

PLUG & SENSE PLAY THE HEAT

SmartIR and IrLugX™ series, the reference in uncooled LWIR



EU based supplier



Comprehensive range of LWIR cores

As specialists of uncooled camera cores in infrared domain, Device-ALab provide true SWaP cameras, ready for integration into electro-optical systems or devices.

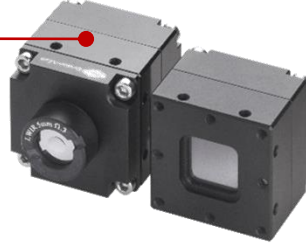
SmartIR and IrLugX™ LWIR camera series cover resolutions from 80x80 to 1M3 pixels and include the most recent microbolometric detectors of either 34, 17 or 12 μm pixels. The generic design of the cores enables versatile implementations, de facto reducing risks and development time for OEMs, Integrators and Solution Providers in defense and commercial markets.

Key Features:

- versatile implementation
- with / without optics
- various interfaces



- resolution up to 1280 pixels
- NETD performance <30 mK
- frame rate up to 120 Hz
- trigger / No latency



- true SWaP
- low consumption
- small footprint



- shutterless capable
- MIL & TWS qualified

SmartIR (34/17µm pixel)	80	160	384	640	1M0
Resolution (pixels)	80 x 80	160 x 120	384 x 288	640 x 480	1024 x 768
Frame rate (maximum)	50 Hz	60 Hz	60 Hz	120 Hz	120 Hz
Typical NETD (F/1 ; 300K ; 30 Hz)	80 mK	50 mK	30 mK	25 mK	40 mK

IrLugX™ (12µm pixel)	320	640	1M3
Resolution (pixels)	320 x 240	640 x 480	1280 x 1024
Frame rate (maximum)	60 Hz	60 Hz	60 Hz
Typical NETD (F/1 ; 300K ; 30 Hz)	50 mK	40 mK	40 mK

Product Interfaces / Video standards	
Modules (host-based processing)	RAW16 over USB2.0 or USB3.0
Engine Cores (embedded processing)	BT656 / YCbCr / CMOS parallel 16bit / PAL-NTSC / Camera Link / SD-SDI / 3G/HD-SDI / MIPI
Platforms (for handheld devices)	Digital: BT656 / YCbCr and/or Analog : PAL / NTSC

Others	
Image processing	Bad Pixel Correction, NUC, Shutterless
Image optimization	Global/local AGC, Progressive digital zoom up to x4, Overlays
Optics (optional)	1.5 mm to 100+ mm Focal Distance / 4° to 180° HFOV
Operating temperature range	Up to -40°C to +70°C (Extended or Military grade)
Qualifications	MIL-STD-810G and MIL-STD-883 (TWS)

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