

# TT-61LA10-TIM

*ThermalTronix Uncooled HD Thermal Imaging Module resolution 640 x 512 pixel, pitch: 17  $\mu$ m. Continuous digital zoom, from 1 x -4 x (step of 0.1/1)*



## Product Features

TT-61LA10-TIM Series thermal imaging module is a universal module designed for OEM applications. TT-61LA10-TIM Series module is adaptable for various applications including automotive night vision system, forest fire prevention and security/surveillance, etc.

## Basic Functions

- Resolution: 640 x 512, Pixel pitch: 17  $\mu$ m
- High sensitivity: NETD  $\leq$  50mK
- Professional image processing: Digital denoise, Digital detail
- Various interfaces optional: RS232, RS422, UART (3.3V)
- Support various video outputs: PAL, LVCMOS, LVDS, Cameralink
- Weight:  $\leq$  100g
- Friendly electrical and mechanical interfaces

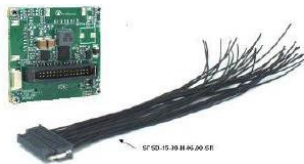
## Thermal 640 x 512 Sample Images



## Optional component

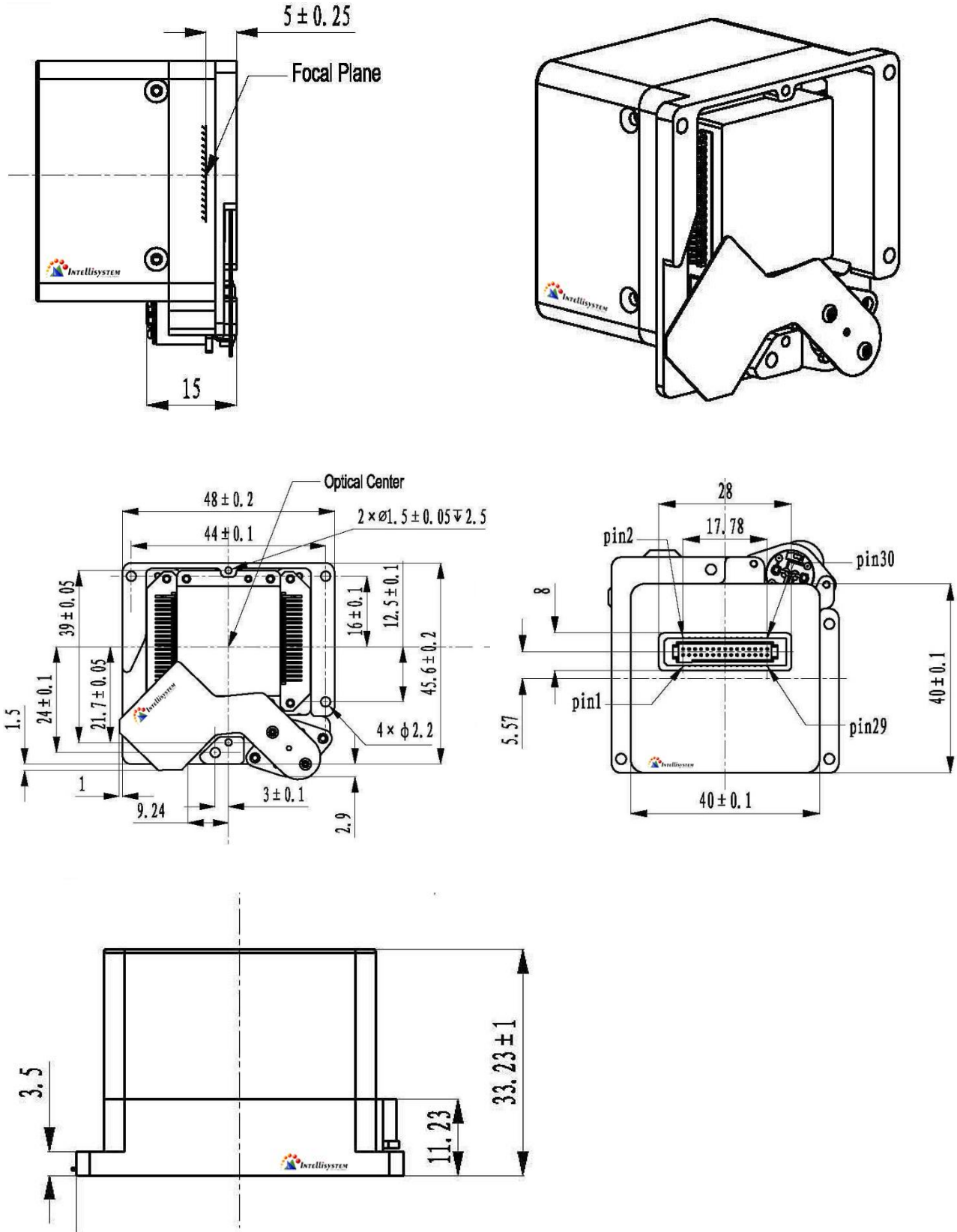
### Expansion components and other accessories

