

## PIKA IR HYPERSPECTRAL CAMERA

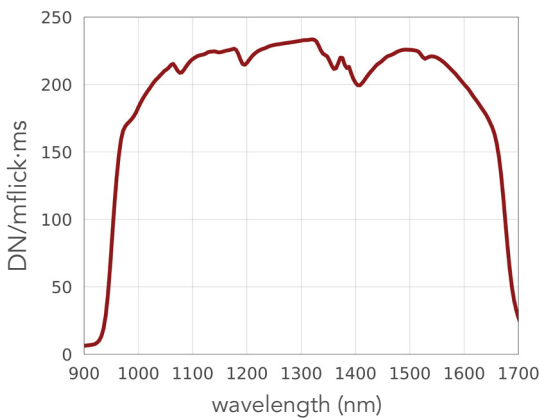


The Pika IR is a line-scan hyperspectral camera that covers the near-infrared spectral range (900 – 1700 nm). The Pika IR is a high-speed, cost effective infrared imager, ideal for machine vision applications. It can be used with any of Resonon’s benchtop, outdoor, and airborne systems, standalone with our software development kit, and integrated into machine vision systems.

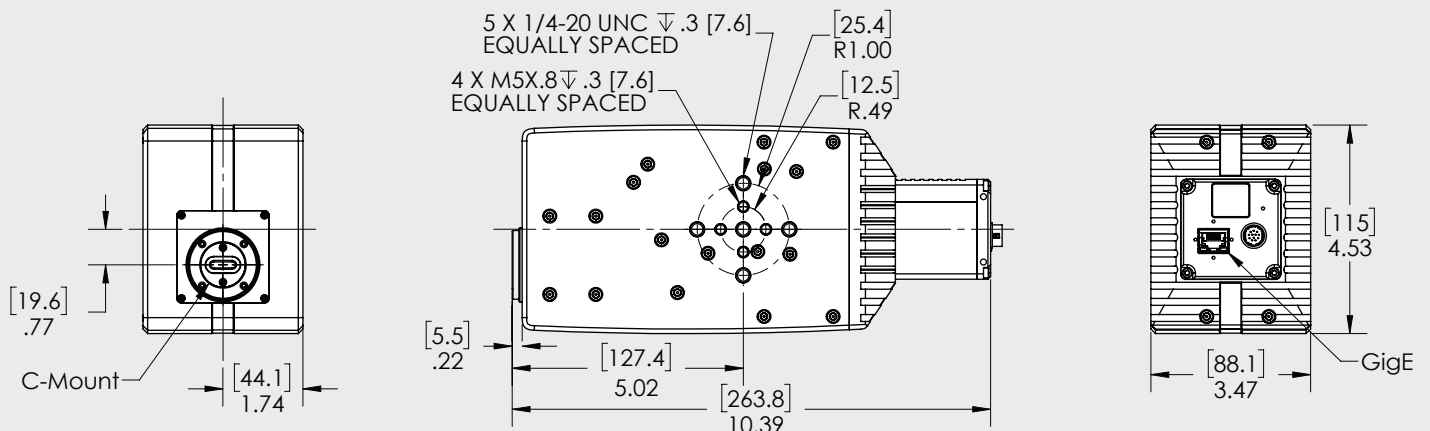
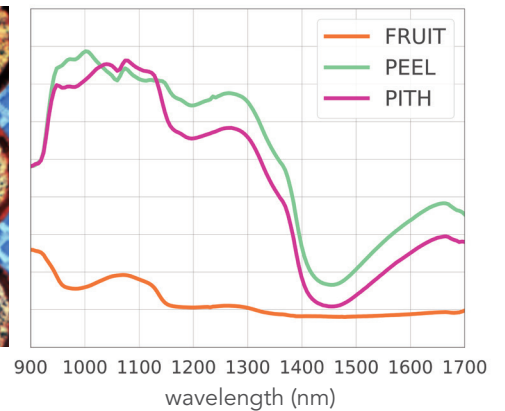
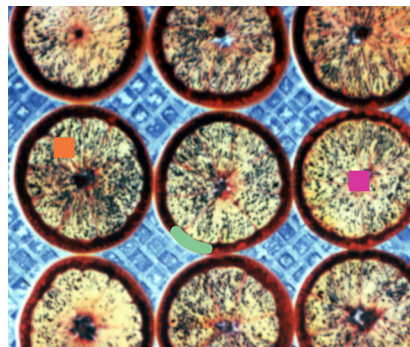
### FEATURES

- Spectral Range: 900 – 1700 nm
- 320 Spatial Pixels Per Line
- 168 Spectral Channels Per Line
- High Speed (508 fps max.)

### SPECTRAL RESPONSE



### ACTUAL DATA



## PIKA IR SPECIFICATIONS

<b>Spectral Range</b>	900 - 1700 nm
<b>Spectral Channels<sup>[1]</sup></b>	168
<b>Spectral Bandwidth</b>	4.8 nm
<b>Spectral Resolution (FWHM)</b>	8.8 nm
<b>Dispersion per Pixel</b>	4.76 nm
<b>Spatial Pixels per Line</b>	320
<b>f/#</b>	1.8
<b>Dimensions</b>	264 x 115 x 88 mm
<b>Weight (without Lens)</b>	2.95 kg
<b>Power Requirements</b>	10.8 V to 30.0 V
<b>Max Frame Rate</b>	508 fps
<b>Interface</b>	GigE
<b>Bit Depth</b>	14
<b>Pixel Size</b>	30 $\mu$ m
<b>Peak SNR<sup>[2]</sup></b>	1581
<b>Binning</b>	spectral and spatial available
<b>Pixel Well Depth</b>	2.5 Me-
<b>Slit Width</b>	30 $\mu$ m
<b>Spectrometer Magnification</b>	0.89
<b>Sensor Type</b>	InGaAs
<b>Sensor Cooling</b>	TEC
<b>Operating Temperature (non-condensing)</b>	-20 to +50 C
<b>Recommended Temperature (non-condensing)</b>	+5 to +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 IR is 172, 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](https://downloads.resonon.com). Resonon provides a programming guidance document for integrating our imagers using readily available SDKs.