CERES V 640 SERIES

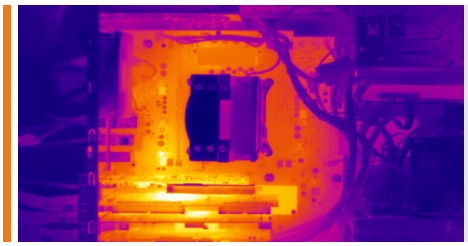
- Uncooled microbolometer camera for high-resolution thermal imaging
- 640x480 pixels
- 12 µm pitch
- GigE or CameraLink
- NETD <60 mK

COMPACT, INDUSTRIAL THERMAL CAMERA

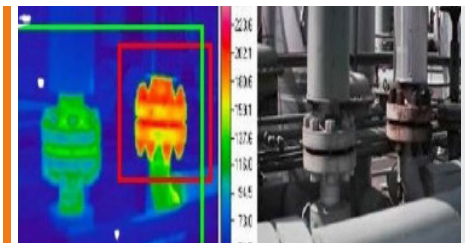
The Ceres V 640 series is based upon the Dione 640 OEM thermal imaging core with 640x480 pixels and 12 µm pixel pitch. The camera offers superior thermal imaging capabilities thanks to the state-of-the-art microbolometer detector and on-board image processing.

The Ceres V 640 camera outputs full frame images at 60 Hz via either a CameraLink or GigE Vision interface - all GenICam compliant.

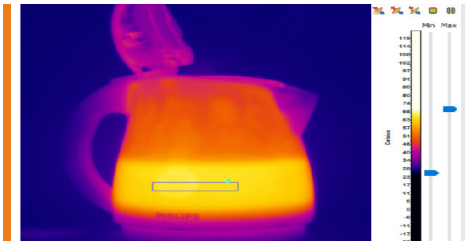
The compact size, excellent image quality and GenICam compliant interfacing allow for easy integration in demanding industrial, scientific and security thermal imaging applications. The camera comes either in a no-lens configuration (camera only with M24x0.5 and M34x0.5 optical mount), or optionally with four different HFOV (Horizontal Field-Of-View) options: 8, 12, 24 or 50 degrees.



PCB Inspection



Thermal imaging



Thermography

DESIGNED FOR USE IN

- Industrial Machine Vision
- Medical
- Scientific & Advanced Research
- Safety & Security

ADVANTAGES

- Compact and high-resolution
- Superior on-board image processing performance (optimized image quality)
- GenICam complaint
- Uncooled operation
- Flexible optical mount and lens options

SPECIFICATIONS

Camera Specifications	Ceres V 640 GigE	Ceres V 640 CL
Mechanical specifications		
Camera dimensions (width x height x length) [mm] (approx.)	45 x 45 x 75	45 x 45 x 67
Optical interface	M24x0.5 & M34x0.5	M24x0.5 & M34x0.5
Camera weight [gr]	207	200
Connector GigE	RJ45	NA
Connector CameraLink	NA	SDR-26
Connector power	Unified Connector (Lemo 1B)	
Connector trigger	Unified connector (Lemo 1B)	
Connector I/O	Unified Connector (Lemo 1B)	
Environmental & power specifications		
Operating temperature range (housing temperature) [°C]	From -40 to +70	
Storage temperature [°C]	From -40 to +85	
Power consumption [W]	4	3.5
Power supply voltage	DC 12 V	
Shock	40 g, 11 ms, MIL-STD810G	
Vibration	5 g (20 to 2000 Hz), MIL-STD810G	
IP rating	IP40	
Regulatory compliance	RoHS	
Electro-optical specifications		
Image format [pixels]	640x480	
Pixel pitch [µm]	12	
Detector type	Microbolometer	
Integration type	Rolling shutter	
Active area and diagonal [mm]	7.68 x 5.76 (diagonal 9.6)	
Detector NETD [Noise Equivalent Temperature Difference] [mK]	<60 (at 30Hz, 300K, F/1)	
Spectral range [µm]	8-14	
Pixel operability	>99.5% (excluding 3 peripheral rows and columns)	
Max frame rate [Hz] [full frame]	60	
Integration time range [µs]	20 - 65	
Analog-to-Digital [ADC] [bits]	16	
Command and control	GigE	CL
Digital output format	GigE	CL
Trigger	Unified Connector (Lemo 1B)	
Product selector guide		
Part number	XEN-000786	XEN-000785