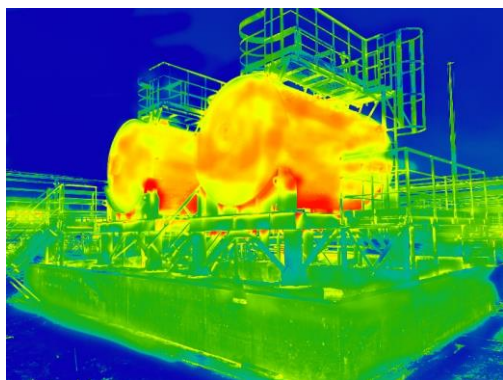
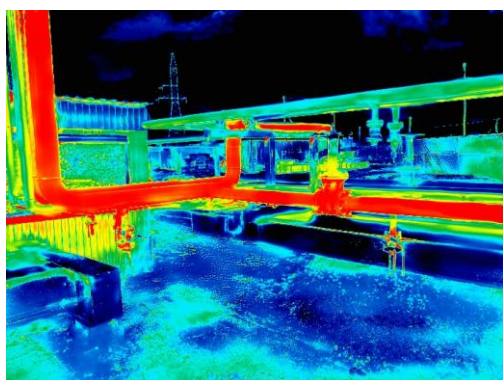


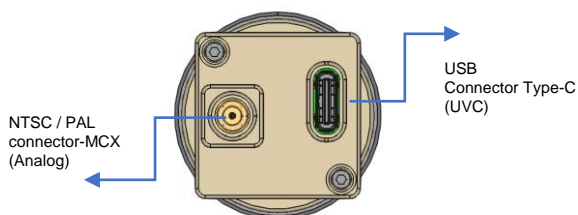
Mars640 LWIR Thermal Camera

Features :

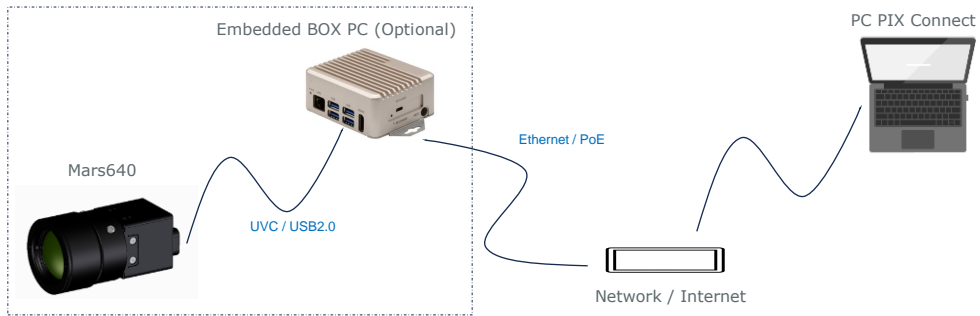
- 640 x 480 pixels
- NDAA Compliant
- Small & Lightweight
- High Accuracy & Speed
- Flexible Interface



