SATIR

Leading the way in Thermal Imaging

SATIR PRODUCT CATALOGUE 2009

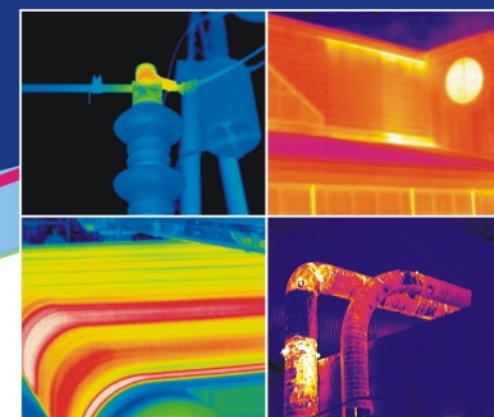GUANGZHOU SAT INFRARED TECHNOLOGY CO.,LTD

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SATIR

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GUANGZHOU SAT INFRARED TECHNOLOGY CO.,LTD

Content

This catalogue is updated constantly, all the product information are subject to the updates. Please contact us for the latest product information.

The
United
States
of
America

The Director of the United States Patent and Trademark Office

Has received an application for a new, original, and ornamental design for an article of manufacture. The title and description of the design are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the design shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the design throughout the United States of America, or importing the design into the United States of America for the term of fourteen years from the date of grant of this patent.

Jon W. Dudas

Director of the United States Patent and Trademark Office

Registered / Registrato 02/08/2005

No 000380811-0002

The President / Il Presidente

Wubbo de Boer

OHIM – OFFICE FOR HARMONIZATION IN THE INTERNAL MARKET
TRADE MARKS AND DESIGNS

CERTIFICATE OF REGISTRATION

This Certificate of Registration is hereby issued for the Registered Community Design identified below. The corresponding entries have been recorded in the Register of Community Designs.

UAMI – UFFICIO PER L'ARMONIZZAZIONE NEL MERCATO INTERNO
MARCHI, DISEGNI E MODELLI

CERTIFICATO DI REGISTRAZIONE

Il presente Certificato di Registrazione è emesso per il Disegno o Modello Comunitario registrato descritto di seguito. I dati corrispondenti sono stati iscritti nel Registro dei Disegni e Modelli Comunitari.

実用新案登録証
(CERTIFICATE OF UTILITY MODEL REGISTRATION)

登録第３１３３７４２号
(REGISTRATION NUMBER)

考案の名称(TITLE OF THE DEVICE)

赤外線カメラ

実用新案権者(OWNER OF THE UTILITY MODEL RIGHT)

中国廣州市廣州経済技術開発区東江大道１０号
国籍　中華人民共和国
廣州颯特電力紅外技術有限公司

考案者(CREATOR OF DEVICE)

呉　継平

出願番号(APPLICATION NUMBER)　　実願２００７－０００３００
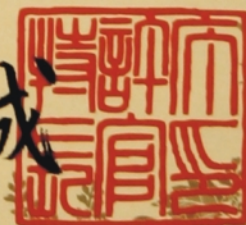
出願年月日(FILING DATE)　　平成１９年　１月２３日(January 23.2007)

この考案は、登録するものと確定し、実用新案原簿に登録されたことを証する。
(THIS IS TO CERTIFY THAT THE UTILITY MODEL IS REGISTERED ON THE REGISTER OF THE JAPAN PATENT OFFICE.)

