrate display products
USB, RS232, Bluetooth Interfaces	Easy integration into automated test environments (ATE's).

Typical Applications



Backlight Evaluation

OLED Testing

Laser Projector Calibration

PR-788 Specifications

Specification	Value	Specification	Value
Detector Elements	512 Cooled Detectors	**Color Repeatability** [+]	±0.0005
Spectral Bandwidth	2, 5 or 8 nm or Automatically Switchable 2, 4 and 8 nm	**Polarization Error**	< 0.2%
Exposure Time Range	7 ms - 2 min.	**Stray Light**	<0.06%
Measurement Time @ 0.34 cd/m^2 with 2° aperture	300 ms	**Storage**	Secure Digital (SD) Card
Wavelength Accuracy	< 0.4 nm	**AutoSync Range**	20 to 2000 Hz
Spectral Resolution	1 nm	**Interfaces**	USB, Bluetooth, RS232
Available Apertures	2 °, 1° , 0.5° , 0.25° , 0.2° , 0.125°, 0.1° , 0.1° x 1° (Ver. Slit), 0.5° x 1.5° (Hor. Slit)	**Power**	Li-ion battery or AC Adapter (90 - 240 VAC)
Luminance Sensitivity *	Please see chart below	**Battery Life**	> 8 hours
Luminance Accuracy *	±2%	**Weight**	6.01 kg
Luminance Repeatability *	<1%	**Dimensions**	28.0 x 17.0 x 20.3 cm
Color Accuracy [+]	±0.0015	**Operating Temperature**	1° to 35° C 0 - 90% RH non-condensing

Aperture v.s. Measurement Spot Size

		Aperture				
Accessory	**Distance**	**2°**	**1°**	**0.5°**	**0.25°**	**0.1°**
MS-75 (355 mm to infinity)	355 mm 305 m	10.5 mm 10.64m	5.25 mm 5.23 m	2.63 mm 2.66 m	1.315 mm 1.33 m	0.525 mm 532 mm
SL-0.5X	94.1 to 137 mm	3.0 to 5.08 mm	1.50 to 2.54 mm	0.75 to 1.27 mm	0.375 to 0.635 mm	0.15 to 0.254 mm
SL-1X	46 to 66 mm	1.78 to 2.64 mm	0.890 to 1.32 mm	0.445 to 0.660 mm	0.226 to 0.330 mm	0.089 to 0.132 mm
MS-7.5	100 mm 30.5 m	35.0 mm 10.64 m	17.5 mm 5.32 m	8.75 mm 2.66 m.	4.38c mm 1.33 m	1.75 mm 5.32 mm
LA-730	Contact	13.2 mm	13.2 mm	13.2 mm	13.2 mm	13.2 mm
FP-730	Contact	3.17 mm	3.17 mm	3.17 mm	3.17 mm	3.17 mm

PR-788 Luminance Range Chart (cd/m^2)

	Aperture				
Accessory	**2°**	**1°**	**0.5°**	**0.25°**	**0.1°**
MS-75	1.71E-05 to 1.71E+04	6.85E-05 to 6.85E+04	2.74E-04 to 2.74E+05	1.10E-03 to 1.10E+06	6.85E-03 to 6.85E+06
SL-0.5X	1.71E-05 to 1.71E+04	6.85E-05 to 6.85E+04	2.74E-04 to 2.74E+05	1.10E-03 to 1.10E+06	6.85E-03 to 6.85E+06
SL-1X	1.71E-05 to 1.71E+04	6.85E-05 to 6.85E+04	2.74E-04 to 2.74E+05	1.10E-03 to 1.10E+06	6.85E-03 to 6.85E+06
MS-7.5	1.71E-05 to 1.71E+04	6.85E-05 to 6.85E+04	2.74E-04 to 2.74E+05	1.10E-03 to 1.10E+06	6.85E-03 to 6.85E+06
LA-730	1.71E-05 to 1.71E+04	6.85E-05 to 6.85E+04	2.74E-04 to 2.74E+05	1.10E-03 to 1.10E+06	6.85E-03 to 6.85E+06
FP-730	1.07E-04 to 1.07E+05	4.28E-04 to 4.28E+05	1.71E-03 to 1.71E+06	6.85E-03 to 6.85E+06	4.28E-02 to 4.28E+07
CR-730 (lux)	3.43E-05 to 3.43E+04	1.37E-04 to 1.37E+05	5.48E-04 to 5.48E+05	2.19E-03 to 2.19E+06	1.37E-02 to 1.37E+07

* Measuring Illum. A Lum. Std. @ 5.14E-4 cd/m^2 with 2° aperture

[+] For CIE 1931 x,y measuring Illum. A Chromaticity Std. @ 5.14E-4 cd/m^2 with 2° aperture

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