

# RESONON

## PIKA NIR-640 HYPERSPECTRAL CAMERA

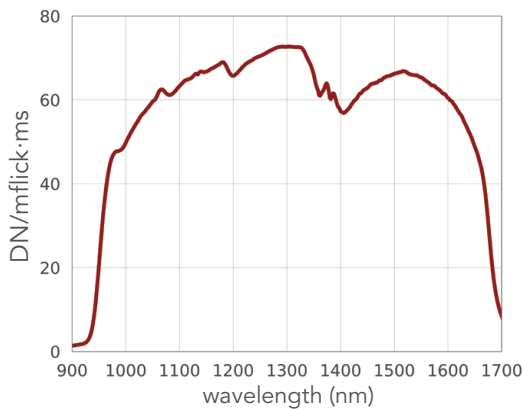
The Pika NIR-640 is a line-scan hyperspectral camera that covers the near-infrared spectral range (900 – 1700 nm). The Pika NIR-640 has high spatial resolution and best in-class spectral resolution, providing excellent imaging quality. It can be used with any of Resonon's benchtop, outdoor, and airborne systems, standalone with our software development kit, and integrated into machine vision systems.



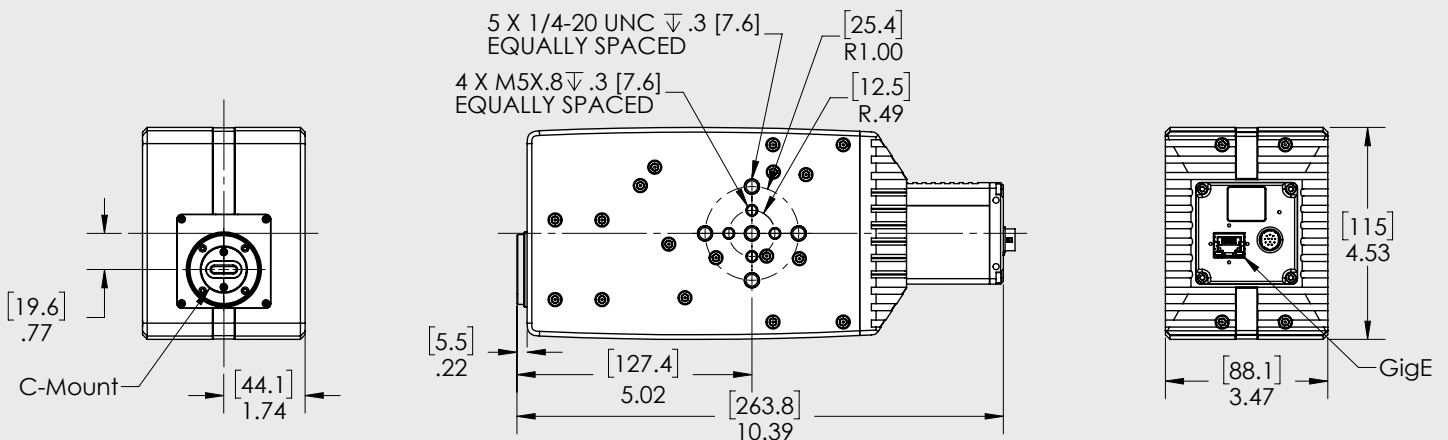
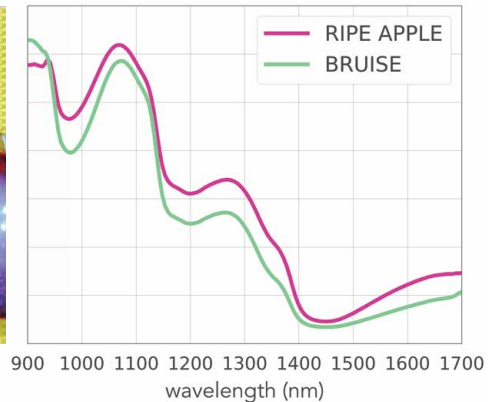
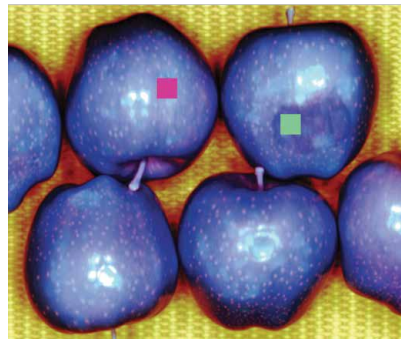
### FEATURES

- Spectral Range: 900 – 1700 nm
- 640 Spatial Pixels Per Line
- 328 Spectral Channels Per Line
- High Performance (5.6 nm FWHM spectral resolution)

### SPECTRAL RESPONSE



### ACTUAL DATA



## PIKA NIR-640 SPECIFICATIONS

<b>Spectral Range</b>	900 - 1700 nm
<b>Spectral Channels<sup>[1]</sup></b>	328
<b>Spectral Bandwidth</b>	2.5 nm
<b>Spectral Resolution (FWHM)</b>	5.6 nm
<b>Spatial Pixels per Line</b>	640
<b>f/#</b>	1.8
<b>Dimensions</b>	27.0 x 11.4 x 8.9 cm
<b>Weight</b>	3.21 kg
<b>Power Requirements</b>	10.8 V to 30.0 V
<b>Max Frame Rate</b>	249 fps
<b>Interface</b>	GigE
<b>Bit Depth</b>	14
<b>Pixel Size</b>	15 $\mu$ m
<b>Peak SNR<sup>[2]</sup></b>	1095
<b>Binning</b>	spectral and spatial available
<b>Sensor Type</b>	InGaAs
<b>Sensor Cooling</b>	TEC
<b>Operating Temperature (non-condensing)</b>	-20 - +50 C
<b>Recommended Temperature (non-condensing)</b>	5 - 40 C
<b>Objective Lens Mount</b>	CS-mount
<b>Objective Lens Field-of-View Options</b>	5°, 7°, 11°, 22°, 77°
<b>Software Development Kit</b>	Windows, C++

[1] This is the number of spectral channels spanning 900 – 1700 nm. The total number of spectral channels delivered by the Pika NIR-640 is 336, 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](http://downloads.resonon.com).

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