平成１９年　７月　４日(July 4.2007)

特許庁長官(COMMISSIONER, JAPAN PATENT OFFICE)

中嶋　誠

| Europäisches Patentamt | European Patent Office | Office européen des brevets |

Urkunde　Certificate　Certificat

| Es wird hiermit bescheinigt, dass für die in der Patentschrift beschriebene Erfindung ein europäisches Patent für die in der Patentschrift bezeichneten Vertragsstaaten erteilt worden ist. | It is hereby certified that a European patent has been granted in respect of the invention described in the patent specification for the Contracting States designated in the specification. | Il est certifié qu'un brevet européen a été délivré pour l'invention décrite dans le fascicule de brevet, pour les Etats contractants désignés dans le fascicule de brevet. |

| Europäisches Patent Nr. | European Patent No. | Brevet européen n° |

1615065

| Patentinhaber | Proprietor of the Patent | Titulaire du brevet |

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31.01.07

Alain Pompidou

Präsident des Europäischen Patentamts
President of the European Patent Office
Président de l'Office européen des brevets

HM-S180

Up-right styling infrared camera
Advanced thermal imaging technologies in a super compact design

HM-S180, is designed with ergonomics in mind. It is smaller in size, making it more comfortable when holding the camera and it also provides powerful functions and extension capacity

Built-in CCD

Laser pointer

Illuminator

Infrared lens

Trigger button for laser pointer

The unique design of 2.5 inch swivelable LCD can not only provide good protection to the LCD itself, but also enables the user to adjust the LCD to the best angle for observation and reduces the reflection during outdoor operation

HM-S180 adopts the standard SD card as the memory interface and can be extended up to 2G.
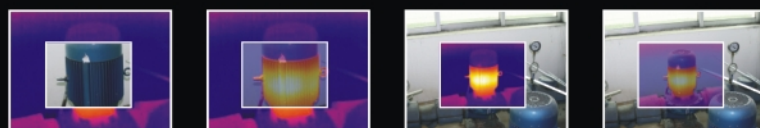
patented product, imitation forbidden

IR Duo VISION

Duo-vision technology

With the Duo-vision technology, HM-S180 can overlap the visual image with the thermal image, making it easier to locate the problem. There are four display modes; users can choose their preference.

Multi-functional docking station

Our creative multi-functional docking station holds the HM-S180, and also provides various interface functions such as: video output, A/C adapter connection and USB port for thermal video transfer in real time!

USB 2.0 interface for thermal video transfer in real time

Video out

DC in

standard package

Model		HM-S180
Thermal Image and optical data		
FOV/ min. focus distance		20° × 15°/ 0.1m
Spatial resolution		2.2 mrad
Thermal sensitivity @ 50/60 Hz		100 mK@30℃
Detector type		FPA, uncooled microbolometer
Resolution		160 × 120
Spectral range		8 ~ 14μm
Focus		Manual
Image presentation		
LCD display		2.5'' LCD
Visual image		Built-in digital video, 640x480pixels, full color
Duo Vision		4 modes
P.I.P		Yes, 4 display modes
Video output		NTSC(60Hz) or PAL(50Hz) composite video
Illuminator		Yes
Measurement		
Measurement range	Range one	−20℃ to +250℃, (−4°F to +482°F),
	Range two	+200℃ to +600℃ (+392°F to +1112°F) (optional) +200℃ to +1000℃ (+392°F to +1832°F),(optional)
	Range three	+800℃ to +1500℃ (+1472°F to +2732°F) (optional)
Accuracy		± 2℃, ± 2% of reading
Measurement mode		Spot analysis up to 4 spots, auto tracking, isotherm analysis, temperature alarm
Correction		Emissivity, ambient temperature, distance, relative humidity
Image storage		
Type		Removable SD card,1G extendable to 2G
File formats – Thermal		SAT format, 14 bit measurement data included
File formats – Visual		CCD format
Thermal video recording		With real time software (optional)
Voice annotation		With Bluetooth (optional)
Laser pointer		
Type		Class 2, 1mw/ 635 nm red
Battery system		
Battery		Rechargeable lithium battery
Battery operation time		≈ 2.5 hours continuous operation
Power save mode		Yes
Environment specification		
Operating temperature range		−20℃ to +50℃ (−4°F to +122°F)
Storage temperature range		−40℃ to +70℃ (−40°F to +158°F)
Humidity		10% to 95%,non-condensing
Encapsulation		IP 54
Shock		Operational: 25G
Vibration		Operational: 2G
Physical characteristic		
Weight (ex. battery)		500g (inc. docking station)
Size (L*W*H)		172 mm × 80mm × 162mm
Tripod mounting		1/4'' _ 20
Interface		
USB		Download thermal images thermal video transfers in real time with software(optional);
Video output		NTSC(60Hz) or PAL(50Hz) composite video
Bluetooth		Voice recording and playback (optional)
External power supply		8–11V 3A DC