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	A00-16000		TT-61LA10-TIM
2	Expansion Board	A00-11000		TT-61LA10-TIM
3	Housing	A0001		TT-61LA10-TIM module, with A00-16000 expansion board
4	Housing	A0002		TT-61LA10-TIM module, with A00-11000 expansion board

## Mechanical Drawings

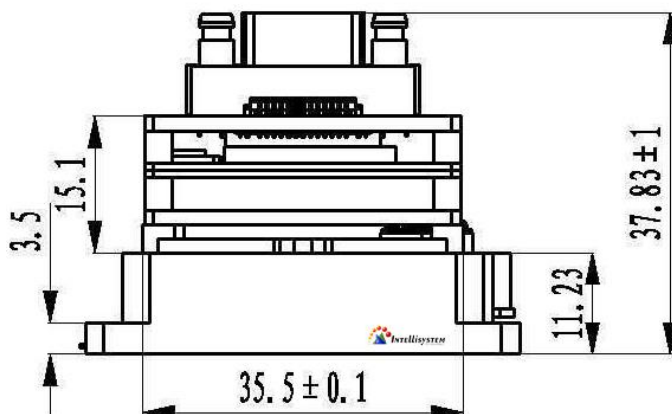
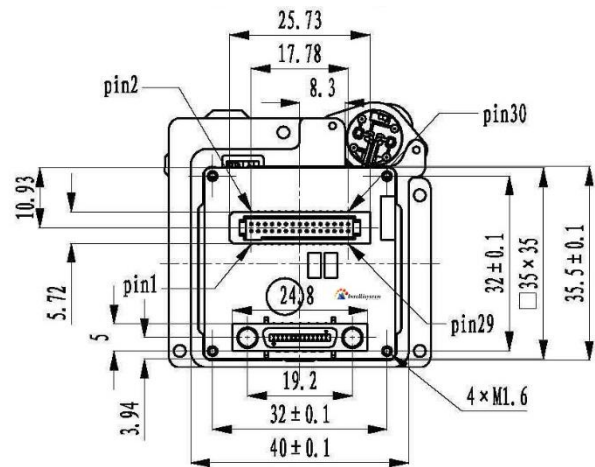
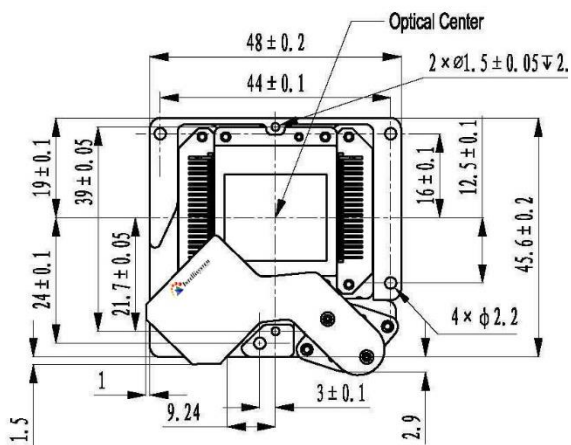
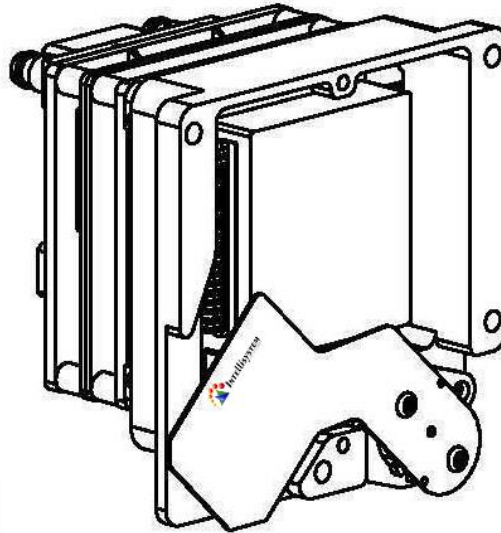
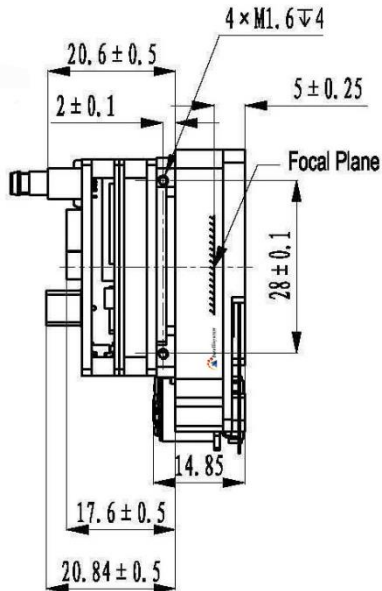
TT-61LA10-TIM without expansion modules





