RESCNON

PIKA IR HYPERSPECTRAL CAMERA

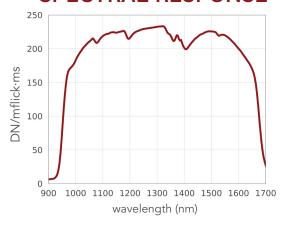


The Pika IR (formerly Pika NIR-320) is a line-scan hyperspectral camera that covers the near-infrared spectral range (900 – 1700 nm). The Pika IR is a high-speed, cost effective infrared imager, ideal for machine vision applications. It can be used with any of Resonon's benchtop, outdoor, and airborne systems, standalone with our software development kit, and integrated into machine vision systems.

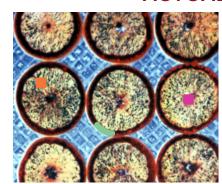
FEATURES

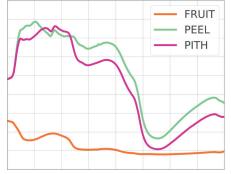
- Spectral Range: 900 1700 nm
- 320 Spatial Pixels Per Line
- 168 Spectral Channels Per Line
- High Speed (508 fps max.)

SPECTRAL RESPONSE

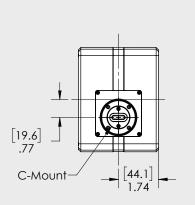


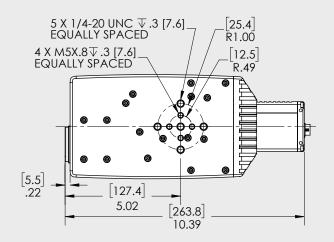
ACTUAL DATA

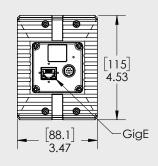




900 1000 1100 1200 1300 1400 1500 1600 1700 wavelength (nm)









PIKA IR SPECIFICATIONS

Spectral Range	900 - 1700 nm
Spectral Channels ^[1]	168
Spectral Bandwidth	4.8 nm
Spectral Resolution (FWHM)	8.8 nm
Dispersion per Pixel	4.76 nm
Spatial Pixels per Line	320
f/#	1.8
Dimensions	264 x 115 x 88 mm
Weight (without Lens)	2.95 kg
Power Requirements	10.8 V to 30.0 V
Max Frame Rate	508 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	0.89
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 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.