HY-S280

Up-right styling infrared camera

Viewfinder

Built-in CCD

Laser pointer

Illuminator

Trigger for laser pointer

Infrared lens

Rubber handle with ergonomic design

3.5 inch LCD can be swiveled for 270deg, making it easier for users to adjust to the best angle for observation

Video out

RS232

DC in

USB2.0 for thermal video transfer in real time

Headset

Innovative design for comfort and precise measurement

**patented product, imitation forbidden**

Picture in Picture (P.I.P)

With 640X480 full color built-in CCD; HY-S280 can take visual images and thermal images at the same time. P.I.P provides comparison of both images for quick diagnosis. Four display modes are available for different preferences.

Innovative up-right styling design

With up-right styling design, HY-S280 can effectively reduce the stress brought by heavy workload, and avoid discomfort caused by the angle formed by the elbow and the wrist.

Less stress on elbow and wrist

Reduce discomfort caused by the angle
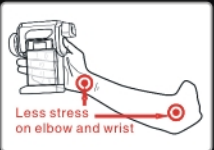
standard package

Model		HY-S280
Thermal Image and optical data		
FOV/ min. focus distance		24° × 18°/ 0.5m
Spatial resolution		1.1 mrad
Thermal sensitivity @ 50/60 Hz		80 mK@30℃
Detector type		FPA, uncooled microbolometer
Resolution		384 × 288
Spectral range		8 ~ 14µm
Focus		Manual
Digital zoom		1x to 8x
Image presentation		
LCD display		3.5'' LCD
Viewfinder		Built-in, 640x480pixels, full color(TFT)
Visual image		Built-in digital video, 640x480pixels, full color
P.I.P		Yes, 4 display modes
Video output		NTSC(60Hz) or PAL(50Hz) composite video
Illuminator		Yes
Measurement		
Measurement range	Range one	−20℃ to +250℃, (−4°F to +482°F)
		+200℃ to +600℃ (+392°F to +1112°F)
	Range two	+200℃ to +1000℃ (+392°F to +1832°F),(optional)
		+800℃ to +1500℃ (+1472°F to +2732°F) (optional)
	Range three	+800℃ to +2000℃ (+1472°F to +3632°F) (optional)
Accuracy		± 2℃, ± 2% of reading
Measurement mode		Spot analysis up to 10 spots, auto tracking, area analysis, isotherm analysis
Correction		Emissivity, ambient temperature, distance, relative humidity
Image storage		
Type		CF card, 1G
File formats – Thermal		SAT format, 14 bit measurement data included
File formats – Visual		CCD format
Thermal video recording		With real time software (optional)
Text annotation		Pre-defined text
Voice annotation		40sec with headset, saved with thermal image
Laser pointer		
Type		Class 2, 1mw/ 635 nm red
Battery system		
Battery		Rechargeable lithium battery
Battery operation time		≈ 2.5 hours continuous operation
Power save mode		Yes
Environment specification		
Operating temperature range		−20℃ to +50℃ (−4°F to +122°F)
Storage temperature range		−40℃ to +70℃ (−40°F to +158°F)
Humidity		10% to 95%,non-condensing
Encapsulation		IP 54
Shock		Operational: 25G
Vibration		Operational: 2G
Physical characteristic		
Weight (ex. battery)		1100g
Size (L*W*H)		160 mm × 90mm × 184mm
Tripod mounting		1/4'' _ 20
Interface		
USB		Thermal video transfers in real time with software (optional)
Video output		NTSC(60Hz) or PAL(50Hz) composite video
External power supply		8~11V 3A DC (optional)

