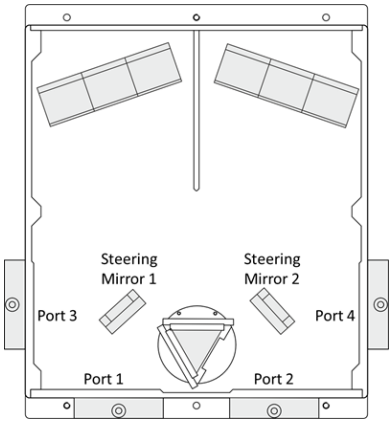
The New Navima™ Spectroscopy System



The Jireh Scientific Imaging's *Navima*™ Series of monochromators are highly customizable allowing choice of spectral range and resolution appropriate for the application. These systems are available with focal lengths of 150mm, 300mm, 500mm and 750mm. At the shorter focal lengths, they provide a cost-effective tool for low to medium resolution spectral analysis or tuneable light sources, whereas the longer focal length instruments provide the resolution needed to robustly conduct high precision measurements in areas such as photoluminescence and laser fluorescence. Our innovative, user friendly *ilustra*™ software allows easy control of our Zion Cameras, all monochromator functions and features including control of many of our accessories.

Model	Navima™ 150	Navima™ 300	Navima™ 500	Navima™ 750
Focal Length	150 mm	300 mm	500 mm	750 mm
Aperture Ratio	f/ 4.0	f/ 3.9	f/ 6.5	f/ 9.7
Mechanical Scanning Range	0 to 900 nm	0 to 1400 nm		
Resolution	0.4 nm	0.1 nm	0.05 nm	0.03 nm
Interchangeable Grating Mount	Dual Grating Turret	Triple Grating Turret		
Grating Size	40 x 40 mm^2	68 x 68 mm^2		
Reciprocal Linear Dispersion	5.4 nm/mm	2.7 nm/mm	1.7 nm/mm	1.1 nm/mm
Wavelength Accuracy	0.25 nm	0.2 nm		
Drive Step Size	0.01 nm	0.005 nm		
Standard Slits	0.01 - 5 mm, Continuously adjustable precision knife edge slits. Motorized and fixed width slits available			

The New Zion GXP Deep Cooled Spectroscopy Camera

The Zion GXP Deep Cooled Technology uses hermetically sealed ensures cooling as low as 90'C below ambient level! Liquid assist for applications that needs deeper cooling and less fan vibrations. Capable of lowering dark current for long integration and low light applications.

New Zion Spectroscopy Platforms

Available in our Standard Cooling or GXP Deep Cooling, for high sensitivity, low dark current and low noise. Can be use with Jireh Scientific Imaging's Spectroscopy System. Designed for quantitative scientific imaging optical spectroscopy applications.

Model	Zion 2048x128	Zion 2048x512
Hamamatsu Sensors	S13240 Back or Front Illuminated	S10141 Back or Front Illuminated
Active Pixels	1024x122	2048x506
Pixel Size	12µm x 12µm	
Cooling (Typical)	TE Cooling 65'C Below Ambient/GXP Model 90'C Below Ambient	
	On Board Processing	
CPU Engine	Floating-point DSP, FPGA, FLASH, SDRAM (up to 32MB)	
Full Featured SDK	Can be customized for application specific processing	
Applications	Peak finding, signature analysis, general purpose computing, etc.	
Interface	USB 2.0	
Standard Slits	0.01 - 5 mm, Continuously adjustable precision knife edge slits. Motorized and fixed width slits available	
	Specifications	
Noise at High Gain (Typical) at -50'C	9 e-	11 e-
Dark Current at -55'C	0.00015 e-/pix/sec	
Available Speeds	100 kHz or 500 kHz	