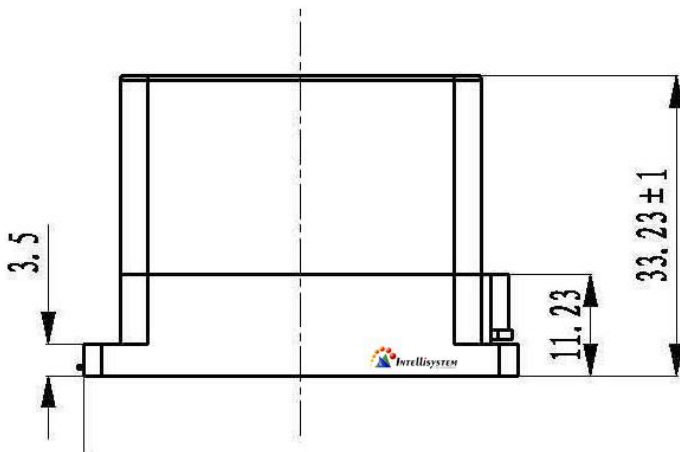
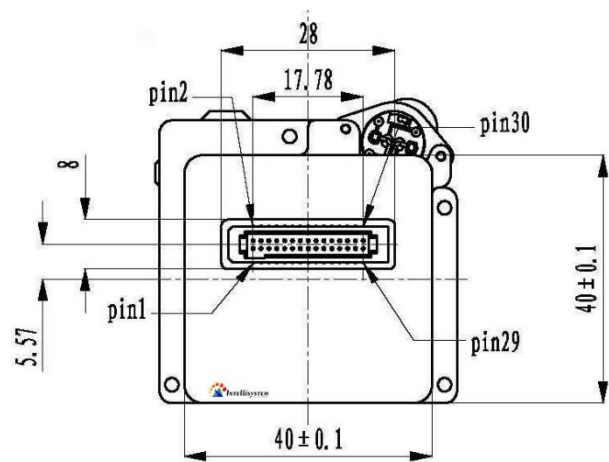
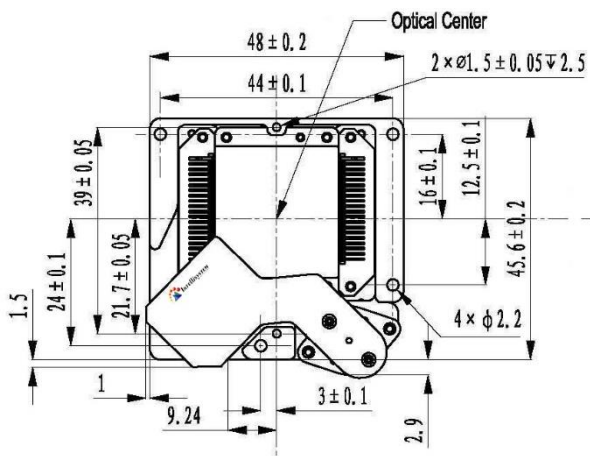
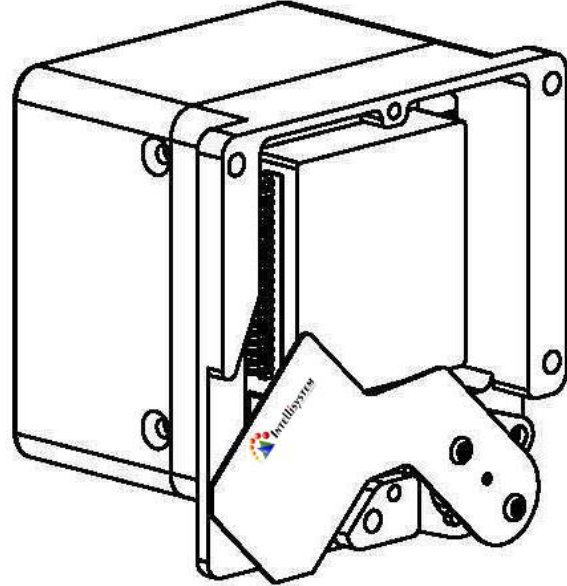
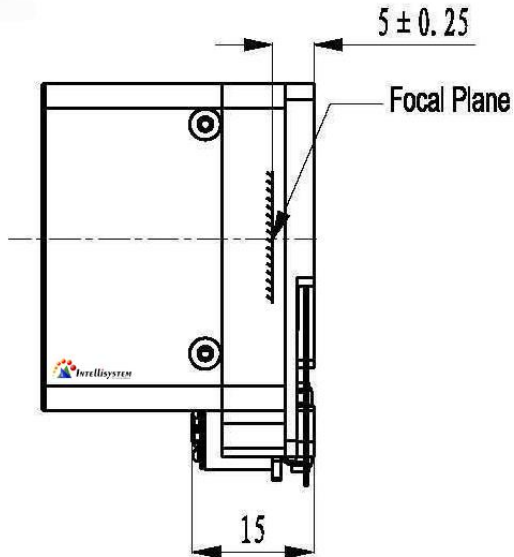
## Mechanical Drawings

