

# Book Your SPECIM FX10 Camera Demo Loan



Rent the Specim Hyperspectral FX10 for a week or a month at a time for your next research project at competitive rates.

If you buy a camera within 9 months of the loan, we'll take a portion of the loan cost off the purchase price.

*"We're offering you the opportunity to hire a Specim FX10 camera for a week or a month (or possibly longer) at a time. Use our camera for your upcoming research project, without having to commit to buying one."*

Dr. Luke Nicholls, Technical Sales Manager, QDUKI

## FEATURES FX10:

- 400-1000 nm spectral range
- 5.5 nm spectral resolution
- 220 spectral bands
- F/1.7 optics
- 1024 spatial pixels
- 330 fps (full frame)
- CL or GigE models
- 600:1 SNR (peak)

## FX10 INFORMATION:

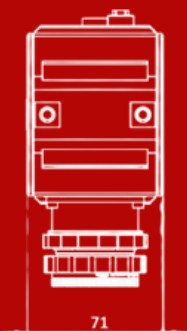
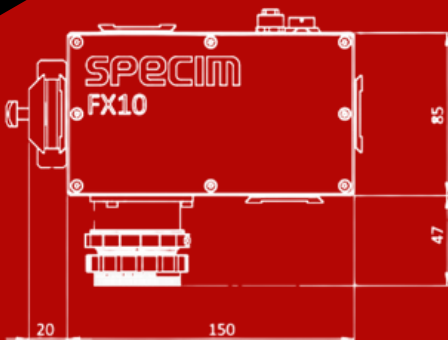
The FX10 is a compact, lightweight, cost-effective hyperspectral camera for the VNIR spectral range (400-1000 nm). F/1.7 optics enables excellent light throughput, high sensitivity, short integration times and high signal-to-noise ratio. The FX10 operates with an impressive frame rate of 330 fps (full frame) using 1024 spatial pixels and 220 spectral bands. By reducing the number of spectral bands, the frame rate can be increased up to 9,900 fps. The camera is supplied with a high quality lens (38 deg FOV) and includes an integrated shutter and order sorting filter. The camera is also IP52 rated, making it suitable for use in harsh environments.

## IDEAL FOR:

- Vegetation & agriculture
- Phenotyping
- Color & density in printing
- Display & light source inspection
- Food quality

## Get in touch today

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# SPECIFICATIONS

Spectral Range	400-1000 / 400-780 (c-version)	
Spectral resolution (FWHM)	5.5 nm (mean)	
Spectral sampling/pixel	2.7 nm	With default binning
Spectral bands	224 / 70 (c-version)	With default binning
Numerical aperture	1.7	With default lens
Optics magnification	0.80	
Effective pixel size	19.9x9.97 $\mu\text{m}$	At fore lens image plane
Effective slit width	42 $\mu\text{m}$	At fore lens image plane
Effective slit length	10.2 mm	At fore lens image plane
SNR @ max. signal	420 : 1	
Spatial samples	1024	
Bit depth	12	
Maximum frame rate	327 FPS full range / 514 FPS full range (c-version)	
Binning	2,4,8 spectral and spatial	Default: 2 spectral x 1 spatial
ROI	Freely selectable multiple bands of interest	Minimum height of ROI is two 1-binned rows. Maximum frame rate is determined by the total number of rows included in the mMROI's
Pixel operability	99.993%	
Image corrections	Non uniformity correction Bad pixel replacement Automatic Image Enhancement (AIE)	One point NUC  AIE: Unified spectral calibration + corrected smile and keystone aberrations
Sensor material	SCMOS	
Sensor cooling	Passive	
Full well capacity	90 ke-	
Read-out modes	IWR / ITR	
Optics temperature	Passive	
Lens mount	Custom mount	
Fore lens FOV options	12 deg 38 deg (default) 47 deg 51 deg 83 deg	Only the default lens is specifically designed for FX10. With other lens options, optical parameters may vary.
Camera digital data output/control interface	GigE Vision, CameraLink	
Camera control protocols	GenICam, ASCII	
Power input	12 V DC (+-10%)	
Power consumption	Max 4 W	
Connectors	Industrial Ethernet OR CameraLink 26-pin, 0.5" MDR	
IP	IP52	
Dimensions (L x W x H)	150 x 85 x 71 mm	Mounting surface option on three sides. Mounting kit adds 24 mm distance on mounting side.
Weight	1.3 kg	
Storage temperature	-20 ... +50°C (non-condensing)	
Operating temperature	+5 ... +40°C (non-condensing)	
Relative humidity	5% – 95% (non-condensing)	