



Phoenix LWIR Core Module

**Phoenix Ultra-High Performance Uncooled LWIR Thermal Imaging Core (< 25 NETD).
Solar Energy tolerant. Includes Absolute Temperature based color palette.**

Typical Applications:

- Machine Vision
- Industrial Control
- Fast Event detection
- Medical Screening
- Security & Surveillance
- Search & Rescue



LWIR Image

DETECTOR

Detector Type	Uncooled Amorphous Silicon Microbolometer
Resolution & Pitch	640 x 480 17µm
Spectral Band	8-14 µm
Sensitivity (NETD)	High Performance ≤ 25mK, Standard < 40mK (f/1.0 lens @ 23 degr C)
Frame Rate	30 Hz (Standard), 60 Hz, 120 Hz and Custom up to 900 Hz Available

OPTICS

Focal Length	No Lens	45mm	30mm	15mm
FOV	NA	14x10 degr	20x15 degr	40x30 degr
F-Stop	NA	f/1.2	f/1.0	f/1.0
Focus	NA	Manual	Manual	Manual
Athermalized / IP Rating	NA	Yes / IP68	Yes/IP68	Yes/IP68

SWAP

Size (WxHxL)	1.5" x 1.5" x 1.5"	2.2" x 2.2" x 4.2"	2.0" x 2.0" x 3.7"	2.2" x 2.2" x 4.2"
Weight	52g	233g	210g	194g
Power	≤ 1.4 watts	≤ 1.4 watts	< 1.4 watts	< 1.4 watts

INTERFACE

Power Input	5-28 VDC
Video Output Channel 1	8/16/24 bit CameraLink
Video Output Channel 2	8 bit NTSC
Image Processing	Histogram or AGC: Color Palette - Absolute Temperature Based
Communication	User GUI, LVTTTL, and USB 2.0, 2 Programmable Discrete I/O's

ENVIRONMENTAL

Operating Temp	-40C to 85C
Storage Temp	-45C to 105C
Enclosure	Available as core, module or inside enclosure