

ULTRA HIGH SENSITIVITY UNCOOLED VGA THERMAL CORE

SWaP capable of <30mK without any denoising



SmartIR640/640E - 30mK

A SWaP camera core which numerous generic variants make ready for integration. Definitely the ideal candidate for highly demanding LWIR applications such as: high DRI performance systems (defense, SAR, UAVs, PTZ), high-speed inspection systems (machine vision) or active thermography (Non-Destructive Testing)

Key Features:

- VGA 17 μ m
- < 30mK without any denoising



- frame rate up to 120 Hz
- trigger / latency-free
- various interfaces

- choice of lenses up to 90° HFOV
- also available without lens



EU based supplier

Key performances

Sensor	Micro-bolometer technology
Resolution / Pixel pitch	640 x 480 pixels / 17 μ m
Spectral range	8 - 14 μ m
Frame rate	Up to 120 Hz
Max NETD (F/1 ; 300K ; 30 Hz)	< 30 mK
Typical NETD (F/1 ; 300K ; 30 Hz)	25 mK
Power consumption (USB 3.0 model)	< 1.1 W

Functions & Interfaces

Image processing	Bad Pixel Correction, NUC, Shutterless
Image optimisation	Global/local AGC, Progressive digital zoom up to x4, Overlays
For module (host-based processing)	USB3.0 RAW16
For engine core (embedded processing)	BT656 / YCbCr / MONO16 / PAL-NTSC / Camera Link / 3G/HD-SDI
Footprint	30 x 30 x 23 mm ³
Weight	from 38 g
Optics	from 7.5 mm to 100+ mm

Others

Operating temperature range	-20°C to +60°C (Standard grade) -40°C to +70°C (Extended or Military grade)
Qualifications	MIL-STD-810G and MIL-STD-883 (TWS)

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