



COMPACT, HIGH-PERFORMING, AND COST-EFFECTIVE

Specim GX17 is the next-generation NIR line-scan hyperspectral camera for real-time machine vision.

This fast-operation push-broom hyperspectral camera is a powerful and accurate tool for inline sorting, inspection, and quality control.

Specim GX17 camera is best suited for:

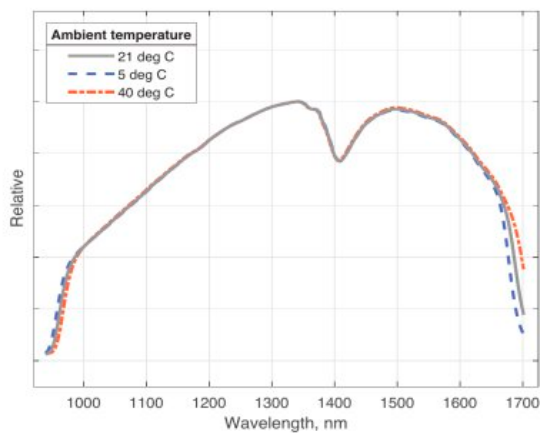
- Waste sorting
- Food sorting, inspection, and grading
- Researching NIR spectra with SpecimINSIGHT

FEATURES

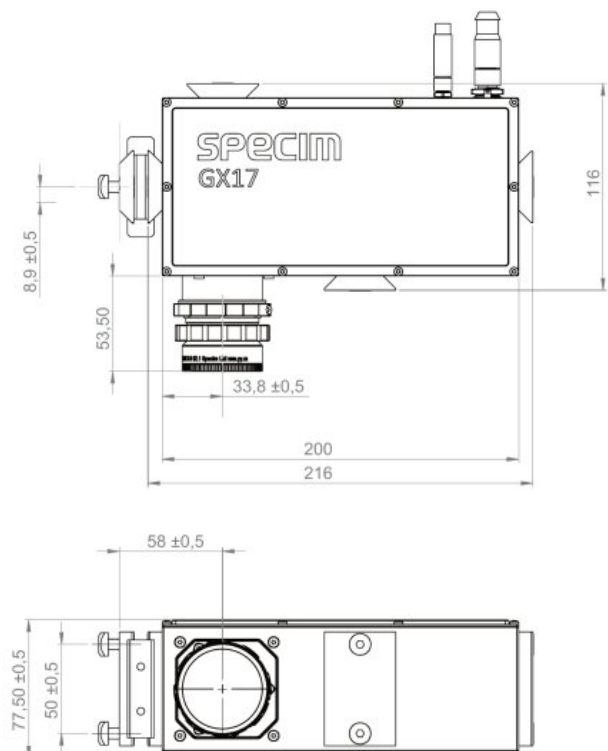
The high spatial resolution, light-throughput, and signal quality make Specim GX17 the most high-performing hyperspectral camera in its class.

- 950 – 1700 nm spectral range (varies depending on ambient temperature)
- 480 spatial pixels
- 800 Frames per second
- Signal-to-noise ratio 700
- F-number 1.7 (light-throughput)
- FOV options from 12° to 90°
- Compatible with SpecimONE
- GenCP-compliant Cameralink interface

SPECTRAL RESPONSE



DIMENSIONS



Spatial pixels	480
Spatial resolution (FWHM)	1.5 pixel
Spectral Range	950-1700 nm (varies depending on ambient temperature)
Spectral resolution (FWHM)	8 nm (mean)
Spectral sampling/pixel	4.7 nm
Spectral bands	168
Numerical aperture	1.7
Optics magnification	0.80
Effective pixel size	24.9 μm (slit plane)
Effective slit width	42 μm (slit plane)
Effective slit length	12.0 mm (slit plane)
SNR @ max. signal	700
Bit depth	16 (effective bits: 14)
Maximum frame rate	800 fps (with 0.5 ms integration time)
Binning	1x
ROI	Yes
Pixel operability	99.5%
Image corrections	With SpecimCUBE (without camera-internal correction)
Sensor material	InGaAs
Sensor cooling	No
Full well capacity	550 ke-
Read-out noise	110 e-
Mechanical shutter	Shutterless
Read-out modes	ITR
Lens mount	Custom mount
Fore lens FOV options	12 deg 38 deg 53 deg 66 deg 75 deg (C-mount lens) 90 deg (C-mount lens)
Camera digital data output/control interface	CameraLink
Camera control protocols	GenCP
Power input	10 - 32 VDC
Power consumption	7.5 W (typical)
Triggers	2 in and 2 out
Connectors	Power M8-4pin; Control M12-12pin, Camera Link SDR
IP	IP52
Dimensions (L x W x H)	202 mm x 75 mm x 102 mm
Weight	1.9 kg (spectral camera)
Storage temperature	-20 ... +50 C (non-condensing)
Operating temperature	+5 ... +40 C (non-condensing)
Relative humidity	5% – 95% (non-condensing)

Specim, Spectral Imaging Ltd. • A Konica Minolta Company • POB 110, FI-90591 Oulu Finland • Elekroniikkatie 13, Oulu Finland
Tel +358 (0) 10 4244 400 • VAT Identification number FI10079234 • info@specim.com • www.specim.com

Information in this document is subject to change without notice. Specim, Spectral Imaging Ltd. reserves the right to change or improve its products and specifications and to make changes in content without obligation to notify any person or organization of such changes or improvements.

Specim-GX17-Technical-Datasheet-03