HY-S380

Up-right styling infrared camera

Aluminum housing can reduce the electromagnetic effect caused by some targets such as high voltage power transmitters, ensuring the best performance of HY-S380
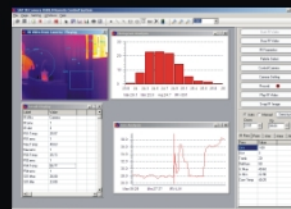
USB2.0 for thermal video transfer in real time

DC in
Video out
Headset

Viewfinder

Trigger for laser pointer

User definable button

270deg Swivel able LCD with touch screen

Removable SD card

Rubber handle with ergonomic design

Laser pointer

Built-in CCD

Battery compartment

Illuminator

Pen

High technology infrared camera with brilliant features

Duo-vision technology
With the duo-vision technology, HY-S380 can overlap the visual image with a thermal image, making it easier to locate the problem. There are four display modes; users can choose their preference.

patented product, imitation forbidden

Model		HY-S380
Thermal Image and optical data		
FOV/ min. focus distance		24° × 18°/ 0.5m
Spatial resolution		1.1 mrad
Thermal sensitivity @ 50/60 Hz		80 mK @30℃
Detector type		FPA, uncooled microbolometer
Resolution		384 × 288
Spectral range		8 ~ 14μm
Focus		Auto/motorized
Digital zoom		1x to 8x
Image presentation		
LCD display		3.5'' LCD, tough screen
Viewfinder		Built-in, 640x480pixels, full color(TFT)
Visual image		Built-in digital video, 640x480pixels, full color
Duo Vision		4 modes
P.I.P		Yes, 4 display modes
Video output		NTSC(60Hz) or PAL(50Hz) composite video
Illuminator		Yes
Statues display		Yes
Measurement		
Measurement range	Range one	−20℃ to +250℃, (−4°F to +482°F)
	Range two	+200℃ to +600℃ (+392°F to +1112°F)
		+200℃ to +1000℃ (+392°F to +1832°F) (optional)
	Range three	+800℃ to +1500℃ (+1472°F to +2732°F) (optional)
		+800℃ to +2000℃ (+1472°F to +3632°F) (optional)
Accuracy		± 2℃, ± 2% of reading
Measurement mode		Analysis up to 10 spots, auto tracking, areas analysis, isotherm analysis, line profile.
Correction		Emissivity, ambient temperature, distance, relative humidity
Image storage		
Type		Removable SD card, extendable to 32G
File formats – Thermal		BMP format, 14 bit measurement data included
File formats – Visual		CCD format
Thermal video recording		14 bit measurement data included, saved in SD card
Text annotation		Text input, saved with thermal image
Voice annotation		40sec, saved with thermal image
Laser pointer		
Type		Class 2, 1mw/ 635 nm red
Battery system		
Battery		Rechargeable lithium battery
Battery operation time		≈ 2.5 hours continuous operation
Power save mode		Yes
Environment specification		
Operating temperature range		−20℃ to +50℃ (−4°F to +122°F)
Storage temperature range		−40℃ to +70℃ (−40°F to +158°F)
Humidity		10% to 95%,non-condensing
Encapsulation		IP 54
Shock		Operational: 25G
Vibration		Operational: 2G
Physical characteristic		
Weight (ex. battery)		1600g
Size (L*W*H)		160 mm × 90mm × 184mm
Tripod mounting		1/4'' _ 20
Interface		
USB		Thermal video transfers in real time with software (optional)
Bluetooth		Voice recording and playback (optional)
Video output		NTSC(60Hz) or PAL(50Hz) composite video
External power supply		8–11V 3A DC (optional)

Thermal video recording in real time
HY-S380 can not only take thermal images, but also thermal video and save the video in the SD card. Post analysis can be performed with the real time analysis software.

Various optional lenses are available for different needs, providing unique satisfaction for customers.

