

TT-71LA13-TIM

*ThermalTronix Uncooled HD Thermal Imaging Module
1024 x 768 VOx Microbolometer, pitch: 14 μ m.
Continuous digital zoom, from 1 x -4 x (step of 0.1/1)*



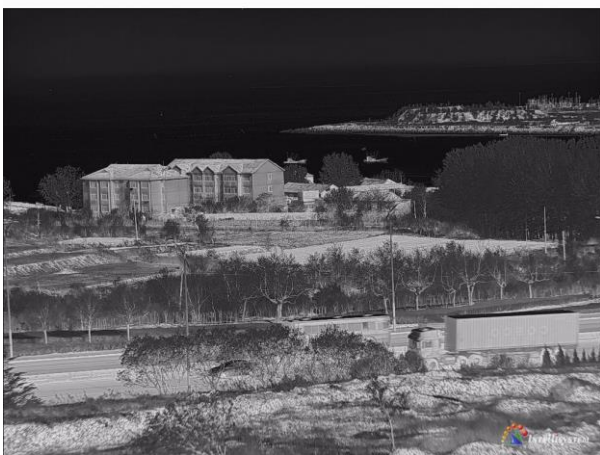
Product Features

IT-71LA13-TIM is a HD thermal imaging module based on the independently developed XGA (1024 x 768) sensor. Since the array format of XGA is 2.4 times the size of VGA, IT-71LA13-TIM can provide larger FOV, extending the detection limits. IT-71LA13-TIM thermal imaging module can output fairly clear image during day, night and other challenging environment conditions such as smoke, dust, haze and fog.

Basic Functions

- Independently developed VOx focal plane arrays
- Resolution: 1024 x 768, Pixel pitch: 14 μ m
- High sensitivity: NETD \leq 50mK
- Professional image processing: Digital denoise, Digital detail enhancement (DDE),
- Non-Uniformity Correction (NUC)
- Various interfaces optional: RS-232, RS-422, UART (3.3V)
- Digital video : LVDS, LVCMOS , Cameralink
- Weight: \leq 100g

