

# ImSpector NIR imaging spectrograph

SPECIM ImSpector is designed for the NIR wavelength ranges 900 - 1700 nm. ImSpectors provide easiest integration and highest optical performance for NIR ranges on the market.

## Near infrared wavelength range

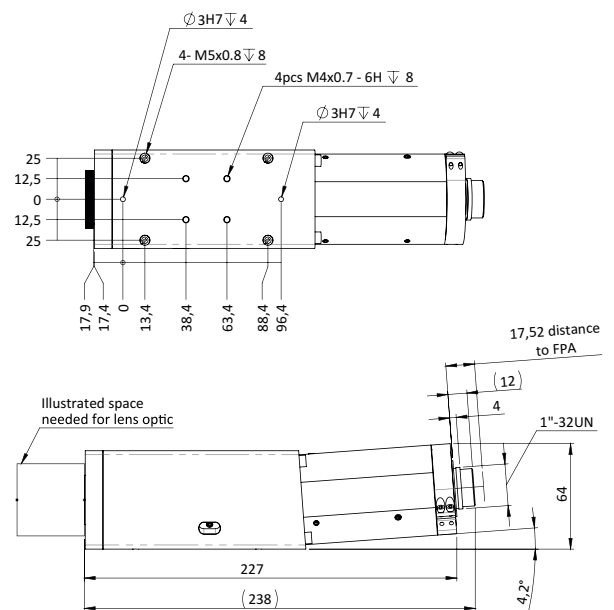
IMSPECTOR		N17E
<b>Optical characteristics</b>		
Spectral range	900 - 1700nm	
Dispersion	110nm/mm	
Spectral resolution *1	5nm (with 30µm slit)	
Image size	max. 7.6 (spectral) x 14.2 (spatial) mm	
Spatial resolution *1	rms spot radius < 15µm *1	
Aberrations	No astigmatism	
Bending of spectral lines across spatial axis	Smile < 5µm	
Bending of spatial lines across spectral axis	Keystone < 5µm	
Numerical aperture	F/2.0	
Slit width, default	30µm (50, 80 and 150µm on request)	
Slit length	14.2mm	
Optical input	Telecentric	
Efficiency	> 50%, independent of polarization	
Stray light	< 0.5% (halogen lamp, 1400nm long-pass filter)	
<b>Mechanical characteristics</b>		
Size, OEM	(W)60 x (H) 60 x (L) 220mm	
Weight	1500g	
Body, OEM	Anonized aluminium tube	
Lens and camera mount	Standard C-mount for lens	
	Standard C-or U-mount adapter for camera	
User adjustments	Image axis relative to detector rows, back focal length adjustable ± 1mm	
<b>Environmental characteristics</b>		
Storage	-20 ... +85 °C, non-condensing	
Operating	+5 ... +40°C, non-condensing	

\*1 System spectral and spatial resolutions also depend on the discrete imaging nature of detector and lens quality.

## Options, fore optics (NIR, SWIR)

- Fore optics: OLES15, OLES22.5, OLES30 and OLES56

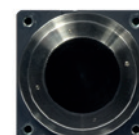
More information about fore optics can be found from Hyperspectral fore lenses -data sheet.



ImSpector N17E mechanical dimensions



ImSpector N17E spectrograph, side view



ImSpector N17E spectrograph, front view

NOTE: product information and images are subjects to change without prior notice.