12° 2x telescope lens

48° wide angle lens   Closed up lens

Iconic menu
Brand new system with iconic menu, making the operation straightforward.

standard package

HR-600

Up-right styling infrared camera

A super infrared camera symbolizing great infrared technology and pursuance of innovation

5.6 inch LCD with touch screen

– 5.6 inch LCD enables the user to see very fine detail;
– Touch screen makes the work more efficient and straightforward;
– 270deg Swivelable design provides the best observation angle;

5.6 inch full color LCD is equipped with the HR-600, users can view the exquisite thermal image or the visual image comfortably and clearly; brand new iconic menu makes for easy operation, together with touch screen, inspection work becomes more efficient.

Viewfinder

Trigger for laser pointer

Laser pointer

Built-in CCD

Illuminator

640X480

High resolution UFPA detector

HR-600 has a 640x480 resolution detector, 307,200 effective pixels, every pixel brings an accurate and reliable temperature measurement result.

Magnesium aluminum alloy housing

The housing of the HR-600 adopts the magnesium aluminum alloy, which provides excellent resistance to electromagnetic radiation, the HR-600 complies with IP54 encapsulation but is simultaneously light weighted.

patented product, imitation forbidden

Unbeatable thermal imaging quality

Perfect imaging quality is the main character of the HR-600, with its high resolution detector and the 5.6 inch full color LCD, HR-600 can provide a supremely exquisite thermal image.
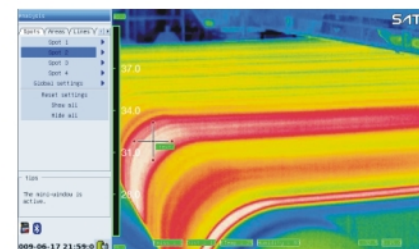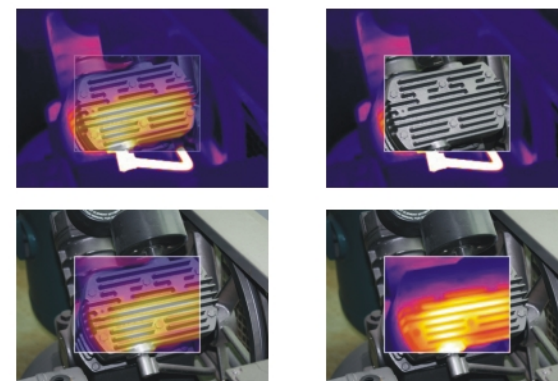
One for All

Innovative joystick makes the operation much easier, ALL analysis can be done by using only ONE joystick

Duo vision

HR-600 can take high quality "duo vision" images, with four display modes; users can choose the most suitable mode for their application.

