



**Sintec Optronics Technology Pte Ltd**

10 Bukit Batok Crescent #07-02 The Spire Singapore 658079

Tel: +65 63167112 Fax: +65 63167113

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## **Thermal imagers and Laser Range finders**

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# Hand-held uncooled Thermal Imager series

## STIR1133C Hand-held Binocular Thermal Imager

STIR1133C hand-held Binocular Thermal Imager is highly mobile product with multiple functions for versatile applications.

### Features:

- High mobility: small size, light weight, hand-held portability.
- Multiple functions and controls: image display/record/download; image preview/delete; auto/manual NUC; auto/manual gain control; brightness control; positive/negative image display; electronic zooming
- High environment adaptability and reliability

### Applications:

- Night vision observation,
- rescue & search, patrol and surveillance



### Technical data:

Model	STIR-1133C
Detectors	384x288 uncooled FPA
Spectral range	8~12μm
Lens	60mm/F0.9
NETD	≤80mK @25°C
Detection distance	≥1.2km against individual person, ≥2.5km against vehicles, ≥6km against medium sized ships
Focusing	Electric
Display mode	Binocular viewing
Video output	CCIR/PAL
Storage capacity	10000 IR images (extendable)
Operation temperature	-30°C~+50°C
Packaging	IP54
Weight	≤1.6 kg (with battery)
Dimension(mm)	≤300×130×110
Power supply	Built-in battery ( continuous operation time >3h)
Electric interface	USB2.0 port for image download
Mechanical interface	Standard tripod thread interface

# STIR-1123B Hand-Held Monocular Thermal Imager

STIR-1123B Hand-held Monocular Thermal Imager is highly mobile product with multiple functions for versatile applications.

## Features:

- High mobility: small size, light weight, hand-held portability.
- Multiple functions and controls: image display/record/download; image preview/delete; auto/manual NUC; auto/manual gain control; brightness control; positive/negative image display; electronic zooming
- High environment adaptability and reliability

## Applications:

- Night vision observation,
- rescue & search, patrol and surveillance



## Technical data:

Model	STIR-1123B
Detectors	384x288 uncooled FPA
Spectral range	8~12μm
Lens	50mm/F0.9
NETD	≤80mK @25°C
Detection distance	≥1km against individual person, ≥2km against vehicles, ≥6km against medium sized ships
Focusing	Manual
Display mode	Monocular viewing
Video output	CCIR/PAL
Storage capacity	10000 IR images (extendable)
Operation temperature	-30°C~+50°C
Packaging	IP54
Weight	≤0.9 kg (with battery)
Dimension(mm)	≤230×110×90
Power supply	Built-in battery (continuous operation time >4h)
Electric interface	USB2.0 port for image download
Mechanical interface	Standard tripod thread interface

# STIR-3431 Multiple-Function Thermal Imager

STIR-3431 Multiple-Function Thermal Imager, incorporating target detection and information record function, is applicable to long distance target detection, surveillance and information collection for seaport monitoring, marine rescue & search, border patrol, etc.

## Features:

- High mobility: small size and light weight; built-in Lithium battery for field operation independently.
- Multiple functions and controls: image based monitoring, image record/download/ preview/delete, positive/negative image display, manual/auto brightness adjustment, auto NUC, defective pixel processing, electronic zooming, laser range finding, GPS, video record



## Technical data:

Thermal imager	Detector type	Uncooled IR FPA
	Spectral range	8~12μm
	Resolution	384x288
	Thermal sensitivity	≤80mK @25℃
	Focal length	60mm
	Focusing	Electric focusing
	Control and adjustment	Manual/auto NUC, gain control, positive/negative image display, electric amplification, image enhancement
Laser range finder	Laser type	Eye safe
	Ranging capability	50m~5km
	Multiple target display	At most 5 targets
Display	OLED viewing + white light visual channel	
Image storage	Built-in memory for storage of 1000 IR images	
Operating temperature	-40℃~ +60℃	
Power supply	Rechargeable Lithium battery, continuous operating time ≥3hours	
weight	≤2.5kg	
Protection	IP67	

# STIR-3432 Multiple-Function Thermal Imager

STIR-3432 Multiple-Function Thermal Imager, incorporating target detection and information record function, is applicable to long distance target detection, surveillance and information collection for seaport monitoring, marine rescue & search, border patrol, etc.

## Features:

The device's basic functions are target's infrared observation, low-light level observation, infrared/low-light level image fusion, laser ranging, target orientation



## Technical data:

Thermal imager	Detector type	Uncooled IR FPA
	Spectral range	8~12μm
	Resolution	384x288
	Thermal sensitivity	≤80mK @25℃
	Focal length	60mm
	Focusing	Electric focusing
	Control and adjustment	Manual/auto NUC, gain control, positive/negative image display, electric amplification, image enhancement
Laser range finder	Laser type	Eye safe
	Ranging capability	120m~5km
Display	OLED viewing + white light visual channel	
Range capability	Thermal imager: ≥1.2km against the person, ≥2.4km against the vehicle	
	Low-light imager module: ≥1km against the person, ≥1.5km against the vehicle	
Low-light imager module	Yes	
GPS accuracy	10m	
Digital compass accuracy	1°	
Image storage	Built-in memory for storage of 1000 IR images	
Operating temperature	-40℃~ +55℃	
Power supply	Rechargeable Lithium battery, continuous operating time ≥3hours	
weight	≤3.5kg	

# STIR-3435A Multiple-Function Thermal Imager

STIR-3435A Multiple-Function Thermal Imager, incorporating target detection and information record function, is applicable to long distance target detection, surveillance and information collection for seaport monitoring, marine rescue & search, border patrol, etc

## Features:

- High mobility: small size and light weight; built-in Lithium battery for field operation independently.
- Multiple functions and controls: image based monitoring, image record/download/ preview/delete, positive/negative image display, manual/auto brightness adjustment, auto NUC, defective pixel processing, electronic zooming, laser range finding, GPS, video record



## Technical data:

No.	Items	Technical Specifications
1	Thermal imager	<ul style="list-style-type: none"> <li>• Waveband: 8 to 12<math>\mu</math>m(uncooled)</li> <li>• Detector resolution: 384 <math>\times</math> 288</li> <li>• Focus: f60mm, F1.0</li> <li>• FOV: 9°<math>\times</math> 6.75°</li> </ul>
2	Color CCD	<ul style="list-style-type: none"> <li>• Size: 1/3"</li> <li>• Resolution: 752 <math>\times</math> 582</li> <li>• FOV: 9° <math>\times</math> 6.75°</li> </ul>
3	Image processing & storage	<ul style="list-style-type: none"> <li>• Photo &amp; video recording (USB output)</li> </ul>
4	Laser Range Finder	<ul style="list-style-type: none"> <li>• Eye-safe</li> <li>• Range capability: 2km for a 2.3m*2.3m target(in weather visibility: <math>\geq</math>9km)</li> <li>• Accuracy: <math>\pm</math>5m</li> <li>• Repetition rate: 0.3Hz</li> </ul>
5	Digital Magnetic Compass	<ul style="list-style-type: none"> <li>• Azimuth range: 360°</li> <li>• Elevation range: <math>\pm</math>50°</li> <li>• Accuracy: 1°</li> </ul>
6	GPS	<ul style="list-style-type: none"> <li>• Accuracy: up to 5m CEP (typical data)</li> </ul>
7	Interfaces	<ul style="list-style-type: none"> <li>• Binoculars</li> <li>• CCIR/PAL Analog Video</li> <li>• RS232</li> <li>• Working time: <math>\geq</math>6 hours(continuous)</li> </ul>
8	Performance	<ul style="list-style-type: none"> <li>• Detection range: 1200m for man/2400m for a 2.3m*2.3m tank</li> <li>• Recognition range: 600m for man/1200m for a 2.3m*2.3m tank</li> <li>• Identification range: 300m for man/600m for a 2.3m*2.3m tank</li> </ul>
9	Environmental	<ul style="list-style-type: none"> <li>• Working temperature: -40°C to +55°C</li> <li>• Vibration: GJB150A</li> </ul>
11	Weight	<ul style="list-style-type: none"> <li>• <math>\leq</math>2.0kg(including battery)</li> </ul>
13	Accessories	<ul style="list-style-type: none"> <li>• Tripod</li> <li>• Analog and digital cables</li> <li>• Rechargeable battery</li> </ul>
14	Housing color	<ul style="list-style-type: none"> <li>• Black or Green</li> </ul>

# Hand-held cooled Thermal Imager series

## STIR-2123 Hand-held Cooled Thermal Imager

STIR-2123 Hand-held Cooled Thermal Imager, incorporating target detection and information record function, is applicable to long distance target detection, surveillance and information collection for seaport monitoring, marine rescue & search, border patrol, etc.