Thermal 1024 x 768 Sample Images



Optional Component

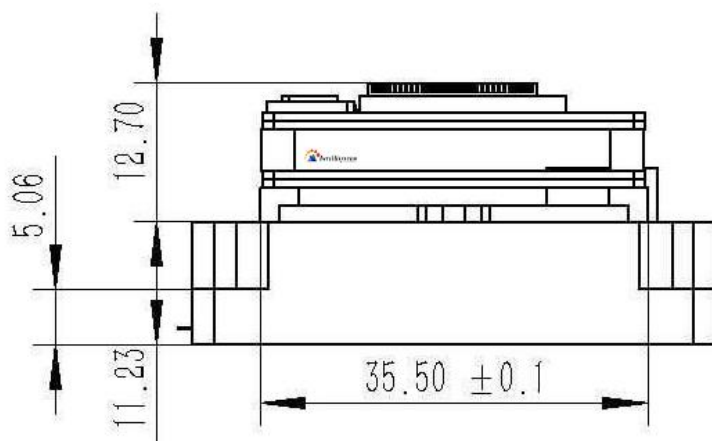
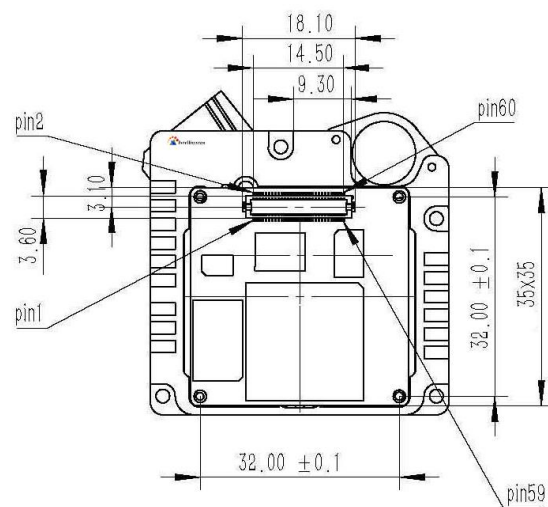
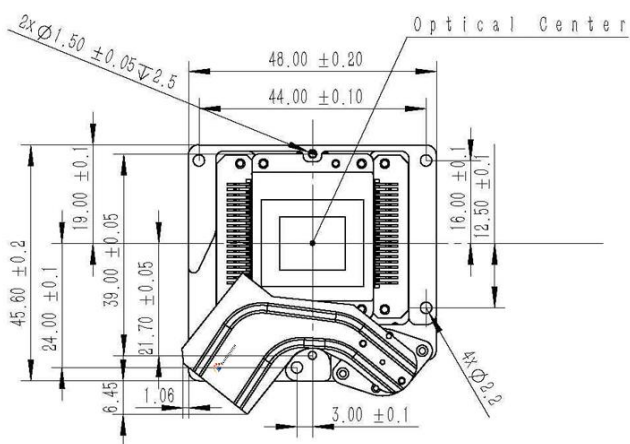
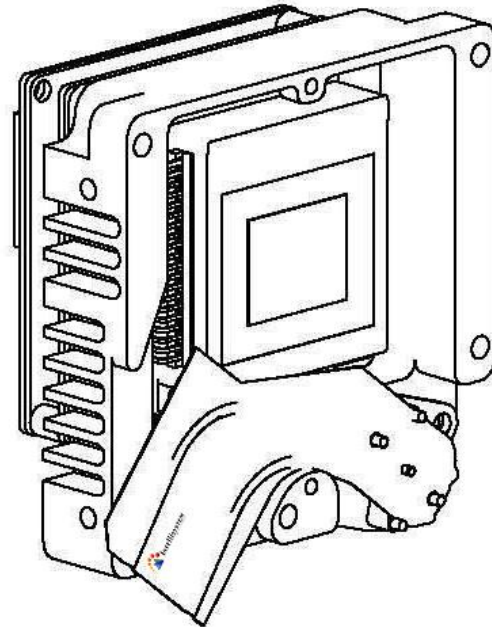
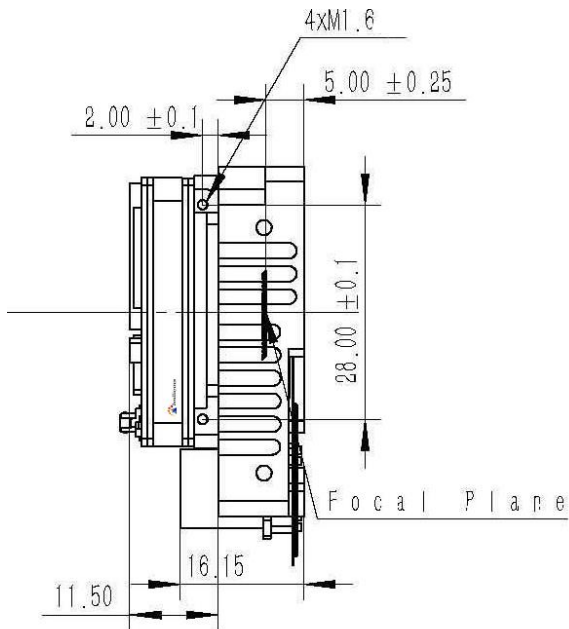
Expansion components and other accessories

Different kinds of expansion components and accessories are available to meet customer's demands for different interfaces and functions.

NO.	PN.	Model	Picture	Applied Model
1	Expansion Board	A03-16000		TT-71LA13-TIM module
2	Expansion Board	A03-11000		TT-71LA13-TIM module
3	Housing	A0001		TT-71LA13-TIM module with A03-16000 expansion board
4	Housing	A0002		TT-71LA13-TIM module with A03-11000 expansion board