Model		HR-600
Thermal Image and optical data		
FOV/ min. focus distance		24° × 18°/ 0.5m
Spatial resolution		0.65 mrad
Thermal sensitivity @ 50/60 Hz		80 mK@30℃
Detector type		FPA, uncooled microbolometer
Resolution		640 × 480
Spectral range		8 ~ 14µm
Focus		Auto/motorized
Digital zoom		1x to 8x
Image presentation		
LCD display		5.6'' LCD, touch screen
Viewfinder		Built-in, high resolution, full color(TFT)
Visual image		Built-in digital video, 640x480pixels, full color
Duo Vision		4 modes
P.I.P		Yes, 4 display modes
Video output		NTSC(60Hz) or PAL(50Hz) composite video
Illuminator		Yes
Measurement		
Measurement range	Range one	−20℃ to +250℃, (−4°F to +482°F)
	Range two	+200℃ to +600℃ (+392°F to +1112°F)
		+200℃ to +1000℃ (+392°F to +1832°F) (optional)
	Range three	+800℃ to +1500℃ (+1472°F to +2732°F) (optional)
		+800℃ to +2000℃ (+1472°F to +3632°F) (optional)
Accuracy		± 2℃, ± 2% of reading
Measurement mode		Analysis up to 10 spots, auto tracking, areas analysis, isotherm analysis, line profile.
Correction		Emissivity, ambient temperature, distance, relative humidity
Image storage		
Type		Removable SD card, extendable to 32G
File formats – Thermal		BMP format, 14 bit measurement data included
File formats – Visual		CCD format
Thermal video recording		14 bit measurement data included, saved in SD card
Text annotation		Text input, saved with thermal image
Voice annotation		60sec with Bluetooth (optional)
Laser pointer		
Type		Class 2, 1mw/ 635 nm red
Battery system		
Battery		Rechargeable lithium battery
Battery operation time		≈ 2.5 hours continuous operation
Power save mode		Yes
Environment specification		
Operating temperature range		−20℃ to +50℃ (−4°F to +122°F)
Storage temperature range		−40℃ to +70℃ (−40°F to +158°F)
Humidity		10% to 95%,non-condensing
Encapsulation		IP 54
Shock		Operational: 25G
Vibration		Operational: 2G
Physical characteristic		
Weight (ex. battery)		1500g
Size (L*W*H)		209mm × 103mm × 216mm
Tripod mounting		1/4'' _ 20
Interface		
USB		Download images
		Thermal video transfers in real time with software (optional)
Bluetooth		Voice recording and playback (optional)
Video output		NTSC(60Hz) or PAL(50Hz) composite video
External power supply		8~11V 3A DC (optional)

IR Duo VISION

HotFind-D Series

The IR camera in compact design with the best cost performance ratio

Battery compartment

USB port, for image download

DC in

Video out

Infrared lens

Laser pointer

User definable trigger button

Rubber sunshield
In order to reduce the reflection of sunlight when working outdoors, a rubber sunshield is provided to minimize the reflection, allowing the best observation result.

standard package

patented product, imitation forbidden

High frame rate in real time
HOTFIND-D series adopts NTSC(60Hz) or PAL(50Hz) composite video output, the thermal image is taken in real time, and no lagging will be found, which guarantees a complete and vivid thermal image, most importantly, no single detail or problem will be overlooked.

Extendable temperature range
Objects of different temperatures require corresponding temperature ranged infrared cameras, HOTFIND-D series has four temperature ranges, it can be extended from standard +250°C up to +1500°C, which means the HOTFIND-D series can be widely used in various applications.

Four Spot analysis, auto tracking
HOTFIND-D series has four movable spots, that can measure four different points in one thermal image at the same time, making it easier for the users comparison.
Auto tracking can find the spot with the highest or lowest temperature in no time, providing clear instructions.

Various optional lenses
Flexible design of the lens means the HOTFIND-D series can adopt various optional lenses with different FOV. All lenses are field replaceable.
With such optional lenses, HOTFIND-D series can provide the users with different thermal images at the same distance and position.

Model		HOTFIND-D	HOTFIND-DX	HOTFIND-DXS	HOTFIND-DXT
Thermal Image and optical data					
FOV/ min. focus distance		20° × 15°/ 0.1m			
Spatial resolution		2.2mrad			
Thermal sensitivity @ 50/60 Hz		100 mK@30°C			
Detector type		FPA, uncooled microbolometer			
Resolution		160 × 120			
Spectral range		8 – 14µm			
Focus		Manual			
Image presentation					
LCD display		2.5'' LCD			
Video output		NTSC(60Hz) or PAL(50Hz) composite video			
Measurement					
Measurement range	Range one	−20°C to +250°C (−4°F to +482°F)	−20°C to +250°C (−4°F to +482°F)	−20°C to +250°C (−4°F to +482°F)	−20°C to +250°C (−4°F to +482°F)
	Range two	−−−−−−	+200°C to +600°C (+392°F to +1112°F)	+200°C to +1000°C (+392°F to +1832°F)	+200°C to +1000°C (+392°F to +1832°F)
	Range three	−−−−−−	−−−−−−	−−−−−−	+800°C to +1500°C (+1472°F to +2732°F)
Accuracy		± 2°C, ± 2% of reading			
Measurement mode		Spot analysis up to 4 spots, auto tracking, isotherm analysis, temperature alarm			
Correction		Emissivity, ambient temperature, distance, relative humidity			
Image storage					
Type		Built-in CF card, 1GB			
File formats Thermal		SAT format, 14 bit measurement data included			
Laser pointer					
Type		Class 2, 1mw/635 nm red			
Battery system					
Type		Rechargeable lithium battery			
Battery operation time		≈2.5 hours continuous operation			
Power save mode		Yes			
Environment specification					
Operating temperature range		−20°C to +50°C (−4°F to +122°F)			
Storage temperature range		−40°C to +70°C (−40°F to +158°F)			
Humidity		10% to 95%, non−condensing			
Encapsulation		IP 54			
Shock		Operational: 25G			
Vibration		Operational: 2G			
Physical characteristic					
Weight (ex. battery)		600g			
Size (L*W*H)		211 mm × 80mm × 195mm			
Tripod mounting		1/4'' _ 20			
Interface					
USB		Download thermal images			
Video output		NTSC(60Hz) or PAL(50Hz) composite video			
External power supply		8−11V 3A DC (optional)			

