



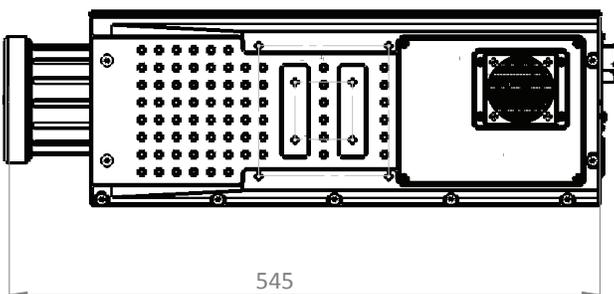
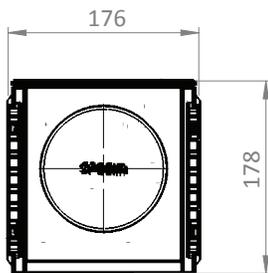
High-speed hyperspectral camera operating in the SWIR range of 1000-2500 nm. With its temperature stabilised optics, it provides the stability and sensitivity required in today's most challenging chemical imaging applications, from pharmaceutical quality assurance to food and agriculture analysis.

BEST SUITED FOR

- Chemical and Material Sorting
- Pharmaceutical manufacturing
- Recycling
- Mineral mapping
- Food and agriculture
- Moisture content distribution
- Art research and archiving

Camera is compatible with LUMO software, datacubes are ENVI-compatible, allowing further processing by several software packages for hyperspectral data processing.

DIMENSIONS



ACCESSORIES

- Fore objective lenses:
 - OLES 15 FOV 34 °
 - OLES 22,5 FOV 23 °
 - OLES 30 FOV 17 °
 - OLES 56 FOV 9 °
 - OLES Macro 1:1 imaging
- Collection fiber optics to convert the camera into a multiple-point spectrometer. All the points are measured simultaneously without a moving multiplexer.
- Rotating stage for scanning static targets and outdoor scenes, or with X-stage sample mover for desktop and microscope applications.

OPTICAL CHARACTERISTICS	
Spectral range	1000 - 2500 nm
Spectral resolution (FWHM)	12 nm (30 µm slit)
Spectral sampling / pixel	5.6 nm
F/#	F/2.0
Slit width	30 µm (50 or 80 µm optional)
Effective slit length	9.2 mm
ELECTRICAL CHARACTERISTICS	
Sensor	Cryogenically cooled MCT detector
Spatial pixels	384
Spectral bands	288
Pixel size	24 x 24 µm
Detector cooling	Stirling, 25 000 h MTTF
Signal-to-noise ratio	1050:1 (at max. signal level)
Camera output	16 bit CameraLink
Data cable Length	5m
Camera control	USB/RS232
Frame grabber	NI-1433 Epix grabber E4*
Frame rate	450 fps (maximum full frame)
Exposure time range	0.1 - 20 ms
Power consumption	Nominal < 50 W
Input voltage	18 - 36 V
MECHANICAL CHARACTERISTICS	
Size (L x W x H)	Sensor 545 x 176 x 178 mm, PSU & control unit 300 x 190 x 130 mm
Weight	14 kg & approx. 5 kg
Body	Anodized aluminium with mounting screwholes
Lens mount	Standard C-mount
Shutter	Electro-mechanical
ENVIRONMENTAL CHARACTERISTICS	
Storage	-20... +50 °C
Operating	+5... +40 °C non-condensing

*Requires Lumo 2022 update 1