### Features:

- High mobility: small size, light weight, hand-held portability.
- Multiple functions and controls : image display/record/download; image preview/delete; auto/manual NUC; auto/manual gain control; brightness control; positive/negative image display; electronic zooming; GPS locating
- Binocular sight, High resolution
- High environment adaptability and reliability



### Technical data:

Model	STIR-2123
Detectors	320x256 cooled FPA
Spectral range	3~5μm
View Field	3.7°x2.8°
NETD	≤30mK @25°C
Detection distance	≥4km against individual person, ≥8km against vehicles, ≥16km against medium sized ships
Focusing	Electric
Display mode	Binocular viewing
Video output	CCIR/PAL
Storage capacity	10000 IR images (extendable)
Operation temperature	-30°C~+60°C
Weight	≤2.8kg (with battery)
Dimension(mm)	≤265×224×100
Power supply	Built-in battery ( continuous operation time >3h)
Electric interface	USB2.0 port for image download
Mechanical interface	Standard tripod thread interface
GPS positioning accuracy	10m

# STIR-2129A Multifunctional Cooled Thermal Imager

STIR-2129A multifunctional cooled thermal imager is integrated with functions of target detection and information recording, can be applied for long distance detection, surveillance and information collection. It is widely applied for harbor monitoring, maritime search and rescue, border patrol and other functions

## Features:

- good mobility: small volume, light weight, easy to carry; Li batteries, suitable for independent field work.
- multi functions: video monitoring; image overview, download, delete; polarity display; manual/auto contrast control, brightness; auto calibration; bad pixels removal; digital zooming; laser ranging; GPS module; video recording
- Binocular sight, High resolution
- environmental adaptability: anti-vibration, anti-shock and electromagnetic compatibility



## Technical data:

No.	Items	Technical Specifications
1	Thermal imager	<ul style="list-style-type: none"><li>• Waveband: 3.7 to 4.8<math>\mu</math>m(cooled)</li><li>• Detector resolution: 320<math>\times</math>256, F4</li><li>• Focal length: 60mm/240mm</li><li>• WFOV: 9<math>^{\circ}</math><math>\times</math>7.3<math>^{\circ}</math>, NFOV: 2.3<math>^{\circ}</math><math>\times</math>1.83<math>^{\circ}</math></li></ul>
2	Thermal Imager Performance	<ul style="list-style-type: none"><li>• Detection range: (9000m for tank, Tank's profile area is not less than 2.3mx 4.6m)</li><li>• Recognition range: (4600m for tank, Tank's profile area is not less than 2.3mx 4.6m)</li></ul>
3	CCD	<ul style="list-style-type: none"><li>• Focal length: 18mm/100mm</li></ul>
4	Image processing & storage	<ul style="list-style-type: none"><li>• Photo &amp; video recording (USB output)</li></ul>
5	Laser Range Finder	<ul style="list-style-type: none"><li>• Wavelength: 1.57<math>\mu</math>m, eye-safe</li><li>• Accuracy: <math>\pm</math>5m, Repetition rate: 1Hz</li></ul>
6	LRF Range Capability	<ul style="list-style-type: none"><li>• From 100m up to 5km (the atmosphere visibility is 23.5km, for a medium size tank)</li></ul>
7	Digital Magnetic Compass	<ul style="list-style-type: none"><li>• Azimuth range: 360<math>^{\circ}</math>, Elevation range: <math>\pm</math>85<math>^{\circ}</math></li><li>• Accuracy: 1<math>^{\circ}</math></li></ul>
8	Global Positioning System	<ul style="list-style-type: none"><li>• Accuracy: up to 5m CEP (typical data)</li></ul>
9	Interfaces	<ul style="list-style-type: none"><li>• Binoculars OLED</li><li>• Video Output : CCIR PAL &amp; SDI</li><li>• Control : RS232</li><li>• Data Output: USB</li><li>• Power supply: rechargeable battery</li><li>• Working time: <math>\geq</math> 4 hours(typical)</li></ul>
10	Environmental	<ul style="list-style-type: none"><li>• Operation: -40<math>^{\circ}</math>C to +60<math>^{\circ}</math>C</li><li>• Storage: -45<math>^{\circ}</math>C to +70<math>^{\circ}</math>C</li></ul>
11	Weight	<ul style="list-style-type: none"><li><math>\leq</math> 4.8 kg</li></ul>
12	Accessories	<ul style="list-style-type: none"><li>• Tripod</li><li>• Carrying case</li><li>• Analog and digital cables</li><li>• Power supply: rechargeable battery</li></ul>
13	Housing Color	<ul style="list-style-type: none"><li>• Black or Customized</li></ul>



# STIR-2130 Multifunctional Cooled Thermal Imager

STIR-2130 multifunctional cooled thermal imager is integrated with functions of target detection and information recording, can be applied for long distance detection, surveillance and information collection. It is widely applied for harbor monitoring, maritime search and rescue, border patrol and other functions

## Features:

- good mobility: small volume, light weight, easy to carry; Li batteries, suitable for independent field work.
- multi functions: video monitoring; image overview, download, delete; polarity display; manual/auto contrast control, brightness; auto calibration; bad pixels removal; digital zooming; laser ranging; GPS module; video recording
- Binocular sight, High resolution
- environmental adaptability: anti-vibration, anti-shock and electromagnetic compatibility



## Technical data:

No.	Items	Technical Specifications
1	Thermal imager	Waveband: 3.7 to 4.8 $\mu$ m(cooled) Detector resolution: 640 $\times$ 512, F4 Focal length: 24mm~300mm
2	Thermal Imager Performance	• Detection range: (12000m for tank, Tank's profile area is not less than 2.3mx 4.6m) • Recognition range: (7500m for tank, Tank's profile area is not less than 2.3mx 4.6m)
3	CCD	• FOV : 2.3 $^{\circ}$ $\times$ 1.8 $^{\circ}$ • Resolution: 720 line
4	Image processing & storage	• Photo & video recording (USB output)
5	Laser Range Finder	• Eye-safe • Wavelength: 1.55 $\mu$ m • Accuracy: $\pm$ 5m Repetition rate: 0.3Hz
6	LRF Range Capability	• From 100m up to 10km (the atmosphere visibility is 23.5km, for a medium size tank)
7	Digital Magnetic Compass	• Azimuth range: 360 $^{\circ}$ • Elevation range: $\pm$ 85 $^{\circ}$ • Accuracy: 1 $^{\circ}$
8	Global Positioning System	• Internal C/A TYPE • Accuracy: 10m
9	Interfaces	• Binoculars OLED • Video Output : CCIR PAL & SDI • Control : RS422 • Data Output: USB • Power supply: rechargeable battery • Working time: $\geq$ 3.5hours
10	Environmental	• Operation: -40 $^{\circ}$ C to +55 $^{\circ}$ C • Storage: -40 $^{\circ}$ C to +70 $^{\circ}$ C • GJB150A or MIL-STD 810
11	Weight	$\leq$ 5 kg
12	Dimension	$\leq$ 400mm $\times$ 250mm $\times$ 110mm
13	Accessories	• Tripod • Carrying case • Analog and digital cables • Power supply: rechargeable battery
14	Housing Color	• Black or Green