HotFind–V Series

High performance IR camera for entry level with upgraded visual camera

High frame rate in real time
HOTFIND–V series adopts NTSC(60Hz) or PAL(50Hz) composite video output, the thermal image is taken in real time, and no lagging will be found, which guarantees the complete and vivid thermal image, most importantly, no single detail or problem will be overlooked.

Extendable temperature range
Objects of different temperatures require corresponding temperature ranged infrared cameras, HOTFIND–V series has four temperature ranges, it can be extended from standard +250℃ up to +1500℃, which means the HOTFIND–V series can be widely used in various applications.

Four Spot analysis, auto tracking
HOTFIND–V series has four movable spots, that can measure four different points in one thermal image at the same time, making it easier for users' comparison. Auto tracking can find the spot with highest or lowest temperature in no time, providing clear instructions.

Bluetooth
Users can add voice annotation to the thermal image via Bluetooth, the voice annotation can be saved with the same thermal image and can be played back with the analysis software, making it easier for post analysis.

- Illuminator
- Built–in CCD
- Infrared lens
- Laser pointer
- User definable trigger button
- Battery compartment

Video out

DC in

The DC input can not only provide power to the HOTFIND–V series for long periods of operation, but will also charge the battery directly without the need for using the battery charger.

Removable Mini SD card, 2GB for standard delivery

Various optional lenses
Flexible design of the lens means the HOTFIND–V series can adopt various optional lenses with different FOV. All lenses are field replaceable. With such optional lenses, HOTFIND–V series can provide the users different thermal images at the same distance and position.

6.4°   4.8°
9°   12°   38°

4.8°
9°
12°
38°
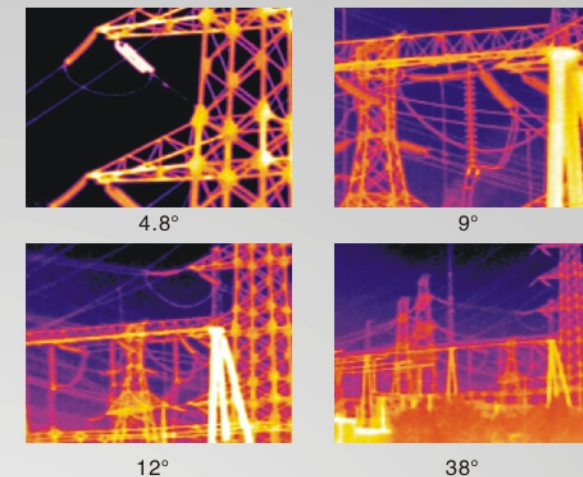
USB real time thermal video recording (optional)
HOTFIND–V series can take not only thermal images, but also thermal video with the USB Real time software, thermal video can be transferred to the PC in real time for analysis and playback

