

# ProMetric® Imaging Photometers and Colorimeters



	IP-PMY2	IP-PMY16	IP-PMY29	IC-PMG2	IC-PMG3	IC-PMI2	IC-PMI8	IC-PMI16	IC-PMI29
<b>Primary Application</b>	Uniformity testing, NFMS, ProMetric in R&D setting	Production Line Testing		Low Light Testing, Source Testing	R&D, Mura Detection	Uniformity testing, NFMS in R&D setting	Production Line Testing		
<b>CCD resolution (pixels)</b>	1600 x 1200	4896 x 3264	6576 x 4384	1536 x 1024	3072 x 2048	1600 x 1200	3296 x 2472	4896 x 3264	6576 x 4384
<b>Total Megapixels</b>	1.9	16.0	28.8	1.6	6.3	1.9	8.1	16.0	28.8
<b>CCD Type</b>	Interline, cooled to +5°C.			Full frame, cooled to -10°C.		Interline, cooled to +5°C.			
<b>CCD A/D dynamic range</b>	12 bits = 4096 gray scale levels			14 bits = 16384 gray scale levels		12 bits = 4096 gray scale levels			
<b>High Dynamic Range (multi exposure)</b>	1,000,000:1			NA		1,000,000:1			
<b>Luminance<sub>Minimum</sub></b>	0.00001 cd/m <sup>2</sup> Limit of Detection 0.0001 cd/m <sup>2</sup> @ SNR = 60 0.0005 cd/m <sup>2</sup> @ SNR = 100			0.000005 cd/m <sup>2</sup> Limit of Detection 0.0001 cd/m <sup>2</sup> @ SNR = 60 0.0005 cd/m <sup>2</sup> @ SNR = 300		0.00001 cd/m <sup>2</sup> Limit of Detection 0.0001 cd/m <sup>2</sup> @ SNR = 60 0.0005 cd/m <sup>2</sup> @ SNR = 100			
<b>Luminance<sub>Maximum</sub></b>	10 <sup>10</sup> cd/m <sup>2</sup> with optional ND filters			10 <sup>10</sup> cd/m <sup>2</sup> with optional ND filters		10 <sup>10</sup> cd/m <sup>2</sup> with optional ND filters			
<b>System accuracy</b>	Illuminance ± 3% Luminance (Y) ± 3%					Illuminance ± 3% Luminance (Y) ± 3% Color Coordinates (x,y) ± 0.003			
<b>Short-term repeatability</b>	Illuminance ± 0.02% Luminance (Y) ± 0.02%			Illuminance ± 0.05% Luminance (Y) ± 0.05% Color Coordinates (x,y) ± 0.0001		Illuminance ± 0.02% Luminance (Y) ± 0.02% Color Coordinates (x,y) ± 0.00005			
<b>Lens Type / Focal Distances Available</b>	Electronically controlled focus and aperture; 24, 35, 50, 100 mm	Electronically controlled focus and aperture; 35, 50, 100 mm		Electronically controlled focus and aperture; 24, 50, 100 mm	Electronically controlled focus and aperture; 35, 50, 100 mm	Electronically controlled focus and aperture; 24, 35, 50, 100 mm		Electronically controlled focus and aperture; 35, 50, 100 mm	
<b>Field of View (Full Angle, H x V degrees)</b>	24 mm 20° x 15° 35 mm 14° x 10° 50 mm 10° x 8° 100 mm 5° x 4°	35 mm 41° x 28° 50 mm 30° x 20° 100 mm 15° x 10°	35 mm 55° x 37° 50 mm 40° x 28° 100 mm 20° x 14°	24 mm 31° x 21° 50 mm 16° x 11° 100 mm 7° x 5°	35 mm 42° x 28° 50 mm 31° x 21° 100 mm 15° x 10°	24 mm 20° x 15° 35 mm 14° x 10° 50 mm 10° x 8° 100 mm 5° x 4°	24 mm 38° x 30° 35 mm 29° x 22° 50 mm 21° x 16° 100 mm 10° x 8°	35 mm 41° x 28° 50 mm 30° x 20° 100 mm 15° x 10°	35 mm 55° x 37° 50 mm 40° x 28° 100 mm 20° x 14°
<b>Minimum measurement time (for 100 cd/m<sup>2</sup>)</b>	0.3 sec - photopic	1.3 sec - photopic	2.0 sec - photopic	2.3 sec - photopic 8 sec - color	6 sec - photopic 19 sec - color	0.5 sec - photopic 1.5 sec - color	0.7 sec - photopic 2.0 sec - color	1.2 sec - photopic 3.7 sec - color	2.2 sec - photopic 7.1 sec - color
<b>Spatial measurement capabilities</b>	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					
<b>Units</b>	foot-lambert, cd/m <sup>2</sup> , nit, W/sr/m <sup>2</sup> , foot-candles, lux, lux-s, W/m <sup>2</sup> , W-s/m <sup>2</sup> , candela, W/sr			foot-lambert, cd/m <sup>2</sup> , nit, W/sr/m <sup>2</sup> , foot-candles, lux, lux-s, W/m <sup>2</sup> , W-s/m <sup>2</sup> , candela, W/sr, CIE (x,y) and (u', v'), Kelvin (CCT)					
<b>Communication Interface</b>	Ethernet 100/1000, USB 2.0 and 3.0 compatible			Ethernet 100/1000, USB 2.0 and 3.0 compatible					
<b>Power</b>	AC / DC adapter, 100-240 V, 50-60 Hz, 80 Watts			100-240 V, 50-60 Hz, 140 Watts					
<b>LCD Touch panel</b>	None			Resolution: 800 x 600 Diagonal: 125 mm					
<b>Dimensions (H x W x D)</b>	86 mm x 86 mm x 154 mm			238 mm x 181 mm x 230 mm					
<b>Weight</b>	1.4 kg			4.9 kg					
<b>Operating temperature</b>	0 - 30° C			0 - 30° C					
<b>Operating humidity</b>	20 - 70% non-condensing			20 - 70% non-condensing					
<b>Warranty</b>	Two Years			Two Years					