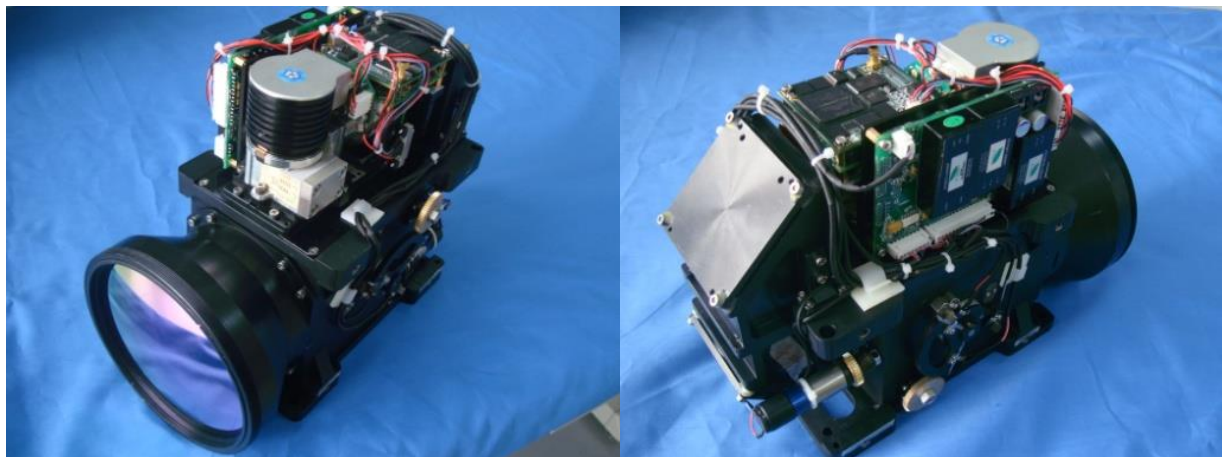
# Cooled Thermal Imager series

## STIR-2125 Cooled Thermal Imager

STIR-2125 is composed of Three-FOVs MWIR lens, infrared detectors, image processing circuit, etc. It can be integrated into all kinds of optoelectronic system.

### Features:

- small size, light weight.
- High environment adaptability and reliability



### Technical data:

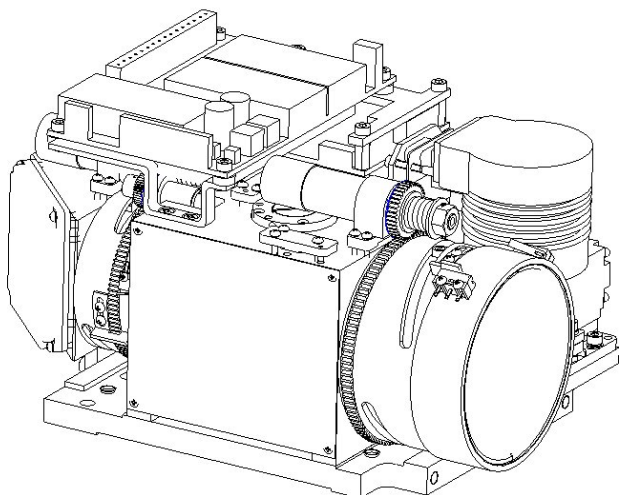
Model	STIR-2125
Detectors	320x256 cooled FPA
Spectral range	3~5μm
Pixel size	30μm×30μm
F number	4
Focal length	30mm/150mm/500mm
View Field	18.3°×14.7°/ 3.7°×2.9°/ 1.1°×0.88°
NETD	≤30mK @25°C
Starting time	≤8min(@25°C)
Operation temperature	-30°C~+60°C
Weight	≤6kg
Dimension(mm)	≤300×155×245
Power supply	DC 24V±10%, with ripple not higher than 100mv, The current ≥2A.

# STIR-2126 Cooled Thermal Imager

STIR-2126 is composed of Two-FOVs MWIR lens, infrared detectors, image processing circuit, etc. It can be integrated into all kinds of optoelectronic system.

## Features:

- small size, light weight.
- High environment adaptability and reliability



## Technical data:

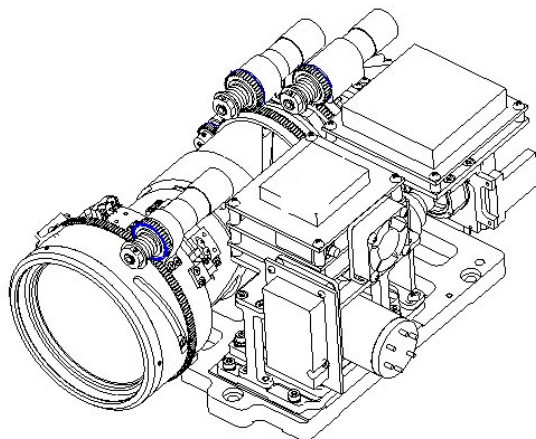
Model	STIR-2126
Detectors	320x256 cooled FPA
Spectral range	3~5 $\mu$ m
Pixel size	30 $\mu$ m $\times$ 30 $\mu$ m
F number	4
Focal length	62.5mm/250mm
View Field	8.8° $\times$ 7.04°/ 2.2° $\times$ 1.76°
NETD	$\leq$ 30mK @25°C
Starting time	$\leq$ 8min(@25°C)
Operation temperature	-30°C~+60°C
Weight	$\leq$ 3.2kg
Dimension(mm)	$\leq$ 225 $\times$ 145 $\times$ 130
Power supply	DC 24V $\pm$ 10%, with ripple not higher than 100mv, The current $\geq$ 2A.

# STIR-2640 Cooled Thermal Imager

STIR-2640 is composed of Continuous zooming MWIR lens, infrared detectors, image processing circuit, etc. It can be integrated into all kinds of optoelectronic system.

## Features:

- small size, light weight.
- High environment adaptability and reliability



## Technical data:

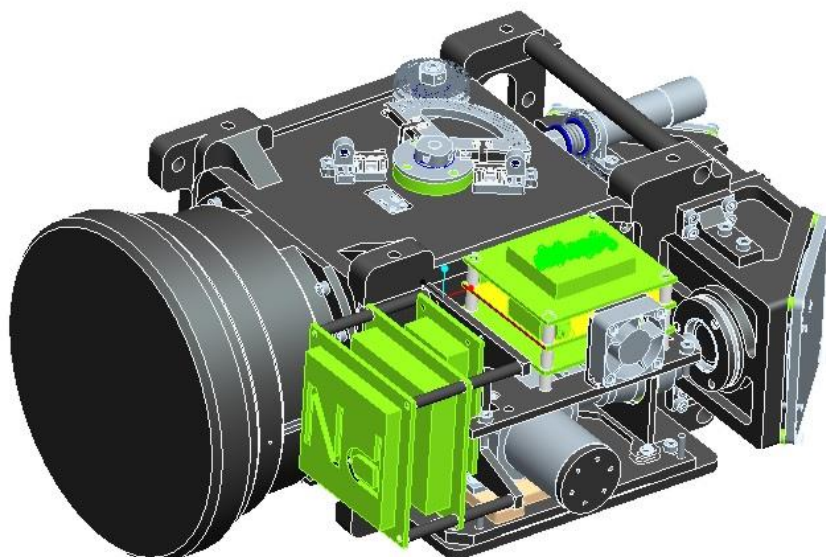
Model	STIR-2640
Detectors	640×512 cooled FPA
Spectral range	3~5μm
Pixel size	15μm×15μm
F number	4
Focal length	18mm~250mm
View Field	30°×22.6°~2.2°×1.7°
NETD	≤35mK @25°C
Starting time	≅8min(@25°C)
Operation temperature	-30°C~+60°C
Weight	≤3.5kg
Dimension(mm)	≤240×188×125
Power supply	DC 24V±10%, with ripple not higher than 100mv, The current ≥2A.

# STIR-2641 Cooled Thermal Imager

STIR-2641 is composed of Three-FOVs MWIR lens, infrared detectors, image processing circuit, etc. It can be integrated into all kinds of optoelectronic system.

## Features:

- small size, light weight.
- High environment adaptability and reliability



## Technical data:

Model	STIR-2641
Detectors	640×512 cooled FPA
Spectral range	3~5μm
Pixel size	15μm×15μm
F number	4
Focal length	30mm/ 150mm/ 500mm
View Field	18.3°×14.7°/ 3.7°×2.9°/ 1.1°×0.88°
NETD	≤35mK @25°C
Starting time	≤8min(@25°C)
Operation temperature	-30°C~+60°C
Weight	≤6kg
Dimension(mm)	≤300×155×245
Power supply	DC 24V±10%, with ripple not higher than 100mv, The current ≥2A.