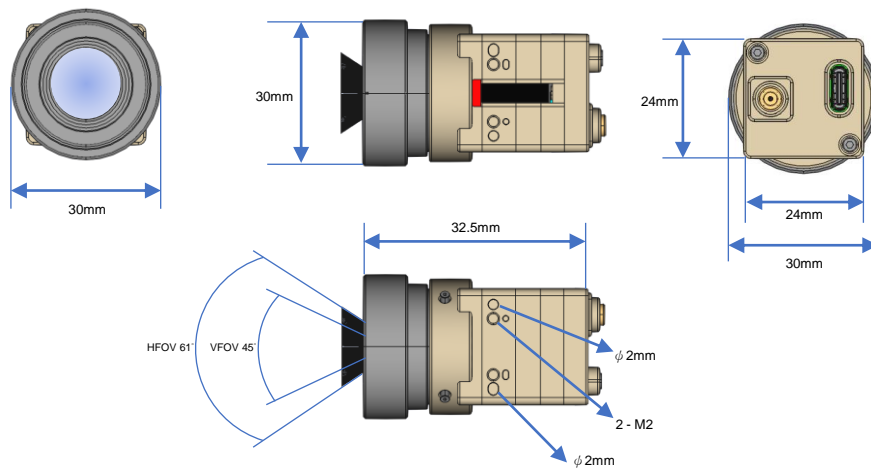
MODEL	THERMAL IMAGING MODULE
SENSOR	
Type	Uncooled VOx Microbolometer
Detector	12 μ m
Spectral range	8 ~ 14 μ m
NETD	50mK F1.0, @300K, 30Hz
Accuracy	± 1.5 °C, @10~100 obj. (± 0.5 °C for body temp.)
Temperature ranges	5~500°C
VIDEO	
Resolution	640 x 480 pixels
Frame rate	25Hz 8bit with DDE, 30Hz 8bit without DDE
Video out	CMOS(RGB888, BT656), USB2.0 (UVC-RGB888, UVC-H.264)
Image protocol	RTSP
LENS	
LENS	6.2 / 7.5 / 9.1 / 10 / 13.5 / 19 / 25mm (Others upon request)
FUNCTION	
Automatic Gain Correction	Histogram Equalization(HEQ) Digital Detail Enhancement(DDE)
Image	Flip / Mirror
Temperature mode	High Gain / Low Gain
Electronic Zoom)	1/2/4/8 x
Noise Reduction	Spatial Noise Reduction (SNR) Temporal Noise Reduction (TNR)
Colorization	10 mode (White hot, Black hot, Rainbow, Rain bow, Iron bow, Lava, Arctic, Glow bow, Grade Fire, Hotte st)
Symbol overlay	OSD function
Accessory (optional)	USB + Analog VPC
PHYSICAL	
Enclosure	Standard Module : 24x24x14.9mm / IP67 of Lens
Weight	Standard Module : 13g / 26.7g (w/holder and shutter)
ESD	EN 61000-4-2 Level 4
POWER SUPPLY	
Consumption	<1.5W @25°C
Current	<300mA
ETC	
Working temperature	-20°~70°C
Storage temperature	-40°~85°C



Process integration



Dimensions (Lens Focus 7.5mm)



Lens Option				
Lens Focus(mm)	FOV (H x V)	Detection Distance(M)	Recognition Distance(M)	Identification Distance(M)
6.2	75 X 55	244	61	30
7.5	61 X 45	295	74	37
9.1	48.6 X 38.6	357	89	45
10	44 X 32	393	98	49
13.5	32 X 26	530	133	66
19	23 X 17.3	746	187	93
25	17.3 X 13.1	982	245	123
50	8.8 X 6.6	1964	491	245

Optional	MODEL	EMBEDDED BOX PC
	System	SPECIFICATIONS
	CPU	Quad Core ARM® Cortex®-A57 MP Core Processor
	System Memory	4GB LPDDR4
	Storage Device	32GB Micro-SD (A version) or 16GB eMMC (B version)
	Display Interface	HDMI 2.0
	Ethernet	10/100/1000Base-TX x 1
	I/O	USB 3.2 Gen 1 x 4 LAN x 1 RS-232 x 2 HDMI x 1 MicroSD x 1 DC Power Input x 1 Recovery Button x 1 Micro-USB for Flash OS x 1
	Expansion	M.2 E-Key 2230 x 1(for Wi-Fi)
	Indicator	Power LED x 1
	OS Support	Linux (AC Linux 4.9) Linux (NVIDIA Jetpack 4.5)
	Power Supply	SPECIFICATIONS
	Power Requirement	12Vdc w/ 2-pin terminal block
	Mechanical	SPECIFICATIONS
	Mounting	Wall mount
	Dimensions (W x D x H)	3.39" x 2.87" x 1.3" (88mm x 75mm x 39mm)
	Gross Weight	1.10 lb (0.5 Kg)
	Net Weight	0.66 lb (0.3 Kg)
	Environmental	SPECIFICATIONS
	Operating Temperature	-4°F ~ 122°F (-20°C ~ 50°C, according to IEC60068-2 with 0.5 m/s AirFlow)
	Storage Temperature	-49°F ~176°F (-45°C ~ 80°C)
	Storage Humidity	95% @ 40°C, non-condensing
	Anti-Vibration	3 Grms/ 5 ~ 500Hz/ operation – MicroSD or eMMC
	Certification	CE/FCC class A