TT-61LA10-TIM with A00-16000 expansion



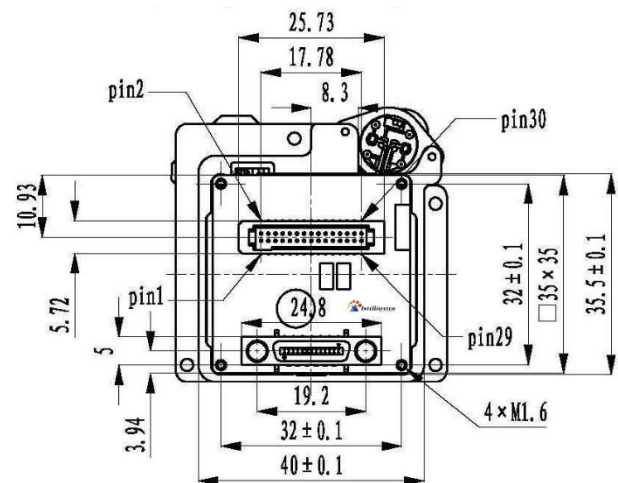
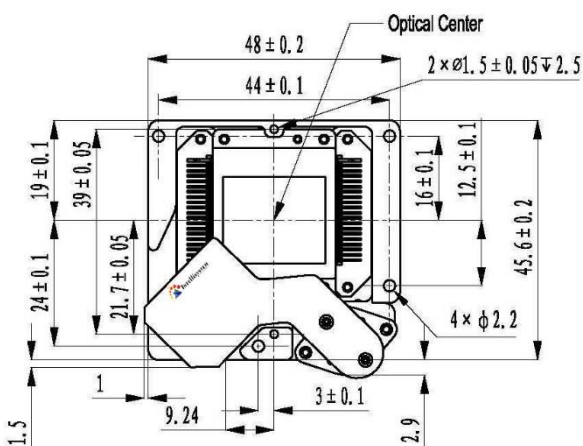
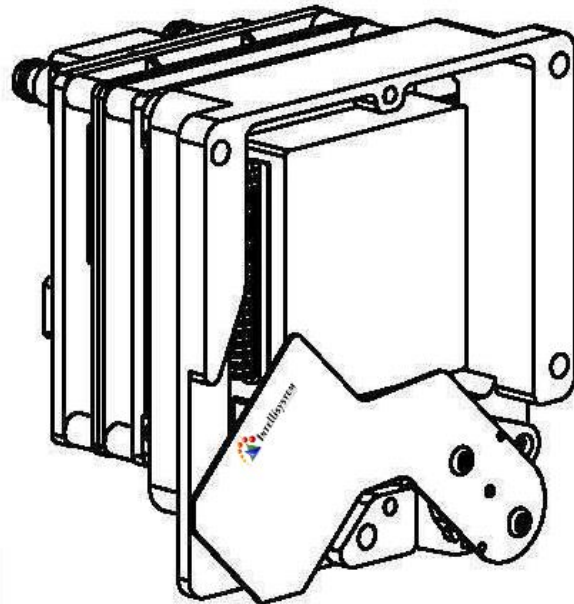
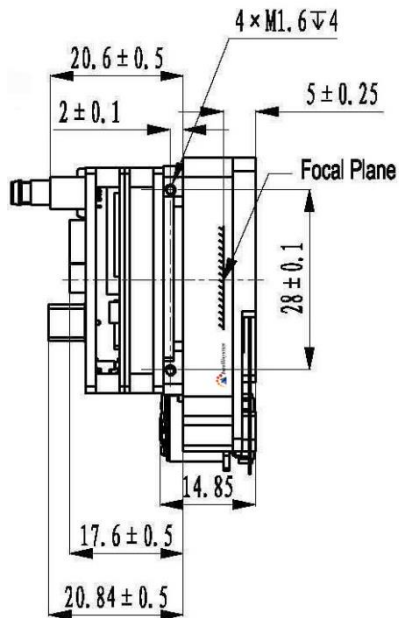
## Mechanical Drawings