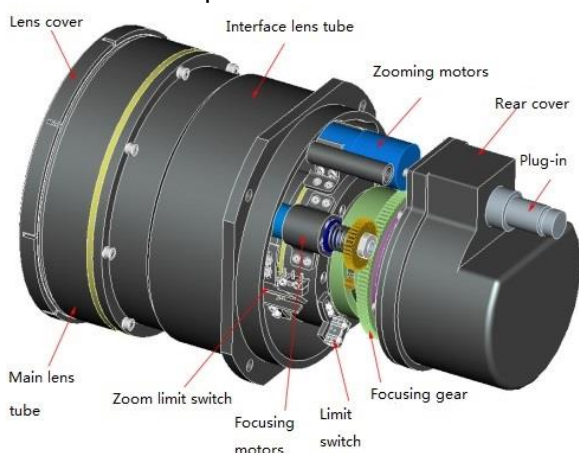
# Security monitoring Thermal Imager series

## STIR-1137A Security Monitoring Thermal Imager

STIR-1137A continuous zooming uncooled infrared imager, composed of continuous zooming optical system, 384×288 uncooled infrared detector, infrared imaging components and so on, can be used for short-range and long-range target detection and image formation, capable of focus and FOV continuous zooming, having auto zooming and similar functions. We can design the interface mounting size according to customer's demand.

### Features:

- Continuous optical zooming.
- Auto-focusing.
- Brightness/ gain adjustment
- Image's polarity switch
- Digital zooming 2×
- Manual/Auto calibration
- Sun-burn prevention



### Technical data:

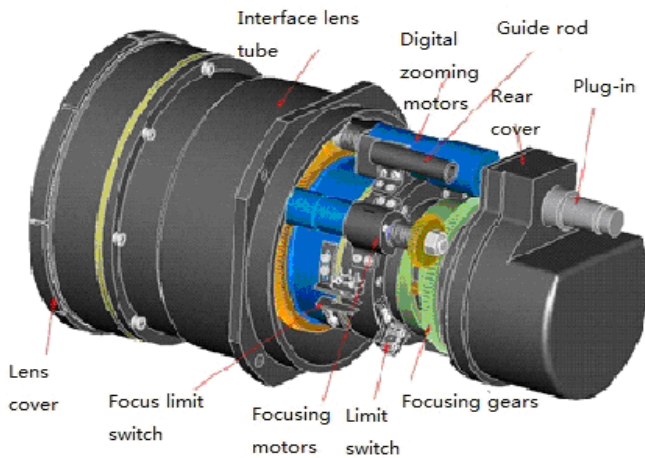
Model	STIR-1137A
Detectors	384×288 uncooled FPA
Spectral range	8~12μm
Lens	30~100mm (F1.0)
FOV	5.5°×4.1°~18.2°×13.7°
NETD	≤100mK @25°C
Power supply	DC 12V
Starting time	≤20s
Operation temperature	-40°C~+60°C
Weight	≤4kg
Dimension(mm)	≤ Φ 133×234 (mm)
Communication protocol	RS422
Video output	CCIR/PAL

# STIR-1137B Security Monitoring Thermal Imager

STIR-1137B continuous zooming uncooled infrared imager, composed of continuous zooming optical system, 384x288 uncooled infrared detector, infrared imaging components and so on, can be used for short-range and long-range target detection and image formation, capable of focus and FOV continuous zooming, having auto zooming and similar functions. We can design the interface mounting size according to customer's demand.

## Features:

- Continuous optical zooming.
- Auto-focusing.
- Brightness/ gain adjustment
- Image's polarity switch
- Digital zooming 2x
- Manual/Auto calibration
- Sun-burn prevention



## Technical data:

Model	STIR-1137B
Detectors	384x288 uncooled FPA
Spectral range	8~12μm
Lens	40~120mm (F1.0)
FOV	4.6°x3.4°~13.7°x10.5°
NETD	≤100mK @25°C
Power supply	DC 12V
Starting time	≤20s
Operation temperature	-40°C~+60°C
Weight	≤4kg
Dimension(mm)	≤ Φ 143x281 (mm)
Communication protocol	RS422
Video output	CCIR/PAL

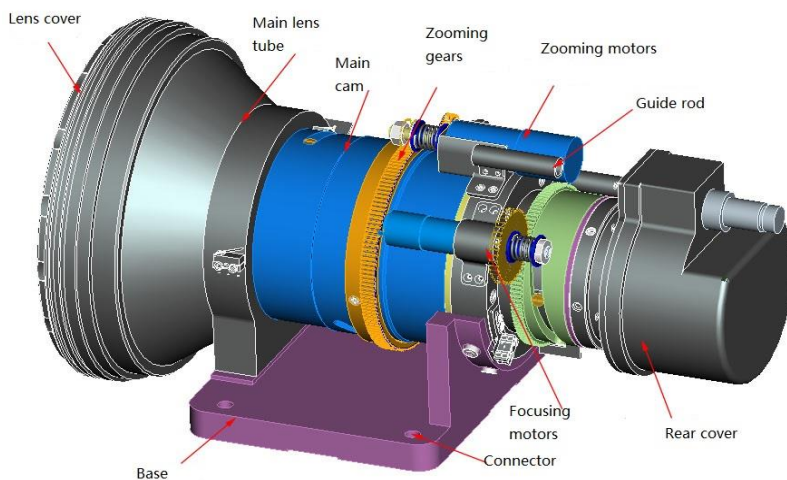


# STIR-1137C Security Monitoring Thermal Imager

STIR-1137C continuous zooming uncooled infrared imager, composed of continuous zooming optical system, 384×288 uncooled infrared detector, infrared imaging components and so on, can be used for short-range and long-range target detection and image formation, capable of focus and FOV continuous zooming, having auto zooming and similar functions. We can design the interface mounting size according to customer's demand.

## Features:

- Continuous optical zooming.
- Auto-focusing.
- Brightness/ gain adjustment
- Image's polarity switch
- Digital zooming 2×
- Manual/Auto calibration
- Sun-burn prevention



## Technical data:

Model	STIR-1137C
Detectors	384×288 uncooled FPA
Spectral range	8~12μm
Lens	50~150mm (F1.0)
FOV	3.7°×2.8°~11°×8.2°
NETD	≤100mK @25°C
Power supply	DC 12V
Starting time	≤20s
Operation temperature	-40°C~+60°C
Weight	≤5kg
Dimension(mm)	≤ Φ 172×325 (mm)
Communication protocol	RS422
Video output	CCIR/PAL

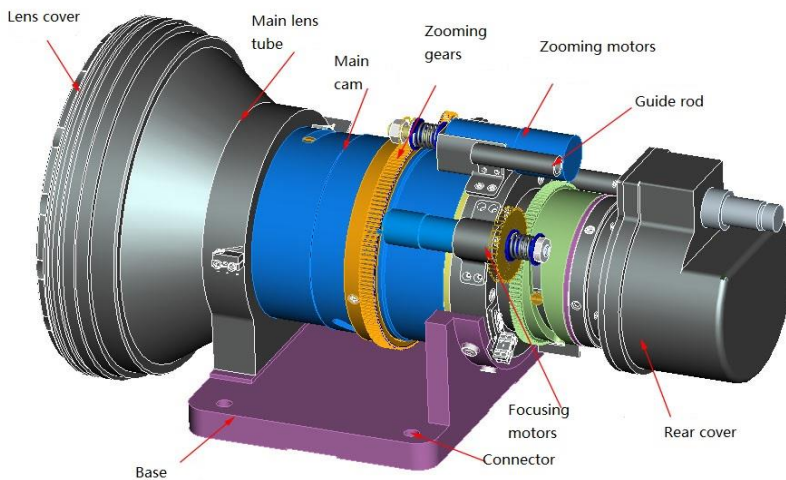


# STIR-1137DS Security Monitoring Thermal Imager

STIR-1137DS continuous zooming uncooled infrared imager, composed of continuous zooming optical system, 640×480 uncooled infrared detector, infrared imaging components and so on, can be used for short-range and long-range target detection and image formation, capable of focus and FOV continuous zooming, having auto zooming and similar functions. We can design the interface mounting size according to customer's demand.