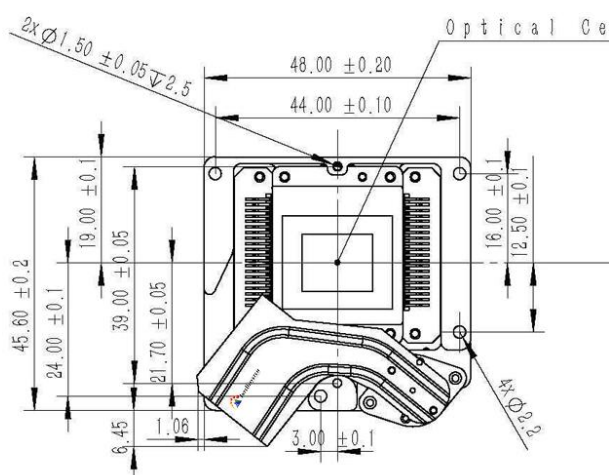
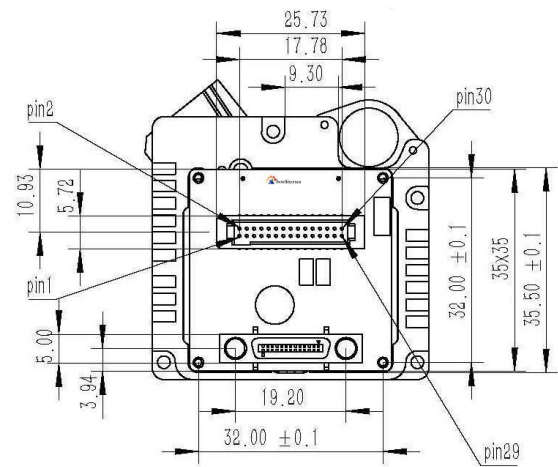
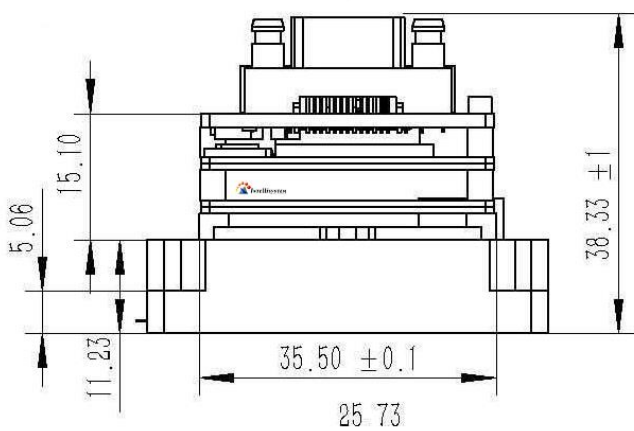
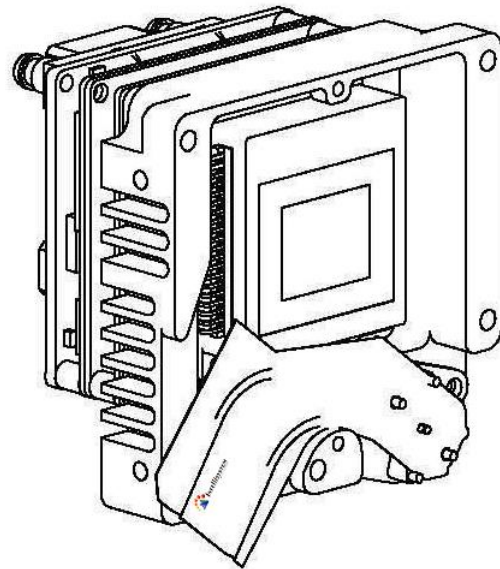
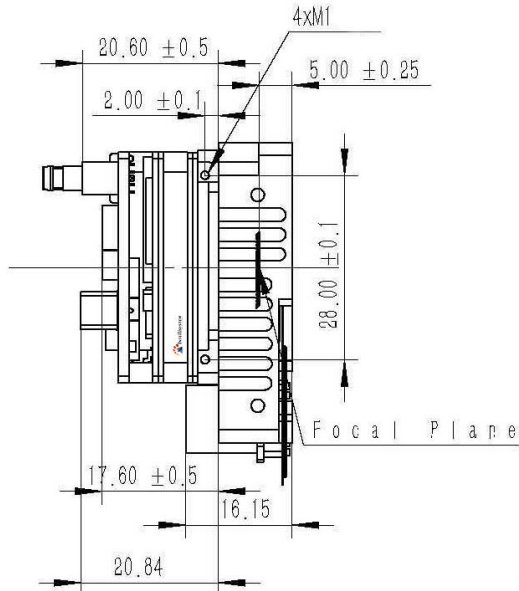
Mechanical Drawings

