

STATE-OF-THE-ART
THERMAL IMAGING CORE

EXOSSENS
REVEAL THE INVISIBLE

Dione 1280 CAM Series



STATE-OF-THE-ART THERMAL IMAGING CORE

KEY FEATURES



**STATE-OF-THE-ART MICROBOLOMETER
DETECTOR WITH 12 μm PIXEL PITCH**



FRAME RATES UP TO 60 Hz



**INDUSTRY LEADING LOW SWaP
(SIZE, WEIGHT AND POWER)**

The Dione 1280 CAM series is based on an uncooled microbolometer detector with a 1280x1024 pixel resolution and 12 μm pitch. The detector NETD is less than 40 mK (available upon request) or 50 mK. Dione 1280 CAM is a LWIR uncooled thermal imaging core with housing supporting M34/M45 lens (optional).

All Dione 1280 versions benefit from advanced image enhancement for image processing while keeping power consumption low. Moreover, GenICam compliance and availability of multiple lenses add flexibility for integration programs in the target markets like defense and surveillance, transportation and industrial process monitoring.



Dione 1280 CAM Series



KEY PERFORMANCES

Image format / Pixel pitch	1280 x 1024 pixels / 12 μ m
Integration type	Rolling shutter
Spectral range	8 - 14 μ m
Max frame rate (full frame)	60 Hz (16bit DV, MIPI CSI-2); 40 Hz (USB)
Power consumption	2.1 W (16bit DV); < 2.7 W (MIPI CSI-2, USB)
Power supply voltage	DC 5 V
Optical interface (optional)	M34x0.5 or M45x0.75

FUNCTIONS & INTERFACES

Digital output format	16bit DV, MIPI CSI-2, USB
Operating temperature range	From -40 °C to +70 °C (16bit DV, USB); From -30 °C to +70 °C (MIPI CSI-2)
Storage temperature	From -40 °C to +85 °C (16bit DV, USB); From -30 °C to +85 °C (MIPI CSI-2)
Detector NETD	<40 mK [at 30 Hz, 300K, F/1], available upon request or <50 mK [at 30 Hz, 300K, F/1]
Shock / Vibration	40 g, 11 ms, MIL-STD810G / 5 g (20 to 2000 Hz), MIL-STD810G

PRODUCT SELECTOR GUIDE

XEN-000702 (Dione 1280 CAM 40 mK)	XEN-000701 (Dione 1280 CAM 50 mK)
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