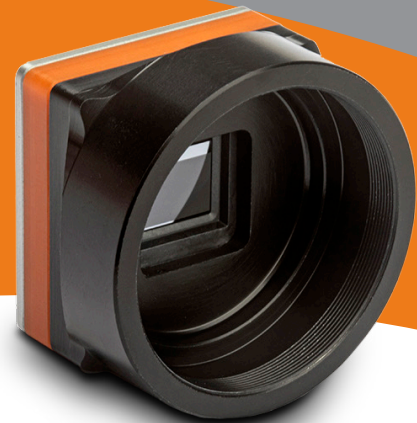


DIONE 320 CAM SERIES

- Uncooled thermal imaging SWaP module
- 320x240 pixels
- 12 μm pitch



COMPACT, INDUSTRIAL THERMAL CAMERA

The Dione 320 CAM series is based on the Dione 320 OEM thermal imaging core with 320x240 pixels and 12 μm pixel pitch. The detector NETD is less than 40 mK (available upon request) or 50 mK. The maximum frame rate is 60 Hz.

Dione 320 CAM is a LWIR uncooled thermal imaging SWaP module with housing supporting M24/M34 lens (optional).

Dione 320 CAM benefits from Xenics image enhancement for advanced image processing while keeping power consumption low. Moreover, GenICam compliance and availability of multiple lens provides high level of tunability for optimal integration into many systems.

DESIGNED FOR USE IN

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

ADVANTAGES

- State-of-the-art detector with 12 μm pixel pitch
- Industry leading SWaP (Size, Weight and Power)
- Part of the highly flexible and interchangeable Dione family series
- Detector NETD is less than 40 mK (available upon request) or 50 mK



Border Security



Thermal Security



Vision Enhancement

SPECIFICATIONS

Camera Specifications	Dione 320 CAM 40 mK	Dione 320 CAM 50 mK
Mechanical specifications		
Camera dimensions (width x height x length) [mm] (approx.)	31 x 31 x 22*; 40 x 40 x 24*	
Optical interface (optional)	M24 or M34 x 0.5	
Camera weight [gr]	27*; 30*	
Connector general I/O	SAMTEC ST5-30-1.50-L-D-P-TR	
Environmental & power specifications		
Operating temperature range (housing temperature) [°C]	From -40 to +70	
Storage temperature [°C]	From -45 to +85	
Power consumption [W]	570 mWatt (at 60 Hz operation; 16bit DV)	
Power supply voltage	DC 5 V	
Shock	40 g, 11 ms, MIL-STD810G	
Vibration	5 g (20 to 2000 Hz), MIL-STD810G	
Regulatory compliance	RoHS	
Electro-optical specifications		
Image format [pixels]	320x240	
Pixel pitch [µm]	12	
Integration type	Rolling shutter	
Active area and diagonal [mm]	3.84 x 2.88 (diagonal 4.8)	
Detector NETD [Noise Equivalent Temperature Difference] [mK]	<40 (at 60 Hz, 300K, F/1), available upon request	<50 (at 60 Hz, 300K, F/1)
Spectral range [µm]	8-14	
Pixel operability	>99.8%	
Max frame rate [Hz] [full frame]	60	
Integration time range [µs]	20 - 65 recommended (1 - 100 is possible)	
Region of interest	Yes	
Min region size [pixels]	80 x 80	
Analog-to-Digital [ADC] [bits]	14	
Command and control	via SAMTEC ST5 connector	
Digital output format	16bit DV**, MIPI CSI-2**	
Trigger	via SAMTEC ST5 connector	
Product selector guide		
Part number	XEN-000792	XEN-000790

* refers to specifications applicable for optical interfaces (optional)

** refers to digital output formats/interfaces that are available as options