TT-71LA13-TIM without expansion modules



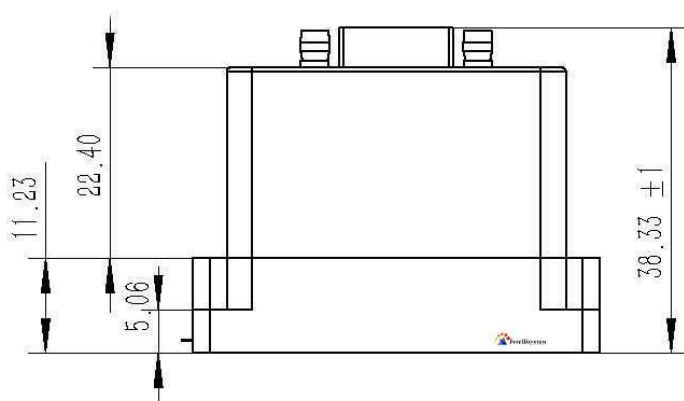
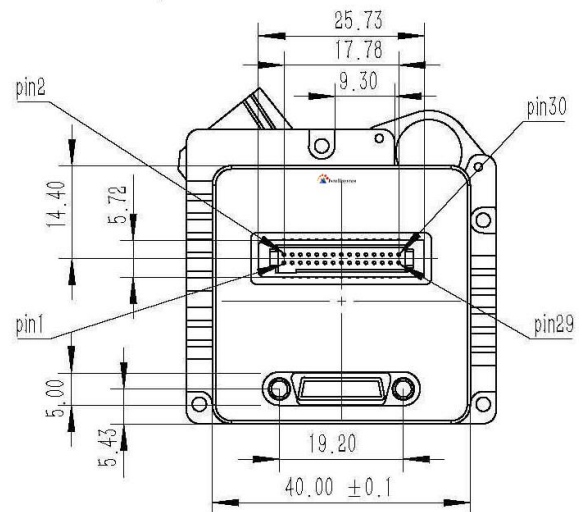
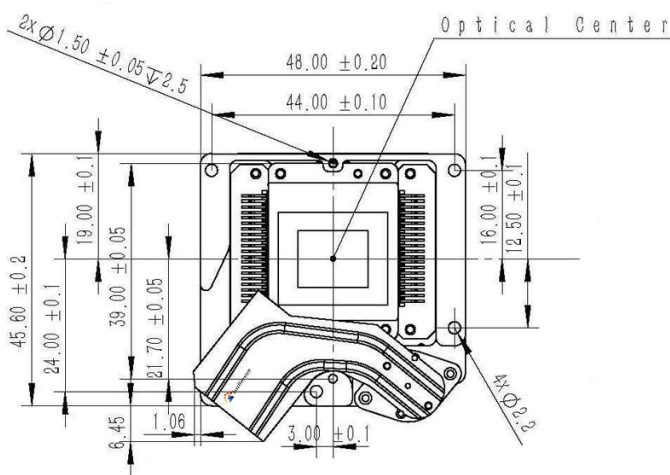
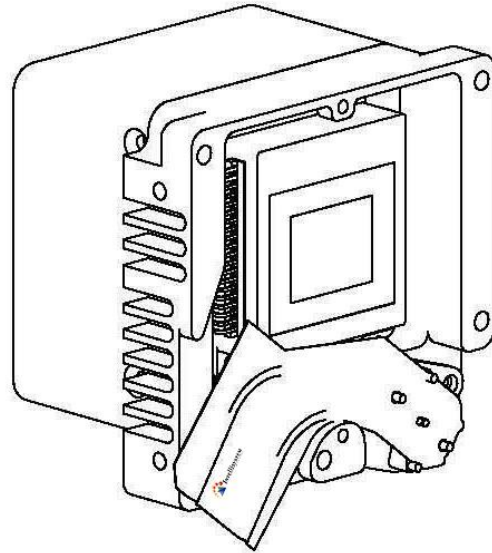
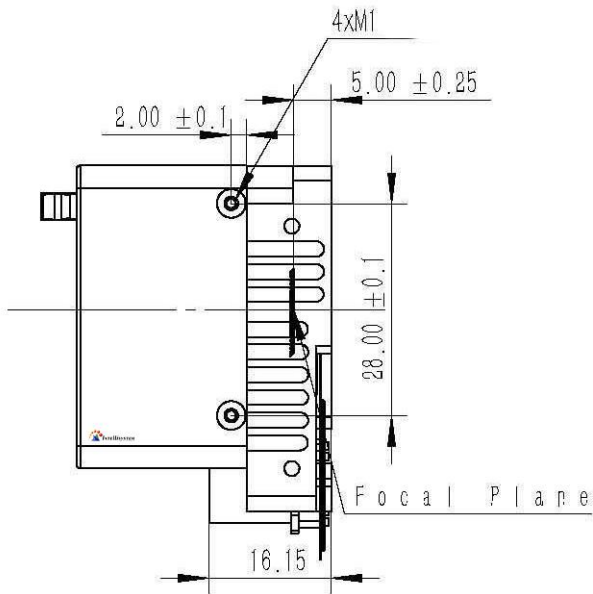
Mechanical Drawings

