IRCameras

IRC803 MID WAVE INFRARED CAMERA

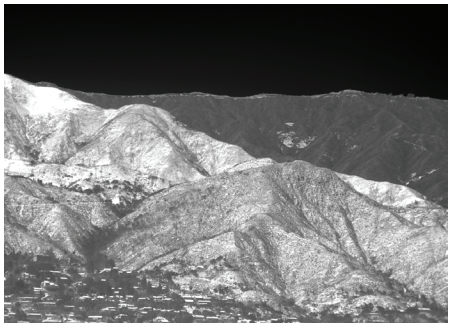
Utilizing the most advanced Indium Antimonide (InSb) focal plane array (FPA) technology available, the IRC803 scientific grade high performance infrared camera provides unmatched sensitivity, ultra-low noise, no blooming and no crosstalk. The IRC803 can be calibrated for accurate temperature measurement, and the powerful Thermography Suite™ image analysis software allows users to obtain calibrated data necessary for making critical decisions.

This 30 micron camera with a 320 x 256 pixel resolution and frame rate of 478 Hz provides crystal clear images and makes it ideal for materials evaluation, quality assurance and scientific imaging applications.

The IRC803 MWIR camera is equipped with an LN2 cooled Dewar assembly which offers lower cost, lower power consumption, no vibration and the ability to easily exchange cold filters or cold shields, making the IRC803 the perfect instrument for prototyping system development or for applications where requirements may change.

CAMERA CAPABILITIES

- 320 x 256 LN2 cooled InSb sensor
- <1 µm to >5 µm spectral response
- NEdT <20 mK
- 478 Hz full window frame rate
- Motorized four position filter wheel option
- Simultaneous Camera Link, GigE & HDMI outputs



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319-001-037

DETECTOR	IRC803
Detector type	Indium Antimonide (InSb)
Spectral response	<1.0 µm to 5.3 µm
Resolution (pixels)	320 x 256
Pixel pitch	30 µm
IMAGING ELECTRONICS	
Frame rate @ max window size	478 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
Image data stamp	Optional IRIG, GPS with on-board receiver
PERFORMANCE	
NEdT	17 mK/25 mK (Lo/Hi gain)
Well capacity (electrons)	20 M/4 M (Lo/Hi gain)
Operability	99.8%
LN2 hold time	> 8 hours typical, > 4 hours with optional cold filter wheel
OPTICS	
Camera f/#	f/2.3, f/3.0 & f/4.0 standard; custom coldshields available on request
Cold filter	3.0 µm - 5.0 µm or no cold filter standard, optional CO2, SWIR or custom filters on request
Lens mount	Bayonet for 7, 13, 25, 50, 100 & 50/250 mm lenses; bolt hole pattern for non-standard lenses
GENERAL	
Power @ 24 VDC	12 watts
System weight	< 7 pounds
Size	3.7" x 8.1" x 11.8"
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-31
Mounting holes	4 x 1/4-thru & 1 x 1/4-20