

UV SPECTROGRAPH 200 – 400 nm



The ImSpector UV4E provides high image quality and optical throughput from 200 - 400 nm. UV spectrographs include an order blocking filter already installed. The UV spectrograph can be integrated with a UV sensitive CCD or CMOS camera, creating a line-scan hyperspectral imaging device. The camera system can be used for UV imaging applications.

UV Spectrograph Specifications

Optical Characteristics	UV4E
Spectral Range	200 - 400 nm
Spectral Dispersion	56.5 nm/mm
Spectral Resolution	2 nm (30 μ m slit)
Spatial Resolution	rms spot radius < 30 μ m
Image Size (Spectral x Spatial)	3.54 x 8.8 mm
Numerical Aperture	F/2.8
Optical Input	Telecentric
Average Diffraction Efficiency	> 50%, independent of polarization
Stray Light	< 0.5% (halogen lamp, 633 nm long-pass filter)
Slit Width, default	50 μ m (80 μ m slit available on request)
Slit Length	9.8 mm
Magnification	1:1

Aberrations

Bending of Spectral Lines Across Spatial Axis	Smile \leq 0.1 nm (0.05%)
Bending of Spatial Lines Across Spectral Axis	Keystone \leq 3 μ m (0.034%)
Astigmatism	None

Mechanical Characteristics

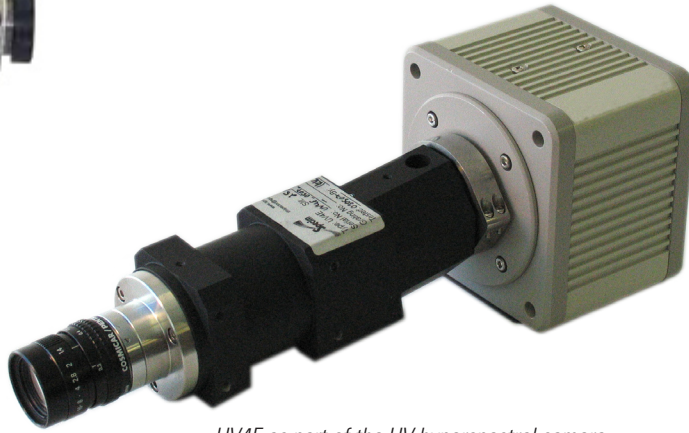
Body	Anodized Aluminum
Size (W x H x L)	50 x 55 x 165 mm
Weight	320 g
Lens Mount	Standard C-mount Adapter
Camera Mount	Standard C-mount Adapter
User Adjustments	Rotating image axis relative to detector rows, adjustable back focal length \pm 1 mm

Environmental Characteristics

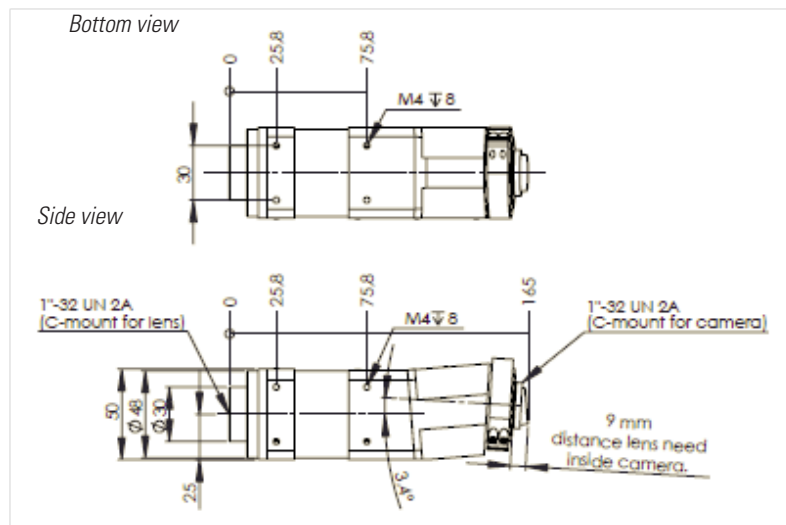
Storage Temperature, non-condensing	-20 $^{\circ}$ C ... +80 $^{\circ}$ C
Operating Temperature, non-condensing	+5 $^{\circ}$ C ... +40 $^{\circ}$ C



ImSpector UV4E



UV4E as part of the UV hyperspectral camera



UV Spectrographs Ordering Information

Part Number	Description	Product Name
MRC-305-004-01	ImSpector - Enhanced UV Spectrograph. UV4E, 50 μ m slit* (default)	ImSpector UV4E

* When ordering please specify if different slit width is needed.