TT-71LA13-TIM with A03-11000 expansion Board



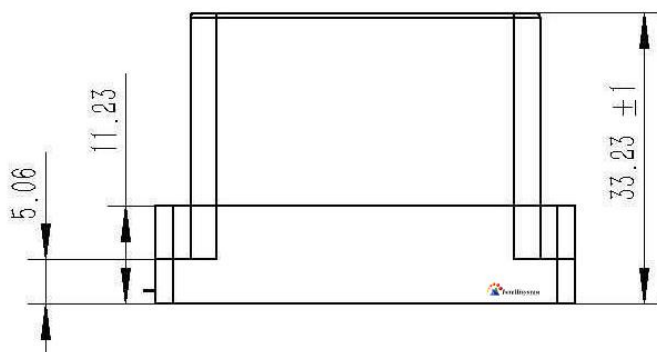
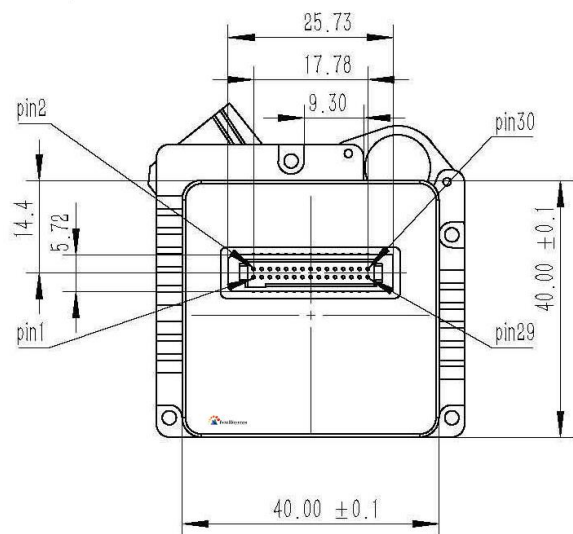
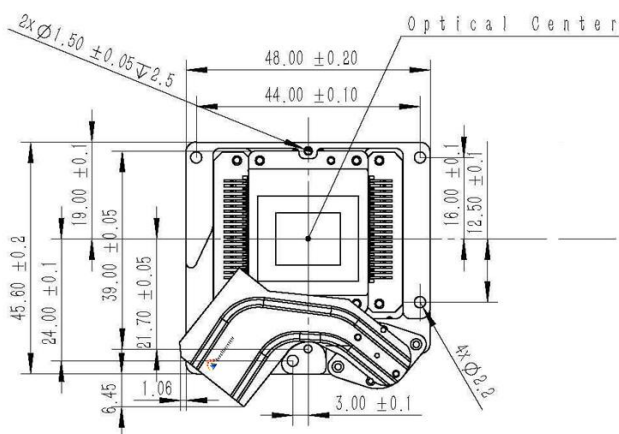
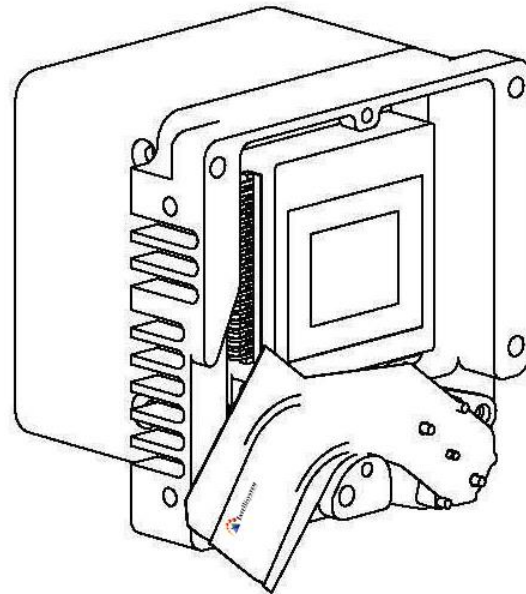
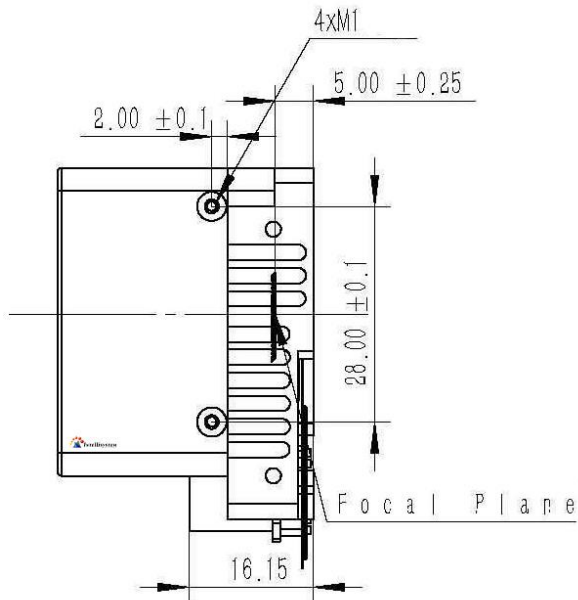
Mechanical Drawings

