

# 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.

#### Designed for use in

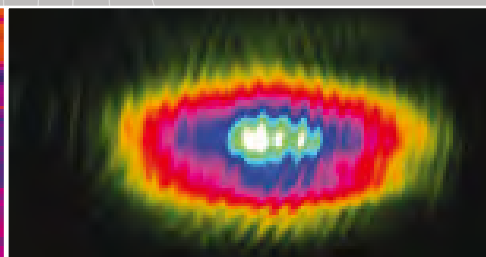
- Scientific & Advanced research
- Medical
- Process Monitoring

#### Advantages

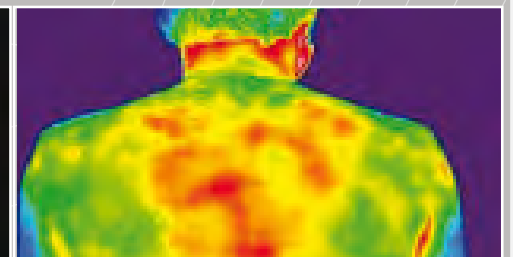
- Compact size
- Easy connectivity via multiple interfaces
- Frame rates up to 60 Hz
- Detector NETD below 50 mK
- Temperature calibrations for thermographic applications



⌘ PCB Inspection



⌘ Laser beam analysis



⌘ Medical: infection detection

## ► Camera Specifications

Camera Specifications	Gobi 640 CL	Gobi 640 GigE	Gobi+ 640 CL	Gobi+ 640 GigE
<b>Mechanical specifications</b>				
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			
<b>Environmental &amp; power specifications</b>				
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	DC 12 V or PoE [Power over Ethernet]	DC 12 V	DC 12 V or PoE [Power over Ethernet]
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			
<b>Electro-optical specifications</b>				
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]
<b>Product selector guide</b>				
Part number	XEN-000066	XEN-000088 XEN-000600 [9 Hz]	XEN-000645	XEN-000646 XEN-000647 [9 Hz]

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