## Features:

- Continuous optical zooming.
- Auto-focusing.
- Brightness/ gain adjustment
- Image's polarity switch
- Digital zooming 2×
- Manual/Auto calibration
- Sun-burn prevention



## Technical data:

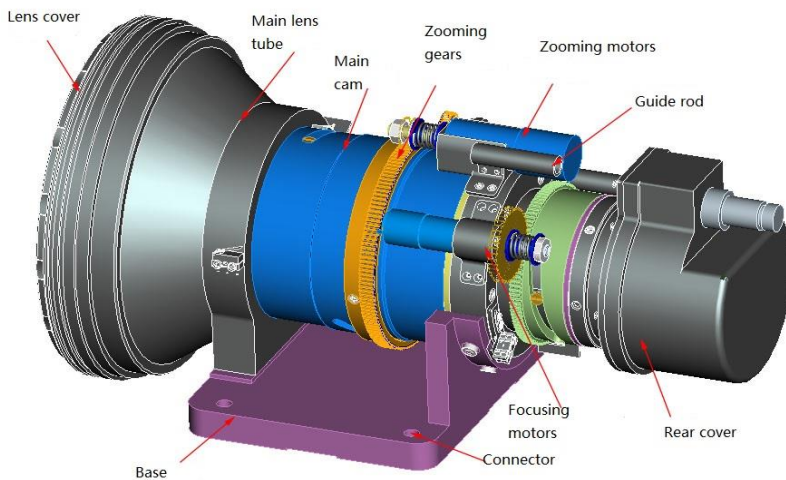
Model	STIR-1137DS
Detectors	640×480 uncooled FPA
Spectral range	8~12μm
Lens	50~150mm (F1.0)
NETD	≤100mK @25°C
Power supply	DC 12V
Starting time	≤20s
Operation temperature	-40°C~+60°C
Weight	≤5kg
Dimension(mm)	≤ Φ 172×325 (mm)
Communication protocol	RS422
Video output	CCIR/PAL

# STIR-1137DV Security Monitoring Thermal Imager

STIR-1137DV continuous zooming uncooled infrared imager, composed of continuous zooming optical system, 640×512 uncooled infrared detector, infrared imaging components and so on, can be used for short-range and long-range target detection and image formation, capable of focus and FOV continuous zooming, having auto zooming and similar functions. We can design the interface mounting size according to customer's demand.

## Features:

- Continuous optical zooming.
- Auto-focusing.
- Brightness/ gain adjustment
- Image's polarity switch
- Digital zooming 2×
- Manual/Auto calibration
- Sun-burn prevention



## Technical data:

Model	STIR-1137DV
Detectors	640×512
Spectral range	8~12μm
Lens	30~150mm (F1.4)
NETD	≤100mK @25°C
Power supply	DC 12V
Starting time	≤20s
Operation temperature	-40°C~+60°C
Weight	≤5kg
Dimension(mm)	≤ Φ 160×240 (mm)
Communication protocol	RS422
Video output	CCIR/PAL

# STIR-33100 Security Monitoring Thermal Imager

STIR-33100 Security Monitoring Thermal Imager is widely used for Island monitoring, security monitoring, night vision, and etc.

## Features:

- Two channels of watching-mode in infrared image observation and CCD.
- Massive storage capacity.
- Configured with a platform for navigation scanning



## Technical data:

Thermal Imager	Detector type	384×288 uncooled FPA
	Wave band	8~14μm
	NETD	≤80mk (25℃)
	Brightness/Gain adjustment	Manual/Automatic
	Electric zooming	√
	Positive/Negative image display	√
	Recognition distance	For f100mm, ≥1.0km against an individual person
CCD	Type	Colorful CCD
	Recognition distance	For f100mm, ≥3km against an individual person
PTZ	Azimuth	n×360°
	Elevation	-45°~+45°
Environment	Operation temperature	-30℃~+60℃
Interfaces	Mechanical interface	Flanges
	Electrical interface	Infrared, CCD
Physical Property	Weight (kg)	≤40
	Dimension (mm)	≤500×300×450

# STIR-33120 Security Monitoring Thermal Imager

STIR-33120 Security Monitoring Thermal Imager is widely used for Island monitoring, security monitoring, night vision, and etc.

## Features:

- Two channels of watching-mode in infrared image observation and CCD.
- Massive storage capacity.
- Configured with a platform for navigation scanning



## Technical data:

Description		STIR-33120
Thermal imager	Detector Type	Uncool detector, FPA 384*288
	Spectral range	8~14μm
	Focal length	120mm
CCD Camera	Image output	PAL
	Lens	30X, f=10 ~ 300mm (F1.6~3.2)
	Pixel	752 (H) x582 (V)
	Focal way	Auto/Manual
	Power	12V DC(±10%) 24VAC/12VDC 5.4W
PTZ	Digital PTZ system(preset position)	
Working temperature		-40℃~60℃
Software	Function	Control the monitoring system
	Running environment	Windows XP、Pentium 4-2.0/512M/40G or above configuration computer or server

# STIR-33150 Security Monitoring Thermal Imager

STIR-33150 Security Monitoring Thermal Imager is widely used for Island monitoring, security monitoring, night vision, and etc.

## Features:

- Two channels of watching-mode in infrared image observation and CCD.
- Massive storage capacity.
- Configured with a platform for navigation scanning



## Technical data:

Thermal Imager	Detector type	384×288 uncooled FPA
	Wave band	8~14μm
	NETD	≤80mk (25℃)
	Brightness/Gain adjustment	Manual/Automatic
	Electric zooming	√
	Positive/Negative image display	√
	Recognition distance	For f150mm, ≥1.5km against an individual person
CCD	Type	Colourful CCD
	Recognition distance	For f100mm, ≥3km against an individual person
PTZ	Azimuth	n×360°
	Elevation	-45°~+45°
Environment	Operation temperature	-30℃~+60℃
Interfaces	Mechanical interface	Flanges
	Electrical interface	Infrared, CCD
Physical Property	Weight (kg)	≤40
	Dimension (mm)	≤500×360×450

# Thermal Sight series

## STIR-1153 Light Thermal Sight

STIR-1153 Light Thermal Sight is applied to various kinds of guns as a night-vision sight.

### Features:

- Clear image and multi-functions.
- Modularization design and customized configuration.
- Good environment adaptability and reliability



### Technical data:

Model	STIR-1153
Detectors	384x288 uncooled FPA
Spectral range	8~12μm
Lens	40mm/F0.9
FOV	13.69°x10.29°
NETD	≤80mK @25°C
Detection distance	≥1km against individual person
Power supply	Lithium, continuous working time: ≥4 hours
Mounting	Picatinny
Operation temperature	-20°C~+50°C
Packaging	IP67
Weight	≤800g (with battery)
Dimension(mm)	≤230×74×85 (mm)
Body material	Aluminum
Video output	CCIR/PAL
Maximum shock	800G

# STIR-1121D Medium Thermal Sight

STIR-1121D Medium Thermal Sight is applied to various kinds of guns as a night-vision sight.

## Features:

- Clear image and multi-functions.
- Modularization design and customized configuration.
- Good environment adaptability and reliability



## Technical data:

Model	STIR-1121D
Detectors	384×288 uncooled FPA
Spectral range	8~12μm
Lens	60mm/F1.0
FOV	9°×6.75°
NETD	≤80mK @25°C
Detection distance	≥1.2km against individual person
Power supply	Lithium, continuous working time: ≥4 hours
Mounting	Picatinny
Operation temperature	-20°C~+50°C
Packaging	IP67
Weight	≤1.3kg (with battery)
Dimension(mm)	≤290×100×80 (mm)
Body material	Aluminum
Video output	CCIR/PAL
Maximum shock	800G

# STIR-1131G Heavy Thermal Sight

STIR-1131G Heavy Thermal Sight is applied to various kinds of guns as a night-vision sight.

## Features:

- Clear image and multi-functions.
- Modularization design and customized configuration.
- Good environment adaptability and reliability



## Technical data:

Model	STIR-1131G
Detectors	384x288 uncooled FPA
Spectral range	8~12μm
Lens	100mm/F1.0
FOV	5.5°x4.12°
NETD	≤80mK @25°C
Detection distance	≥2.5km against individual person
Power supply	Lithium, continuous working time: ≥4 hours
Mounting	Picatinny
Operation temperature	-40°C~+50°C
Packaging	IP67
Weight	≤1.8kg (with battery)
Dimension(mm)	≤391×107×116 (mm)
Body material	Aluminum
Video output	CCIR/PAL
Maximum shock	1200G



# STIR-1141A Heavy Thermal Sight

STIR-1141A Heavy Thermal Sight is applied to various kinds of guns as a night-vision sight.

