



HYPERSPECTRAL IMAGING CAMERAS - FS2X-SERIES

Hyperspectral Imaging Cameras - FS2X-Series utilizes a transmission grating splitter module featuring high diffraction efficiency and a highly sensitive surface array camera.

This advanced design, combined with built-in scanning imaging and auxiliary camera technology, addresses the challenges faced by traditional hyperspectral cameras, such as external push scan imaging mechanisms and complex focusing. The FS2X-Series can be directly integrated with standard C interface imaging lenses or microscopes to achieve rapid spectral image acquisition.

APPLICATIONS

Application fields

Hyperspectral Imaging Cameras – FS2X-SeriesHyperspectral Imaging Cameras – FS2X-Series

FEATURES

Visible Spectrum/NIR:

- Spectral range: 400-1000nm, wavelength resolution better than 2.5nm, with up to 1200 spectral channels.
- Image resolution up to 1920x1920.

SW-NIR:

- Spectral range: 900-1700nm, wavelength resolution better than 8nm, with up to 254 spectral channels.

- Image resolution up to 320x320.

TECHNICAL SPECIFICATIONS

Model	FS-20	FS-22	FS-23	FS-25
Spectroscopic method	Grating			
Image resolution	1920*1920			320*320
Dynamic range	12 bits			14bits
Imaging speed	≤15 seconds		≤5 seconds	
Spectral channels number	600	300	1200	254
Spectral region	400-700nm	400-1000nm		900-1700nm
Spectral FWHM	2.5nm	5nm	2.5nm	8nm
Slit width	25um			
Transmission efficiency	60%			
Stray light level	0.5%			
Pixel size	5.86um*5.86um			30um*30um
Detector type	CMOS			InGaAs
Sensor imaging surface size	11.3*7.1mm			9.6mmx7.68mm
Standard lens focal length	25mm			
Minimum working distance	100mm-∞	150mm-∞	100mm-∞	
Field angle	25°			17°

Minimum exposure time	34us	21us	1us
Maximum exposure time	10 seconds		1 seconds
SNR	600/1		
Data interface	USB3.0		Gigabit network
Camera lens interface	C-Mount		
Accessories	USB3.0 transmission line		Gigabit network transmission line
Imaging features	With ROI function Single area ROI can be achieved	With ROI function Multi area ROI can be achieved	With ROI function Single area ROI can be achieved
Auxiliary imaging features	Auxiliary framing camera to monitor the shooting area		
Power supply mode	Built-in battery		
Main Unit engine size *	25.5cm*13.8cm*10.7cm		33.5cm*18.2cm*14.3cm
Weight**	Less than 2.8KG		Less than5.3KG
Power dissipation	50W		
* size without lens and handle ** weight without lens			



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