TT-61LA10-TIM with expansion board A00-16000 & Housing A0001



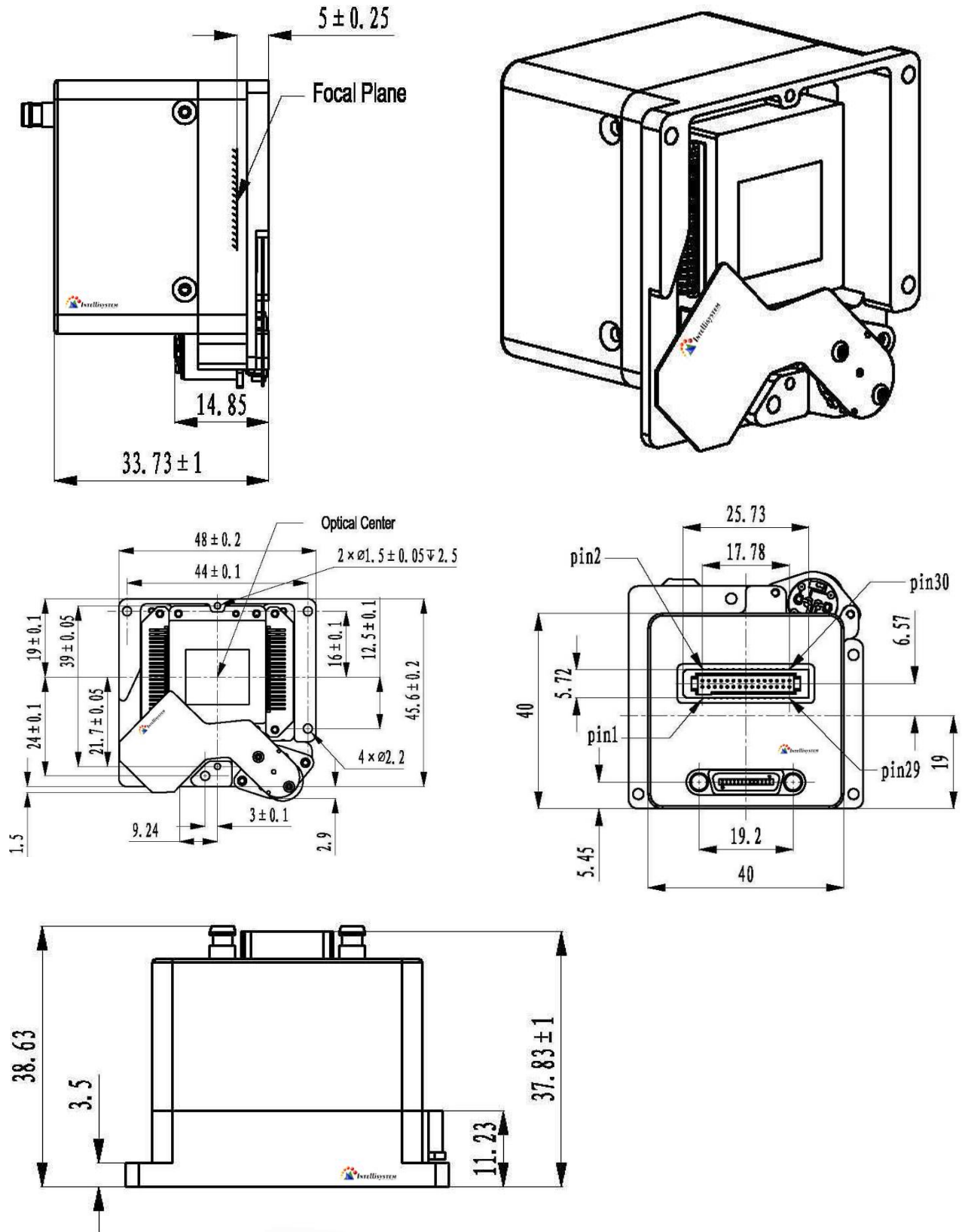
## Mechanical Drawings

TT-61LA10-TIM with A00-11000 expansion board



## Mechanical Drawings

TT-61LA10-TIM with Expansion Board A00-11000 & Housing A0002





## Specifications

<b>Models</b>	<b>TT-61LA10-TIM</b>
System Type	Uncooled LWIR Thermal Imaging Module
<b>Performance</b>	
Resolution	640 x 512
Pixel Pitch	17 $\mu$ m
Spectral Band	8-14 $\mu$ m
Sensitivity (NETD)	$\leq$ 60mK (50mK optional)
TEC	Yes
<b>Video Format</b>	
Frame Rate	50Hz
Analog Video	1-CH PAL
Digital Video	14-bit or 10-bit LVCMOS / LVDS / Cameralink
Digital Zoom	Continuous digital zoom, from 1 x -4 x (step of 0.1/1)
<b>Power System</b>	
Input Voltage	4 – 6 V Base configuration 5 – 24 V Base configuration with expansion Board
Typical Input Voltage	4 V Base configuration 12V Base configuration with expansion Board
<b>Function</b>	
Communication Interface	RS-232; UART (3.3V); RS-422
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
<b>Physical Attributes</b>	
Size	35mm x 35mm (circuit board)
Weight	$\leq$ 100g
<b>Environmental</b>	
Operating Temp Range	-40°C to +60°C
Storage Temp Range	-45°C to +85°C

All products, product specifications and data are subject to change without notice.