

Technical specifications

HYPERVISION 1700

Hyperspectral camera



Optical Properties	Description
Spectral Range	430-1700
Spectral Resolution	6 nm (FWHM)
Spectral Bands	920
Spectral Sampling	1.38 nm/pix
Spatial Samples	1296
Spectral Smile Distortion	< 0.2 %
Keystone Distortion	< 0.2 %
Numerical Aperture*	F/2.8
Working Distance*	0.2m-Infinity
Optics Magnification	1:1
Slit Width Options	10 µm, 20 µm (standard), 30 µm
Slit Length	8 mm
Lens Angle of View Options	7.3 °, 10.4 °, 14.5 °, 29.9 ° (standard), 43.6 °

*With standard lens

Camera Body Properties	Description
Lens Mount	C-mount
Power Input	24 V DC
Power Consumption	35 W typical / 60 W max
Connectors	M12 5-pin PWR, 1000Base-T Ethernet, USB-C Display Port
Dimensions (H × L × W)	175 × 185 × 105 mm
Weight	4.9 kg
Operating Temperature	5 – 40 °C

Output Properties	Description
Sensor Type	InGaAs CMOS
Sensor Size	8.2 mm (Type 1/2")
Pixel Size	5 × 5 µm
Bit Depth	8, 10, or 12-bit
Binning Options	1 - 16 (Horizontal & Vertical)
SNR	52.1 dB
Dynamic Range	56.8 dB
Pixel Operability	> 99.5 %
Quantum Efficiency	> 75 % @ λ = 1200 nm
Frame Rate*	150 fps @ 920 bands (8-bit mode)
Shutter Type	Global Shutter
Sensor Cooling	Thermoelectric Cooling Element
Read-out Modes	All-pixel, vertical/horizontal 1/2 subsampling, and ROI mode

*Framerate scales with pixel count, enabling higher FPS by selecting wave-lengths or regions of interest.

