

TECHNICAL SPECIFICATIONS (DRAFT)

System Specifications

Image Sensor Architecture	CMOS, Global Shutter, 65 MegaPixels
Image Sensor Interface	CoaXPress V1.1.1 CXP3/6 – 4 lanes
Lens Front Barrel Diameter	54 mm
Control Interface	USB 2.0, USB 2.0 over Ethernet (optional)
Input Power	110 – 240V AC, 50-60Hz 2.5A
Dimensions, LxWxH	317 x 230 x 596 mm
Environmental	15 to 35 °C, relative humidity 70% or less without condensation



Optical Specifications - M80 Imaging Colorimeter Only

Image Sensor	CMOS, Global Shutter, 65MP 65 MegaPixels, TE Cooled	
Active Image (H x V)	9344 (H) x 7000 (V)	
Pixel Size (µm)	3.2 µm x 3.2 µm	
Field of View (HxV)	116 x 95 deg.	150 deg. diagonal
Angular Pixel Density	60 pixels/deg, constant across the FOV	
Distortion	<1%	
Autofocus Range	0 to 4 Diopters	Infinity to 250 mm
Luminance Measurement Range	0.2 cd/m ² to 500,000 cd/m ²	
Luminance ^{*1*2}	Measurement Range	0.2 ~ 500,000 cd/m ²
	Accuracy	± 2%
	Repeatability (2σ)	0.002
Color ^{*1*2}	Accuracy	±0.003 in CIE1931 x,y for white
	Repeatability (2σ)	0.0005 in CIE1931 x,y for white
Flicker Measurement*	Built-in sensor with FBW 80kHz (@-3dB)	

Optical Specifications - M80 Imaging Colorimeter + optional Spectroradiometer

Luminance ^{*3}	Accuracy	±1%
	Repeatability	0.002
Color ^{*3}	Accuracy	± 0.0015 in CIE1931 x,y
	Repeatability	0.0005 in CIE1931 x,y
Wavelength Range (nm)	400 to 780	
Wavelength Data Increment (nm)	1nm (with spectrometer)	
Wavelength Reproducibility	± 1nm (with spectrometer)	
Polarization Sensitivity ^{*4}	< 3%	

Software Measurement Capabilities

- ✓ Center Color & Luminance
- ✓ Luminance Uniformity
- ✓ Michelson Contrast & Uniformity
- ✓ Checkerboard & ANSI Contrast
- ✓ Field of View
- ✓ Color Uniformity
- ✓ Image Geometric Distortion
- ✓ Sequential Contrast

*1 Based on illuminant A standard light source or user calibration for specific spectra

*2 Measure in normal mode with temperature 23±2 °C and relative humidity 50% or less

*3 Based on illuminant E flat white standard light source across visible 400nm to 700nm spectrum

*4 Using 550nm monochromatic light input and measuring stray light ratio at 550nm ±40nm