## Features:

- Clear image and multi-functions.
- Modularization design and customized configuration.
- Good environment adaptability and reliability



## Technical data:

Model	STIR-1141A
Detectors	640×480 uncooled FPA
Spectral range	8~12μm
Lens	100mm/F1.0
NETD	≤80mK @25°C
Detection distance	≥2.5km against individual person
Power supply	Lithium, continuous working time: ≥4 hours
Mounting	Picatinny
Operation temperature	-40°C~+50°C
Packaging	IP67
Weight	≤2.3kg (with battery)
Dimension(mm)	≤391×107×116 (mm)
Body material	Aluminum
Video output	CCIR/PAL
Maximum shock	1200G

# Thermometry series

## STIR-4233 Fire Prevention Thermal Imager

STIR-4233 is widely used for Fire prevention of forest, wild animal protection area monitoring, Security, anti-fire and night-vision monitoring of sensitive area.

### Features:

- IR thermal image observation and two channels watching-mode of CCD.
- IR auto temperature measurement and fire alarm.
- Configured with platform for navigation scanning
- TCP/IP remote control
- High capacity storage



### Technical data:

Detect distance	≥5Km (as 3m×3m fire area )
IR camera	384×288
focus	180mm (or 60/180mm lens as optional)
Platform	horizontal : 1°~350° vertical : -70°~20°
Operation temperature	pointer: -20℃~60℃ Video recorder: -10℃~50℃
Dimension	≤500mm×300mm×450mm
Weight	≤15 Kg

# STIR-4232 Human body thermometry

STIR-4232 Human body thermometry is widely used for identify individual with fever symptom among the crowd and traditional medical diagnosis

## Features:

- Non-contact temperature measurement.
- Accurate temperature measurement of a designated point.
- Automatic search and lock-on of highest temperature point over a full screen
- Over-limit alarm, record of body temperature beyond the limit in real time
- Two channels respectively for display of IR image and visible light image
- Easy operation and maintenance



## Technical data:

Thermal imager	Detector type	384×288 Uncooled FPA
	Spectral range	8~14μm
	NETD	≤80mk(@25°C)
	Brightness/Gain adjustment	Manual/automatic
	Positive/Negative image display	√
CCD		Colourful
Function	Temperature pick-up range	0-50°C
	Accuracy	±2°C or ±2%
Image display		High resolution colour LCD
Environment	Operation temperature	-10°C-+50°C
Physical property	Weight (kg)	≤2.5(IR camera weight)
	Dimension (mm)	≤200×150×150

# Hand-held laser rangefinder series

## STLRF-6253/6254 Laser Rangefinder

STLRF-6253/6254 Laser Rangefinder is widely used for Patrol & reconnaissance; Engineering exploration; Surveying and mapping.

### Features:

- High accuracy range finding
- Easy operation
- Simultaneous multiple targets measurement
- Small size and low light



### Technical data:

Model	JIR-6253	JIR-6254
wavelength	1.06 $\mu$ m	1.06 $\mu$ m
Peak power	$\geq 1$ MW	$\geq 1$ MW
Receiving aperture (mm)	70	40
Detector	APD	APD
Ranging capability (km)	Against big target:20 Against 2.3*2.3 : 10	Against big target:10 Against 2.3*2.3 : 5
Distance accuracy	$\pm 3$ m	$\pm 3$ m
Repetition rate	10ppm	10ppm
Divergence angle	$\leq 1$ mrاد	$\leq 1$ mrاد
Eyepiece adjust range	$\pm 3$ Diopter	$\pm 3$ Diopter
Impact	30g	30g
Tripod	High range:0.5~1.5m Bearing:5Kg	High range:0.5~1.5m Bearing:5Kg
Operation temperature	-30 $^{\circ}$ C~60 $^{\circ}$ C	-30 $^{\circ}$ C~60 $^{\circ}$ C
Power supply	12V battery	12V battery
Interface	RS422	RS422
Size	215x210x85 (mm)	200x190x75 (mm)
Weight	2.7Kg	2.0Kg

# STIR-6243/6244 Eye safe Laser Rangefinder

STIR-6243/6244 Eye safe Laser Rangefinder is widely used for Patrol & reconnaissance; Engineering exploration; Surveying and mapping.

## Features:

- High accuracy range finding
- Easy operation
- Simultaneous multiple targets measurement
- Small size and low light



## Technical data:

Model	STIR-6243	STIR-6244
wavelength	1.57 $\mu\text{m}$ (eye safe)	1.57 $\mu\text{m}$ (eye safe)
Peak power	$\geq 1\text{MW}$	$\geq 1\text{MW}$
Receiving aperture (mm)	70	40
Detector	APD	APD
Ranging capability (km)	Against big target:20 Against 2.3*2.3 : 10	Against big target:10 Against 2.3*2.3 : 5
Distance accuracy	$\pm 3\text{m}$	$\pm 3\text{m}$
Repetition rate	10ppm	10ppm
Divergence angle	$\leq 1\text{mrad}$	$\leq 1\text{mrad}$
Eyepiece adjust range	$\pm 3\text{Diopter}$	$\pm 3\text{Diopter}$
Impact	30g	30g
Tripod	High range:0.5~1.5m Bearing:5Kg	High range:0.5~1.5m Bearing:5Kg
Operation temperature	$-30^{\circ}\text{C} \sim 60^{\circ}\text{C}$	$-30^{\circ}\text{C} \sim 60^{\circ}\text{C}$
Power supply	12V battery	12V battery
Interface	RS422	RS422
Size	215x210x85 (mm)	200x190x75 (mm)
Weight	2.7Kg	2.0Kg

# STIR-6260 Multi-function Laser rangefinder

STIR-6260 Multi-function laser rangefinder is highly mobile product with multiple functions for versatile applications.

## Features:

- High accuracy range finding.
- Easy operation
- Simultaneous multiple targets measurement
- Small size and low light



## Technical data:

Model	STIR-6260 Capable Multifunction LRF
wavelength	1.06 $\mu$ m
Peak power	$\geq 1$ MW
Receiving aperture (mm)	40
Detector	APD
Ranging capability (km)	10
Distance accuracy	$\pm 3$ m
Repetition rate	10ppm, 1Hz(Emergency)
Compass Accuracy	1°
GPS	Standard external interface
Operation temperature	-30°C~60°C
Power supply	12V battery
Interface	RS232
Dimension	$\leq 230 \times 220 \times 98$ (mm)
Weight	$\leq 2.3$ Kg

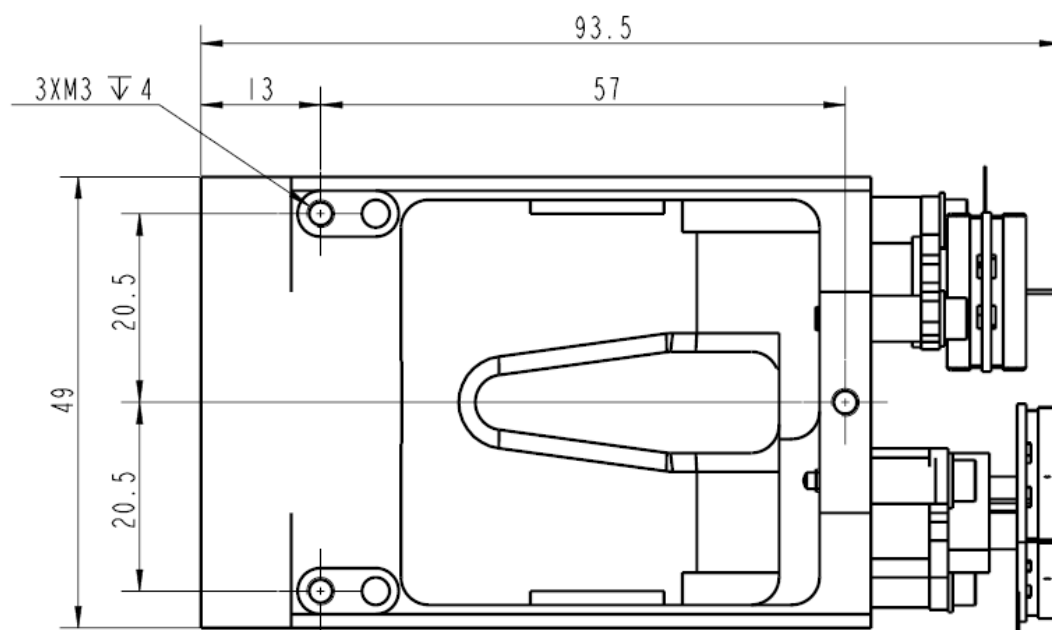
# laser rangefinder core module series

## STIR-6258B Laser Rangefinder

STIR-6258B Laser rangefinder is composed of laser generator, emission system, reception system, driving circuit, receiving circuit, main control circuit and so on.

