# RESONON

PIKA NIR-320 HYPERSPECTRAL CAMERA

The Pika NIR-320 is a line-scan hyperspectral camera that covers the near-infrared spectral range (900 – 1700 nm). The Pika NIR-320 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.
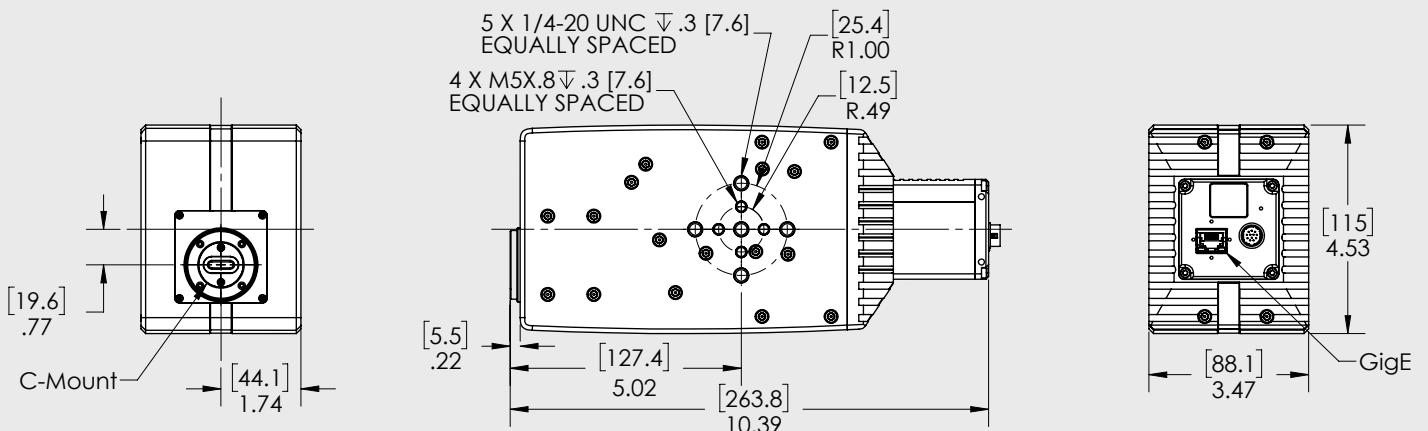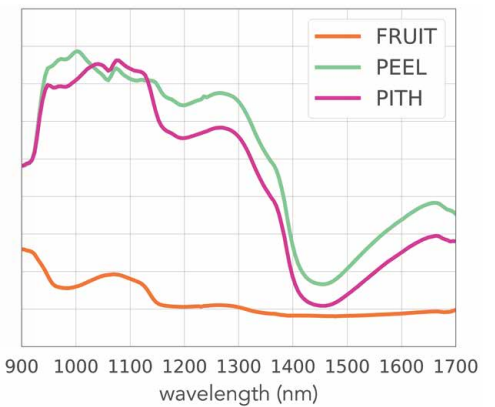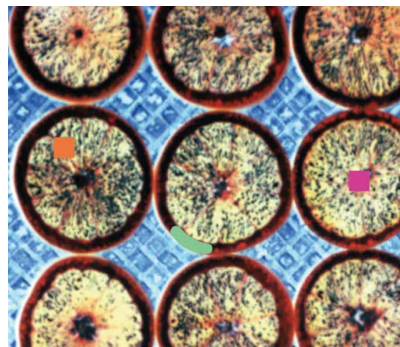
FEATURES

- Spectral Range: 900 – 1700 nm
- 320 Spatial Pixels Per Line
- 164 Spectral Channels Per Line
- High Speed (520 fps @ full frame)

SPECTRAL RESPONSE
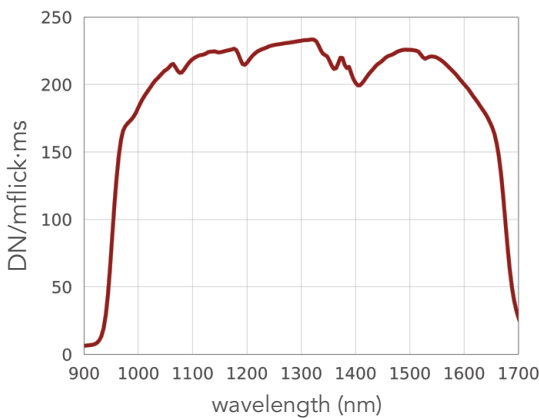
ACTUAL DATA

PIKA NIR-320 SPECIFICATIONS

Spectral Range	900 - 1700 nm
Spectral Channels[1]	164
Spectral Bandwidth	4.9 nm
Spectral Resolution (FWHM)	8.8 nm
Spatial Pixels per Line	320
f/#	1.8
Dimensions	27.0 x 11.4 x 8.9 cm
Weight	3.21 kg
Power Requirements	10.8 V to 30.0 V
Max Frame Rate	520 fps
Interface	GigE
Bit Depth	14
Pixel Size	30 µm
Peak SNR[2]	1581
Binning	spectral and spatial available
Sensor Type	InGaAs
Sensor Cooling	TEC
Operating Temperature (non-condensing)	-20 - +50 C
Recommended Temperature (non-condensing)	5 - 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 900 – 1700 nm. The total number of spectral channels delivered by the Pika NIR-320 is 168, 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.