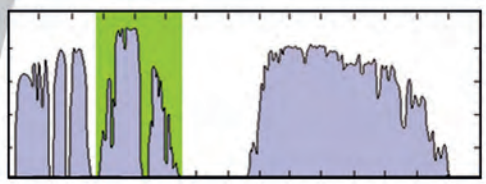
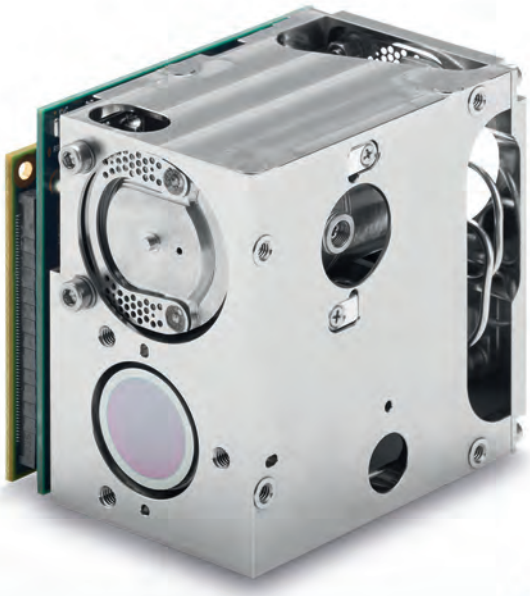
HiPIR Engine HOT MCT 1024 x 768 10µm PITCH IDCA

ULTRA-COMPACT HIGH PERFORMANCE MWIR ENGINE





HiPIR Engine HOT

- Ultra-low size, weight and power characteristics
- High operating temperature
- Preserving ~5µm, cutoff-wavelength
- Best suited for applications such as micro UAVs, small gimbals, portable systems or sights
- Optional small video processing unit available

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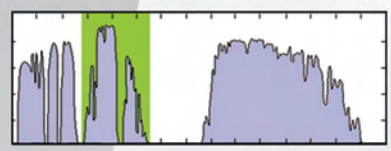

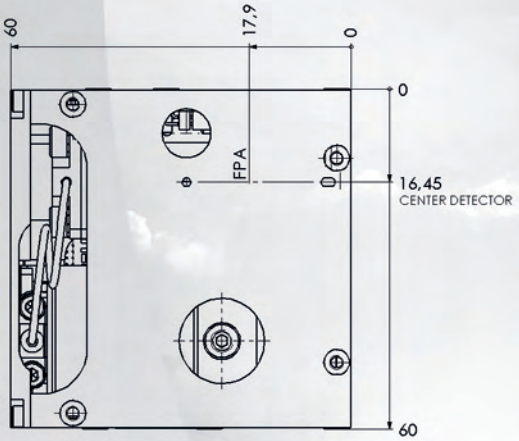

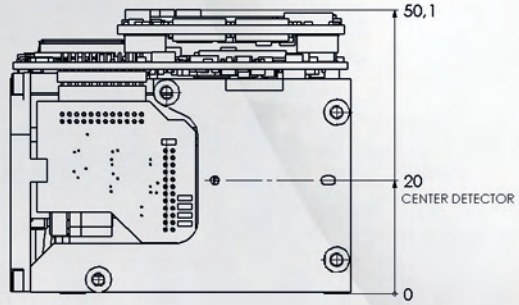

IR Sensor

Material	HgCdTe - Cadmium Mercury Telluride
Format	1024 x 768 (XGA)
Pixel pitch	10µm x 10µm
Detector spectral response	3.4µm - 4.8µm
FPA operating temperature	~ 160K

ROIC

Readout modes	Selectable ITR / IWR
Full well capacity	~ 7Me$^-$ (ITR); ~ 4Me$^-$ (IWR)
Windowing	programmable (any window in steps of 4 columns and 1 row)

SWaP

Size (length x height x width)	60mm x 60mm x 50mm (2.36 x 2.36 x 1.97 inches)
Weight	~ 0.36kg (~ 0.8lbs)
Power consumption	~ 4W (regulated mode @ ambient room temperature)
Cold shield	F/2.2 (others on request, e.g. F/4.0; impact on characteristics tbd)

Electronics

Video output	CL LVDS 14bit
Full frame rate	50Hz / 60Hz
Nominal supply voltage	14VDC

Performance

NETD	~ 20mK (at 300K; 50% well fill)
Operability	> 99%
Cool down time	~ 3 minutes @ ambient room temperature

Options

Stackable image processing unit	BPR, NUC, dynamic reduction, several reference sets for NUC HDMI video output, frame rate 25Hz / 30Hz

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