TT-71LA13-TIM with A00-11000 board and A0002 housing



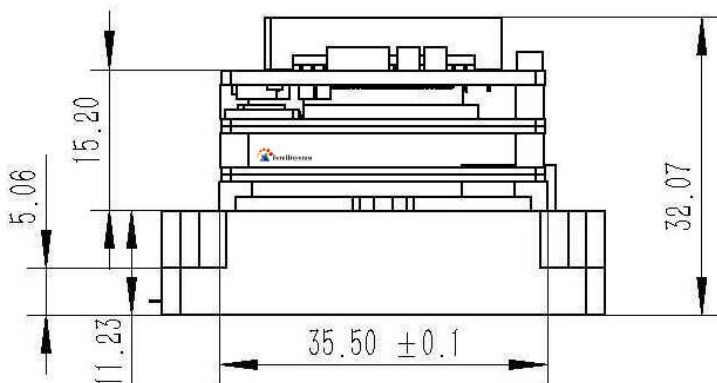
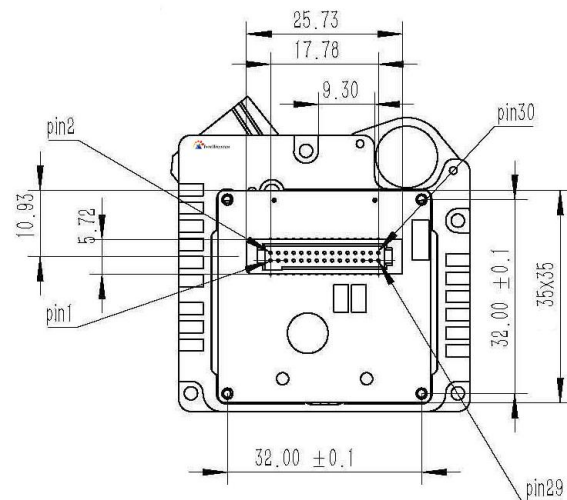
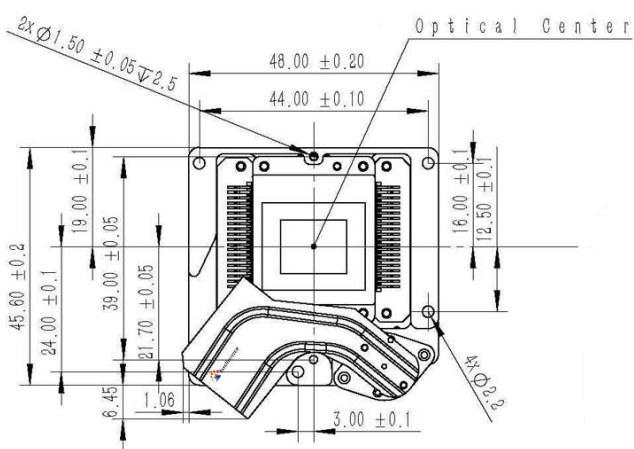
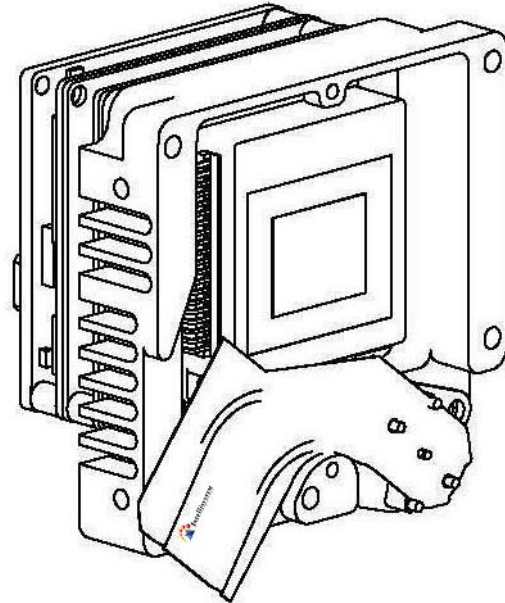
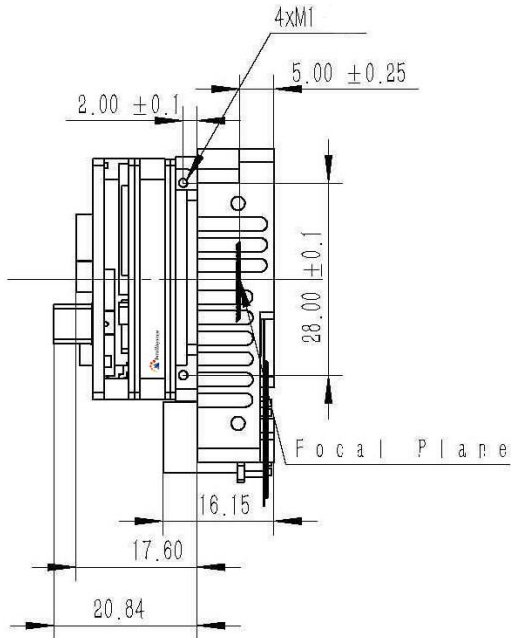
Mechanical Drawings

