# RESONON

PIKA IR-L HYPERSPECTRAL CAMERA

The Pika IR-L is a line-scan hyperspectral camera that covers the near-infrared spectral range (925 – 1700 nm). The Pika IR-L is a high-speed, light-weight, cost-effective infrared imager, ideal for remote sensing applications. It can be used with any of Resonon's benchtop, outdoor, and airborne systems, standalone with our software development kit, and integrated into machine vision systems.
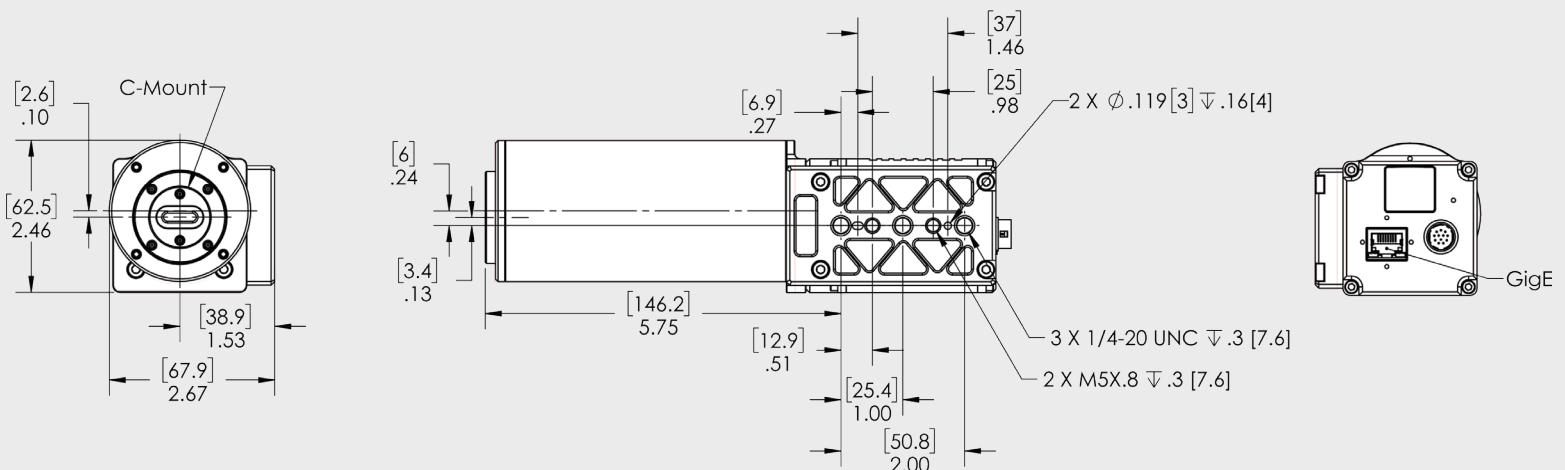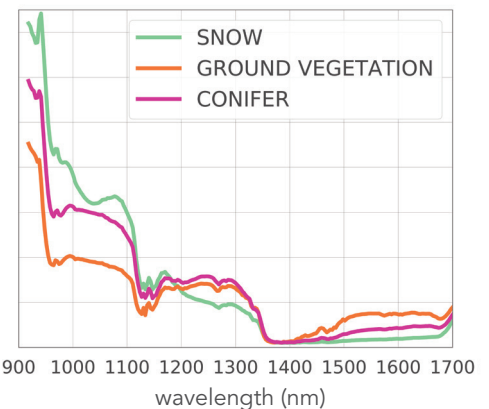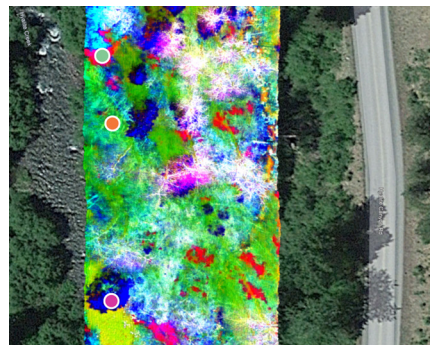
FEATURES

- Spectral Range: 925 – 1700 nm
- 320 Spatial Pixels Per Line
- 236 Spectral Channels Per Line
- High Speed (521 fps max.)

SPECTRAL RESPONSE
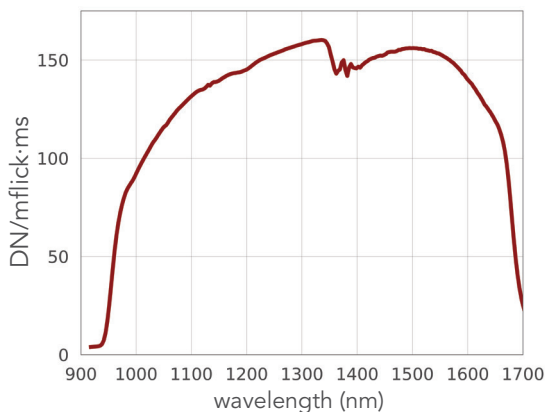
ACTUAL DATA

PIKA IR-L SPECIFICATIONS

Spectral Range	925 - 1700 nm
Spectral Channels[1]	236
Spectral Bandwidth	3.3 nm
Spectral Resolution (FWHM)	5.9 nm
Dispersion per Pixel	3.28 nm
Spatial Pixels per Line	320
f/#	1.8
Dimensions	210 x 68 x 63 mm
Weight (without Lens)	1.01 kg
Power Requirements	10.8 V to 30.0 V
Max Frame Rate	521 fps
Interface	GigE
Bit Depth	14
Pixel Size	30 μm
Peak SNR[2]	1581
Binning	spectral and spatial available
Pixel Well Depth	2.5 Me-
Slit Width	30 μm
Spectrometer Magnification	1.0
Sensor Type	InGaAs
Sensor Cooling	TEC
Operating Temperature (non-condensing)	-20 to +50 C
Recommended Temperature (non-condensing)	+5 to +40 C
Objective Lens Mount	CS-mount
Objective Lens Field-Of-View Options	5°, 7°, 11°, 22°, 77°
Software Development Kit	Windows, C++

[1] This is the number of spectral channels spanning 925 – 1700 nm. The total number of spectral channels delivered by the Pika IR-L is 240, with bands extending beyond both edges of the Spectral Range.

[2] This value obtained at minimum binning. SNR can be increased with spectral and spatial binning.

Sample data and hyperspectral analysis software are available for free download at downloads.resonon.com.

A C++ software development kit is available for direct control of our hyperspectral cameras.