Xenics
Photonis Group

Dione 1280 CAM Series

Ultra-compact long-wave infrared (LWIR) thermal imaging core

STATE-OF-THE-ART THERMAL IMAGING CORE

KEY FEATURES

◆ Ultra-compact size, low weight and power (SWaP)

◆ 1280x1024 microbolometer detector with 12 µm pixel pitch

◆ Frame rates up to 60 Hz

◆ Detector NETD is less than 40 mK (available upon request) or 50 mK

◆ Designed for use in border security, thermal security and vision enhancement applications.

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 Xenics image enhancement for advanced 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 safety and security, transportation and industrial process monitoring.
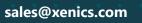
Dione 1280 CAM Series

EU based supplier

KEY PERFORMANCES

Image format/Pixel pitch	1280 x 1024 pixels / 12 μm
Integration type	Rolling shutter
Spectral range	8 - 14 μm
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

FUNCTIONS & INTERFACES

Digital output format	16bit DV, MIPI CSI-2, USB
Operating temperature range (housing temperature)	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; <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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xenics.com

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