### Features:

- High accuracy range finding
- Easy operation
- Simultaneous multiple targets measurement
- Small size and low light



### Technical data:

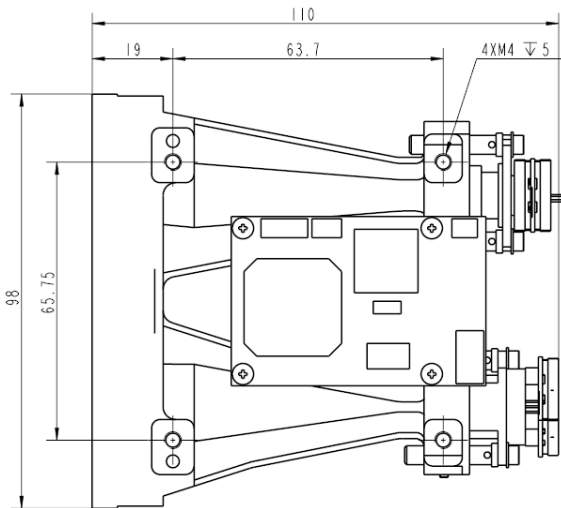
Model	STIR-6258B
wavelength	1.55 $\mu$ m
Ranging capability (km)	Against 2.3m*4.6m target : 2km
Distance accuracy	$\pm 5$ m
Distance resolution	$\leq 50$ m
Repetition frequency	$\geq 0.3$ Hz;
Operation temperature	-40 $^{\circ}$ C $\sim$ 55 $^{\circ}$ C
Power supply	12V $\pm 1$ V
Interface	RS232
Size	93.5x49x35 (mm)
Weight	130g

# STIR-6558B Laser Rangefinder

STIR-6558B Laser rangefinder is composed of laser generator, emission system, reception system, driving circuit, receiving circuit, main control circuit and so on.

## Features:

- High accuracy range finding
- Easy operation
- Simultaneous multiple targets measurement
- Small size and low light



## Technical data:

Model	STIR-6558B
wavelength	1.55 $\mu$ m
Ranging capability (km)	Against big target:8km Against 2.3*2.3 : 4km
Distance accuracy	±5m
Distance resolution	≤100m
Repetition frequency	≥0.3Hz;
Operation temperature	-40℃~55℃
Power supply	12V ±1V
Interface	RS232
Size	110x98x49.5 (mm)
Weight	329g

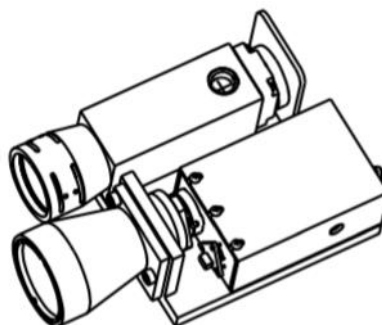
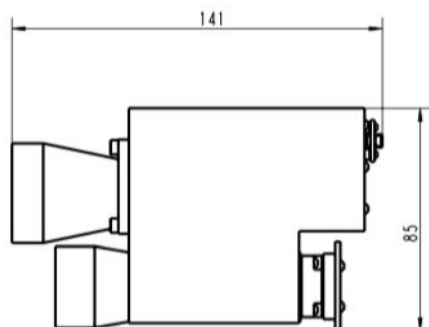


## STIR-6255A Laser Rangefinder

STIR-6255A Laser rangefinder is composed of laser generator, emission system, reception system, driving circuit, receiving circuit, main control circuit and so on.

### Features:

- High accuracy range finding
- Easy operation
- Simultaneous multiple targets measurement
- Small size and low light



### Technical data:

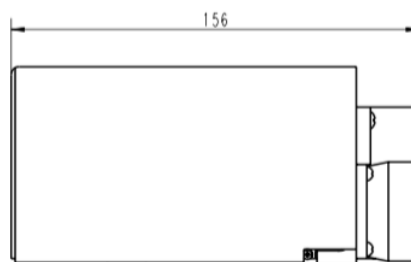
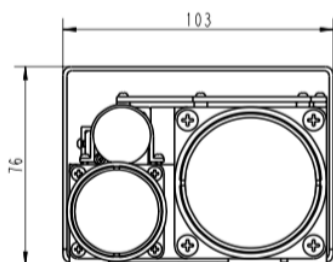
Model	STIR-6255A
wavelength	1.57 $\mu\text{m}$
Ranging capability (km)	Against big target:5km
Distance accuracy	$\pm 5\text{m}$
Distance resolution	$\leq 100\text{m}$
Repetition rate	$\leq 5\text{Hz}$ ;
Accurate rate	$\geq 98\%$
Operation temperature	$-40^{\circ}\text{C} \sim 55^{\circ}\text{C}$
Power supply	24V DC, 5A
Interface	RS422
Size	141×85×50 (mm)
Weight	$\leq 0.5\text{kg}$

## STIR-6255B Laser Rangefinder

STIR-6255B Laser rangefinder is composed of laser generator, emission system, reception system, driving circuit, receiving circuit, main control circuit and so on.

### Features:

- High accuracy range finding
- Easy operation
- Simultaneous multiple targets measurement
- Small size and low light



### Technical data:

Model	LRF-6255B
wavelength	1.57 $\mu\text{m}$
Ranging capability (km)	Against big target:5km
Distance accuracy	$\pm 5\text{m}$
Distance resolution	$\leq 100\text{m}$
Repetition rate	$\leq 5\text{Hz}$ ;
Accurate rate	$\geq 98\%$
Operation temperature	$-40^{\circ}\text{C} \sim 55^{\circ}\text{C}$
Power supply	24V DC, 5A
Interface	RS422
Size	156×103×76 (mm)
Weight	$\leq 1.1\text{kg}$

## STIR-6247 Laser Rangefinder

STIR-6247 Laser rangefinder is composed of laser generator, emission system, reception system, driving circuit, receiving circuit, main control circuit and so on.

### Features:

- High accuracy range finding
- Easy operation
- Simultaneous multiple targets measurement
- Small size and low light



### Technical data:

Model	STIR-6247
wavelength	1.57 $\mu\text{m}$ (eye safe)
Peak power	$\geq 3\text{mJ}$
Detector	APD
Ranging capability (km)	6
Distance accuracy	$\pm 5\text{m}$
Repetition rate	10ppm
Operation temperature	$-30^{\circ}\text{C} \sim +60^{\circ}\text{C}$
Power supply	16V DC, 1A
Interface	RS422
Size	$\leq 121.5\text{mm} \times 53\text{mm} \times 73\text{mm}$
Weight	0.4Kg

# STIR-6232 Laser Rangefinder

STIR-6232 Laser rangefinder is composed of laser generator, emission system, reception system, driving circuit, receiving circuit, main control circuit and so on.