TT-71LA13-TIM with A03-16000 board and A0001 housing



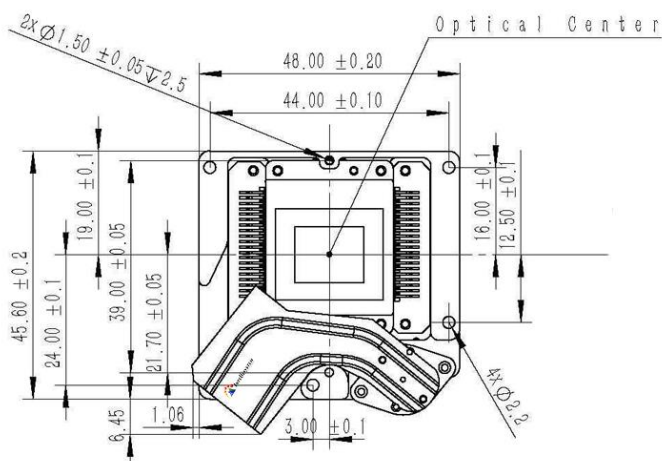
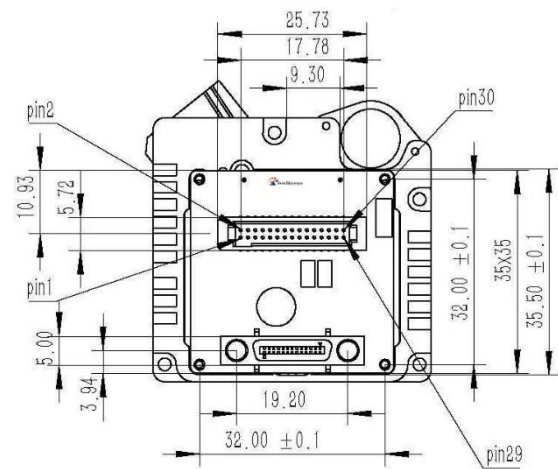
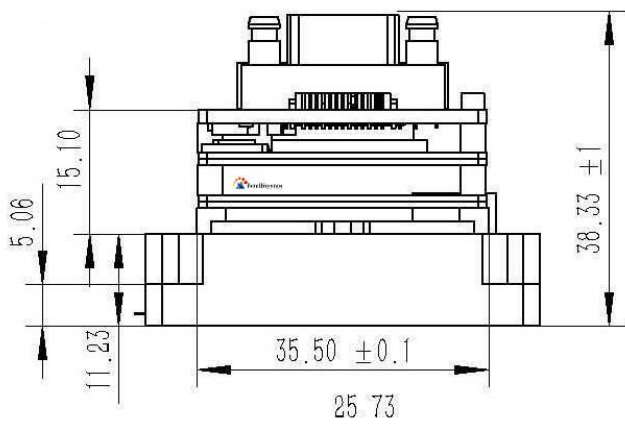
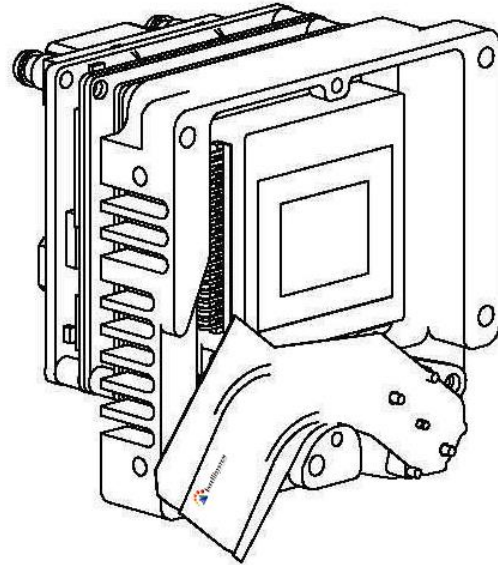
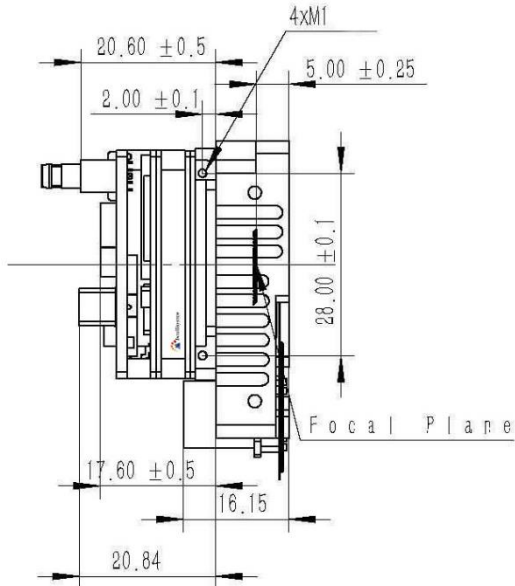
Mechanical Drawings

TT-71LA13-TIM with A03-16000 expansion Board



Mechanical Drawings

TT-71LA13-TIM with A03-11000 expansion Board



Specifications

Model	TT-71LA13-TIM
System Type	Uncooled LWIR Thermal Imaging Module
Performance	
Resolution	1024 x 768 VOx Microbolometer
Pixel Pitch	14 μ m
Spectral Band	8-14 μ m
Sensitivity (NETD)	\leq 60mK (50mK optional)
TEC	Yes
Video Format	
Frame Rate	30Hz
Digital Video	LVDS, 14-bit or 10-bit LVCMOS, Cameralink
Digital Zoom	Continuous digital zoom, from 1 x -4 x (step of 0.1/1)
Power System	
Input Voltage	5.2 – 6 V Base configuration 5 – 24 V Base configuration with expansion board
Typical input Voltage	5.5V Base configuration 12V Base configuration with expansion board
Power Consumption	\leq 2.8W \leq 3.2W (with expansion board)
Function	
Communication Interface	RS-232; RS-422; UART (3.3V)
Image Processing	Digital denoise Digital detail enhancement Non-Uniformity Correction
Image Control	Polarity: White Hot / black Hot Orientation: Vertical /Horizontal/Diagonal Pseudo-color: support Cross cursor: Display / Hide / Move
Physical Attributes	
Size	35mm x 35mm (circuit board)
Weight	\leq 100g
Environmental	
Operating Temp Range	-40°C to +60°C
Storage Temp Range	-45°C to +85°C