



**IRCameras**

## MID WAVE IRC900 SERIES

Providing superior resolution, the IRC900 Series scientific cameras are unmatched in sensitivity, ultralow noise and no crosstalk.

The IRC900 Series is based on a closed cycle Stirling cooled sensor engine. Users can quickly and easily vary integration time, frame rate and window size. With a choice of sensor formats and customized Dewar configurations, the IRC900 Series offers customers easy integration and customization for personalized applications.

Providing multiple outputs, users can view imagery directly from the IRC900 Series cameras using HDMI, and acquire and display digital data via Camera Link and GigE. Optional GPS allows users to geolocate the camera, and an optional four position filter wheel provides the ability to select sub-bands for spectrally dependent applications.

Software options include WinIRC and a software developers kit to allow the user to acquire, display and analyze data from the IRC900 series cameras.



### CAMERA CAPABILITIES

- Choice of Stirling cooled InSb sensors
- $<1 \mu\text{m}$  to  $>5 \mu\text{m}$  spectral range
- 14-bit digital output
- SuperFraming for extended dynamic range
- Motorized four position filter wheel option
- High frame rates & windowing



<b>DETECTOR</b>	<b>IRC906</b>	<b>IRC906HS</b>	<b>IRC910</b>	<b>IRC912</b>
Detector type	Indium Antimonide (InSb)			
Spectral response	<1.0 $\mu\text{m}$ to 5.3 $\mu\text{m}$			
Resolution (pixels)	640 x 512		1024 x 1024	1280 x 1024
Pixel pitch	20 $\mu\text{m}$	12 $\mu\text{m}$	25 $\mu\text{m}$	12 $\mu\text{m}$
<b>IMAGING ELECTRONICS</b>				
Image Data Stamp	Optional IRIG, GPS with on-board receiver			
Frame rate @ max window size	119 Hz	475 Hz	76 Hz	119 Hz
Integration time	<150 ns to full frame			
Dynamic range	14-bit with 13-bit option to increase frame rate at small window sizes			
Windowing	User defined in 4 x 1 increments; min width = 320, min height = 32			
Integration type	Snapshot, automatic selection of integrate while read or integrate then read			
Ultra low latency sync	Sync I/O, integration out			
Image data	Simultaneous CameraLink, GigE & HDMI			
Communications	Serial over Camera Link & GigE			
Software control	Cross platform GenICam compliant			
<b>PERFORMANCE</b>				
Non uniformity correction	up to 12 on board tables			
NEdT	18 mK	30 mK	18 mK	30 mK
Well capacity (electrons)	7 M	2 M	10 M	2 M
Operability	99.8 %	99.6 %	99.6 %	99.6 %
<b>OPTICS</b>				
Camera f/#	f/2.3, & f/4.0 standard; custom cold shields available on request			
Cold filter	3.0 $\mu\text{m}$ - 5.0 $\mu\text{m}$ or no cold filter standard, SWIR, CO2 or custom filters on request			
Lens mount	Bayonet	Bayonet	Bolt hole pattern	Bayonet
Optional filter wheel	Motorized four position cold filter wheel; 25.4 mm diameter x 1.0 mm thick filters			
<b>GENERAL</b>				
Power @ 24 VDC	20 W	25 W	35 W	28 W
System weight	<7 pounds	<7 pounds	<10 pounds	<7 pounds
Size	5.1" x 5.8" x 8"	5.1" x 5.8" x 8"	6" x 6" x 9"	5.1" x 5.8" x 8"
Operating temperature range	-40° C to +55° C (-40° F to +131° F)			
Storage temperature range	-55° C to +80° C (-67° F to +176° F)			
Environmental rating	IP-51			
Mounting holes	2x 1/4-20 & 4x #10-24			