## Features:

- High accuracy range finding
- Easy operation
- Simultaneous multiple targets measurement
- Small size and low light



## Technical data:

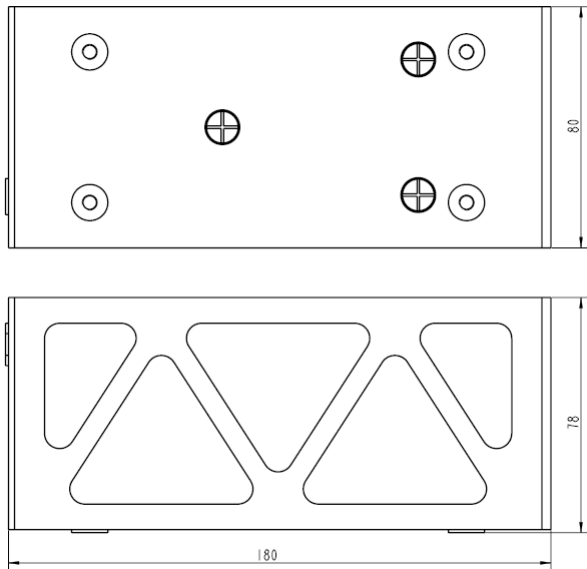
Wavelength	1.06μm
Laser Type	Nd:YAG
Detectors	APD
Ranging capability	150m~10km
Ranging accuracy	±5m (±2.5m, ±1m optional)
Repetitive rate	10ppm(typical), 1Hz(in emergency)
False alarm rate	≤3%
Data interface	RS422
Power supply	18V~36VDC
Dimension	≤120mm×110mm×70mm
Weight	≤1.5 Kg
Operation temperature	-30℃~60℃
Environment adaptability	Strong vibration and shock resistance As per high/low temperature, humidity, salty fog, sand and water tightness standard

# STIR-6245 Laser Rangefinder

STIR-6245 Laser rangefinder is composed of laser generator, emission system, reception system, driving circuit, receiving circuit, main control circuit and so on.

## Features:

- High accuracy range finding
- Easy operation
- Simultaneous multiple targets measurement
- Small size and low light



## Technical data:

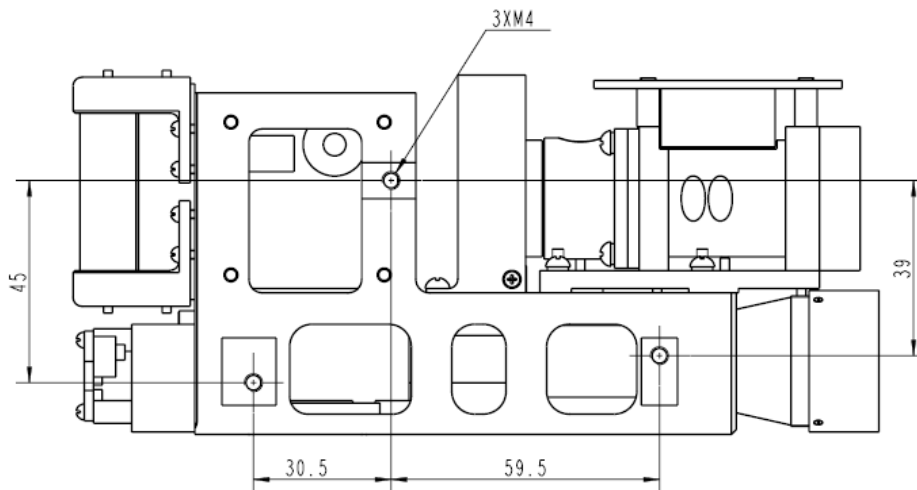
Wavelength	1.57 $\mu$ m
Laser Type	Nd:YAG
Detectors	APD
Ranging capability	150m~10km
Ranging accuracy	$\pm$ 5m
Repetitive rate	10ppm(typical), 1Hz(in emergency)
False alarm rate	$\leq$ 3%
Data interface	RS422
Power supply	18V~36VDC
Dimension	$\leq$ 210mm $\times$ 70mm $\times$ 70mm
Weight	$\leq$ 1.5 Kg
Operation temperature	-30 $^{\circ}$ C~60 $^{\circ}$ C
Environment adaptability	Strong vibration and shock resistance As per high/low temperature, humidity, salty fog, sand and water tightness standard

# STIR-6269 Laser Rangefinder

STIR-6269 Laser rangefinder is composed of laser generator, emission system, reception system, driving circuit, receiving circuit, main control circuit and so on.

## Features:

- High accuracy range finding
- Easy operation
- Simultaneous multiple targets measurement
- Small size and low light



## Technical data:

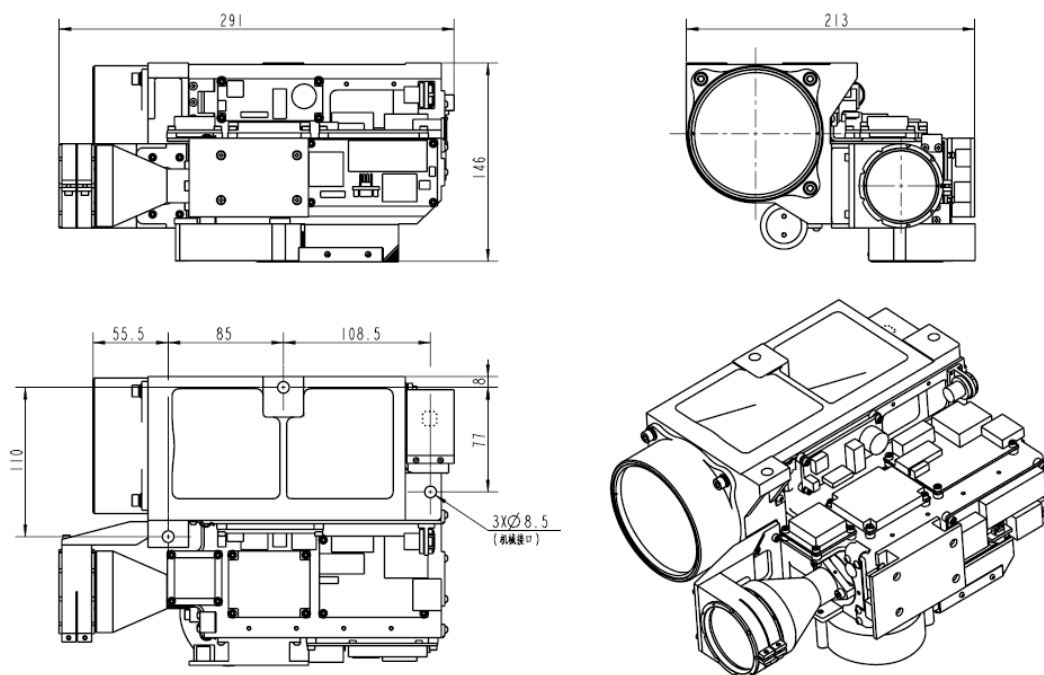
Wavelength	1.57μm
Laser Type	Nd:YAG
Detectors	APD
Ranging capability	100m~8km
Ranging accuracy	±5m
Repetitive rate	10ppm(typical), 1Hz(in emergency)
False alarm rate	≤3%
Data interface	RS422
Power supply	7.2VDC
Dimension	≤180mm×80mm×40mm
Weight	≤0.7Kg
Operation temperature	-30℃~50℃
Environment adaptability	Strong vibration and shock resistance As per high/low temperature, humidity, salty fog, sand and water tightness standard

# STIR-300 High Repetition Rate Laser Rangefinder

STIR-300 High repetition rate Laser rangefinder is composed of laser generator, emission system, reception system, driving circuit, receiving circuit, main control circuit and so on.

## Features:

- High accuracy range finding
- Easy operation
- Simultaneous multiple targets measurement
- Small size and low light



## Technical data:

Wavelength	1.57 $\mu$ m
Ranging capability	100m~20km
Ranging accuracy	$\pm$ 5m
Range capability	More than 20km for big target, more than 10km for the vehicle (When the atmosphere visibility is more than 23.5km);
Repetitive rate	5 Hz
Laser energy	$\geq$ 30mJ
Laser divergence angle	$<$ 0.8mrad
False alarm rate	$\leq$ 5%
Right measure rate	$\geq$ 95%
Data interface	RS422
Power supply	24VDC, peak power is 100W
Dimension	$\leq$ 290mm $\times$ 215mm $\times$ 145mm
Weight	$\leq$ 5.5 Kg
Operation temperature	-40 $^{\circ}$ C~60 $^{\circ}$ C
Environment adaptability	Strong vibration and shock resistance As per high/low temperature, humidity, salty fog, sand and water tightness standard