Gobi 640 Series

Thermal LWIR Camera

- LWIR uncooled camera with 640 x 480 resolution
- Microbolometer detector

Small, high performance uncooled thermal camera

The Gobi 640 series is based on an uncooled microbolometer detector with a 640 x 480 pixel resolution.

The Gobi 640, with detector NETD of less than 55 mK, offers frame rates up to 50 Hz, whereas the Gobi+ 640 reaches frame rates of 60 Hz and detector NETD of less than 50 mK.

The cameras come with either a CameraLink or GigE Vision interface.

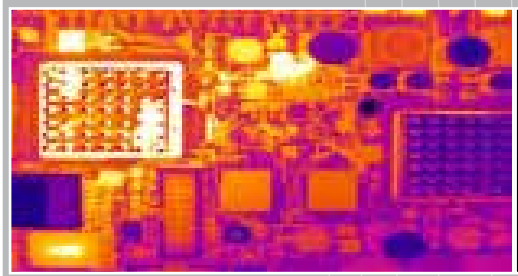
Learn more:

Designed for use in

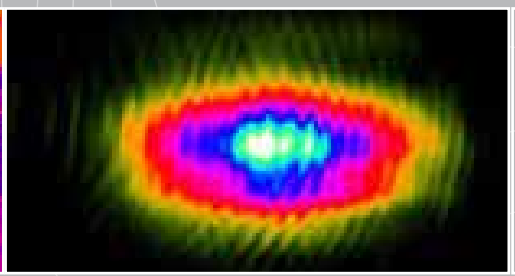
- Scientific & Advanced research
- Medical
- Process Monitoring

Advantages

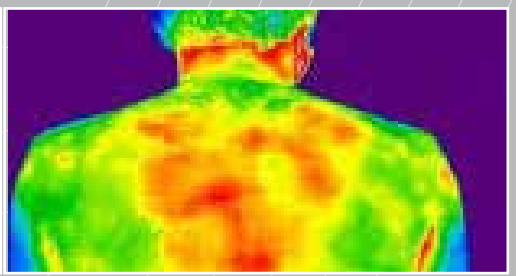
- Compact size
- Easy connectivity via multiple interfaces
- Frame rates up to 60 Hz
- Detector NETD below 50 mK
- Temperature calibrations for thermographic applications



PCB Inspection



Laser beam analysis



Medical: infection detection

▶ Camera Specifications

Camera Specifications	Gobi 640 CL	Gobi 640 GigE	Gobi+ 640 CL	Gobi+ 640 GigE
Mechanical specifications				
Approximate dimensions - excluding lens [width x height x length] [mm]	49 x 49 x 62	49 x 49 x 79	49 x 49 x 62	49 x 49 x 79
Weight [gr] - excluding lens	208	263	208	263
Optical interface	M42 or M34 x 0.75			
Connector GigE	-	RJ-45	-	RJ-45
Connector CameraLink	Standard SDR	-	Standard SDR	-
Connector power	Hirose HR10-7R-SA[73]			
Connector trigger	SMA			
Environmental & power specifications				
Ambient operating temperature range [°C]	From -40 to +60			
Storage temperature [°C]	From -45 to +85			
Power consumption [W]	2	4.5	2	4.5
Power supply voltage	DC 12 V			
Shock	40 g, 11 ms, MIL-STD810G/MIL-STD883J			
Vibration	5 g [20 - 2000 Hz], MIL-STD810G/MIL-STD883			
IP rating	IP 40			
Regulatory compliance	CE, RoHS			
Electro-optical specifications				
Image format [pixels]	640 x 480			
Pixel pitch [µm]	17			
Detector type	a-Si microbolometer			
Integration type	Rolling shutter			
Active area and diagonal [mm]	10.88 x 8.16 [diagonal 13.6]			
Detector NETD [Noise Equivalent Temperature Difference] [mK]	<55 [at 30 Hz, 300 K, F/1]	<55 [at 30 Hz, 300 K, F/1]	<50 [at 30 Hz, 300 K, F/1]	<50 [at 30 Hz, 300 K, F/1]
Spectral range [µm]	8 - 14			
Pixel operability	>99% [excluding 3 peripheral lines and columns]	>99% [excluding 3 peripheral lines and columns]	>99.5%	>99.5%
Max frame rate [Hz] [full frame]	50	50 [or 9]	60	60 [or 9]
Integration time range [µs]	1 - 80			
Region of interest	Yes			
Min region size [pixels]	160 x 120			
Analog-to-Digital [ADC] [bits]	16			
Command and control	CameraLink	GigE Vision	CameraLink	GigE Vision
Digital output format	CameraLink [16 bit]	GigE Vision [16 bit]	CameraLink [16 bit]	GigE Vision [16 bit]
Trigger	In or out via SMA or in via CL-CC1 [configurable]	In or out via SMA [configurable]	In or out via SMA or in via CL-CC1 [configurable]	In or out via SMA [configurable] [not for 9 Hz]
Product selector guide				
Part number	XEN-000066	XEN-000088	XEN-000645	XEN-000646
	-	XEN-000600 [9 Hz]	-	XEN-000647 [9 Hz]

XDS.018.01 | Information furnished by Xenics is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are typical values and subject to change without notice. This information supersedes all previously supplied information.

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