



**IRCameras**

## IRC906SLS BROADBAND INFRARED CAMERA

Incorporating an all-digital Strained Layer Superlattice (SLS) focal plane array (FPA), the IRC906SLS detects infrared radiation in both the mid-wave (MWIR) and long-wave (LWIR) spectral regions. It's like having two cameras in one - an optional embedded warm filter wheel allows the user to select specific wavelengths of interest in both the MWIR and LWIR regions, taking full advantage of the broadband response of the SLS sensor.

This 640 x 512 format, 20 micron pixel pitch scientific camera runs at up to 475 frames per second with no electronic crosstalk. Full rate image data is available via Camera Link; simultaneous Gigabit Ethernet (GigE) and HDMI outputs are also offered.

With its excellent sensitivity and broad spectral response, the IRC906SLS is well suited for spectroscopy, chemical analysis, target signature detection and characterization and material evaluation applications.



### CAMERA CAPABILITIES

- 640 x 512 closed-cycle cooled SLS sensor
- 2.0  $\mu\text{m}$  to 11.25  $\mu\text{m}$  spectral response
- NE $\Delta$ T < 35 mK at full frame rate
- 475 Hz full window frame rate
- Motorized four position warm filter wheel optional
- Simultaneous CameraLink, GigE & HDMI outputs



<b>DETECTOR</b>	
Detector type	Strained Layer Superlattice
Spectral response	<2.0 $\mu$ m - 11.25 $\mu$ m +/- .75 $\mu$ m
Resolution (pixels)	640 x 512
Pixel pitch	20 micron
<b>IMAGING ELECTRONICS</b>	
Frame rate @ max window size	475 Hz
Integration time	<500 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 = 8
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 CameraLink & GigE
Software control	Cross platform GenICam compliant
<b>PERFORMANCE</b>	
NEdT	< 35 mK @ 30°C
Well capacity (electrons)	7 M
Operability	> 98%
<b>OPTICS</b>	
Camera f/#	f/2.3 coldshield standard
Cold filter	No cold filter standard; LWIR or custom filters on request
Lens mount	Bayonet
Optional filter wheel	Motorized four position warm filter wheel; 25.4 mm diameter x 1.0 mm thick filters
<b>GENERAL</b>	
Power @ 24 VDC	Steady state power consumption <40 W @ 25°C
System weight	< 13 pounds
Closed cycle cooler	Stirling Linear cooler
Size	8.5" (l) x 5.125" (w) x 6.7" (h)
Operating temperature range	-25° C to +50° C
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