ProMetric® Imaging Photometers and Colorimeters

RADIANT VISION SYSTEMS

* Based on a virtual detector size of 1% of FOV.
** Based on illuminant A or user calibration for specific spectra. Based on a virtual detector size of 1% of the FOV.
*** For 100 cd/m2, using gigabit Ethernet.

Model	IP-PMY2	IP-PMY16	IP-PMY29	IP-PMY43	IC-PMI2	IC-PMI8	IC-PMI16	IC-PMI29
Primary Application	Production Line Testing, Lighting	Production Line Testing, Display Testing, OLED Testing, Advanced Vision			Production Line Testing, Lighting	Production Line Testing, Display Testing, Color Correction		
Sensor Type	CCD, Interline, cooled to +5°C.				CCD, Interline, cooled to +5°C.			
Sensor megapixels	1.9	16.0	28.8	43.1	1.9	8.1	16.0	28.8
Sensor pixel resolution	1600 x 1200	4896 x 3264	6576 x 4384	8040 x 5360	1600 x 1200	3296 x 2472	4896 x 3264	6576 x 4384
System Dynamic Range (single exposure, per pixel)	61 dB (1 x 1 binning)			59 dB (1 x 1 binning)	61 dB (1 x 1 binning)			
High Dynamic Range (multi exposure)	> 1,000,000:1				> 1,000,000:1			
Luminance (Minimum)*	0.00001 cd/m^2 Limit of Detection 0.0001 cd/m^2@ SNR = 60 0.0005 cd/m^2@ SNR = 100				0.00001 cd/m^2 Limit of Detection 0.0001 cd/m^2@ SNR = 60 0.0005 cd/m^2@ SNR = 100			
Luminance (Maximum)	10^{10} cd/m^2 with optional ND filters				10^{10} cd/m^2 with optional ND filters			
System accuracy**	Illuminance ± 3% Luminance (Y) ± 3%				Illuminance ± 3% Luminance (Y) ± 3% Color Coordinates (x,y) ± 0.003			
Short-term repeatability*	Illuminance ± 0.02% Luminance (Y) ± 0.02%				Illuminance ± 0.02% Luminance (Y) ± 0.02% Color Coordinates (x,y) ± 0.00005			
Lens Type / Focal Distances Available	Electronically controlled focus and aperture; 24, 35, 50, 100, 200 mm	Electronically controlled focus and aperture; 35, 50, 100, 200 mm			Electronically controlled focus and aperture; 24, 35, 50, 100, 200 mm		Electronically controlled focus and aperture; 35, 50, 100, 200 mm	Electronically controlled focus and aperture; 50, 100, 200 mm
Field of View (Full Angle, H x V degrees)	24 mm 20° x 15° 35 mm 14° x 10° 50 mm 10° x 8° 100 mm macro 5° x 4° 200 mm 3° x 2°	35 mm 41° x 28° 50 mm 30° x 20° 100 mm macro 15° x 10° 200 mm 8° x 5°	35 mm 55° x 37° 50 mm 40° x 28° 100 mm macro 20° x 14° 200 mm 11° x 7°		24 mm 20° x 15° 35 mm 14° x 10° 50 mm 10° x 8° 100 mm 5° x 4° 200 mm 3° x 2°	24 mm 38° x 30° 35 mm 29° x 22° 50 mm 21° x 16° 100 mm 10° x 8° 200 mm 5° x 4°	35 mm 41° x 28° 50 mm 30° x 20° 100 mm 15° x 10° 200 mm 8° x 5°	50 mm 40° x 28° 100 mm 20° x 14° 200 mm 11° x 7°
Minimum measurement time***	0.2 sec - photopic	0.6 sec - photopic	1.0 sec - photopic	1.4 sec - photopic	0.3 sec - photopic 1.1 sec - color	0.4 sec - photopic 1.2 sec - color	0.6 sec - photopic 1.5 sec - color	0.9 sec - photopic 2.4 sec - color
Spatial measurement capabilities	Luminance, Radiance, Illuminance, Irradiance, Luminous Intensity, Radiant Intensity.				Luminance, Radiance, Illuminance, Irradiance, Luminous Intensity, Radiant Intensity. CIE Chromaticity Coordinates, L*a*b* Color Scale, Correlated Color Temperature (CCT), Dominant Wavelength.			
Units	foot-lambert, cd/m^2, nit, W/sr/m^2, foot-candles, lux, lux-s, W/m^2, W-s/m^2, candela, W/sr.				foot-lambert, cd/m^2, nit, W/sr/m^2, foot-candles, lux, lux-s, W/m^2, W-s/m^2, candela, W/sr. CIE (x,y) and (u', v'), Kelvin (CCT).			
Communication interface	Ethernet 100/1000, USB 2.0				Ethernet 100/1000, USB 2.0			
Power	AC / DC adapter, 100-240 V, 50-60 Hz, 60 Watts				100-240 V, 50-60 Hz, 140 Watts			
LCD touch panel	None				Resolution: 800 x 600 Diagonal: 125 mm			
Dimensions (H x W x D)	86 mm x 86 mm x 154 mm				238 mm x 181 mm x 230 mm			
Weight	1.4 kg				4.9 kg			
Operating temperature	0 - 30° C				0 - 30° C			
Operating humidity	20 - 70% non-condensing				20 - 70% non-condensing			