Rubber sunshield
In order to reduce the reflection of sunlight when working outdoor, rubber sunshield is provided to minimize the reflection, allowing the best observation result.

standard package

Model		HOTFIND-V	HOTFIND-VS	HOTFIND-VXS	HOTFIND-VXT
Thermal Image and optical data					
FOV/ min. focus distance		20° × 15°/ 0.1m			
Spatial resolution		2.2 mrad			
Thermal sensitivity @ 50/60 Hz		100 mK @ 30℃			
Detector type		FPA, uncooled microbolometer			
Resolution		160 × 120			
Spectral range		8 – 14μm			
Focus		Manual			
Image presentation					
LCD display		2.5'' LCD			
Visual image		Built–in digital video, 640x480pixels, full color			
Duo Vision		4 modes			
P.I.P		Yes, 4 display modes			
Video output		NTSC(60Hz) or PAL(50Hz) composite video			
Illuminator		Yes			
Measurement					
Measurement range	Range one	−20℃ to +250℃ (−4°F to +482°F)	−20℃ to +250℃ (−4°F to +482°F)	−20℃ to +250℃ (−4°F to +482°F)	−20℃ to +250℃ (−4°F to +482°F)
	Range two	−−−−−−	+200℃ to +600℃ (+392°F to +1112°F)	+200℃ to +1000℃ (+392°F to +1832°F)	+200℃ to +1000℃ (+392°F to +1832°F)
	Range three	−−−−−−	−−−−−−	−−−−−−	+800℃ to +1500℃ (+1472°F to +2732°F)
Accuracy		± 2℃, ± 2% of reading			
Measurement mode		Spot analysis up to 4 spots, auto tracking, isotherm analysis, temperature alarm			
Correction		Emissivity, ambient temperature, distance, relative humidity			
Image storage					
Type		Removable Mini SD card, 2G			
File formats – Thermal		SAT format, 14 bit measurement data included			
File formats – Visual		CCD format			
Thermal video recording		With real time software (optional)			
Voice annotation		With Bluetooth (optional)			
Laser pointer					
Type		Class 2, 1mw/ 635 nm red			
Battery system					
Battery		Rechargeable lithium battery			
Battery operation time		≈ 2.5 hours continuous operation			
Power save mode		Yes			
Environment specification					
Operating temperature range		−20℃ to +50℃ (−4°F to +122°F)			
Storage temperature range		−40℃ to +70℃ (−40°F to +158°F)			
Humidity		10% to 95%,non-condensing			
Encapsulation		IP 54			
Shock		Operational: 25G			
Vibration		Operational: 2G			
Physical characteristic					
Weight (ex. battery)		600g			
Size (L*W*H)		215 mm × 80mm × 219mm			
Tripod mounting		1/4'' 20			
Interface					
USB		thermal video transfers in real time with software(optional);			
Video output		NTSC(60Hz) or PAL(50Hz) composite video			
Bluetooth		Voice recording and playback (optional)			
External power supply		8–11V 3A DC (optional)			

patented product, imitation forbidden

HotFind–L Series

384x288 resolution and high performance IR camera for universal industrial applications

IR DUO VISION

Illuminator
Built–in CCD
Infrared lens
Laser pointer
User definable trigger button
Battery compartment

High frame rate in real time

HOTFIND–L series adopts NTSC(60Hz) or PAL(50Hz) composite video output, the thermal image is taken in real time, and no lagging will be found, which guarantees a complete and vivid thermal image, most importantly, no single detail or problem will be overlooked.

Extendable temperature range

Objects of different temperatures require corresponding temperature ranged infrared cameras, HOTFIND–L series has four temperature ranges, it can be extended from standard +250℃ up to +1500℃, which means the HOTFIND– L series can be widely used in various applications.

Four Spot analysis, auto tracking

HOTFIND–L series has four movable spots that can measure four different points in one thermal image at the same time, making it easier for users' comparison.
Auto tracking can find the spot with highest or lowest temperature in no time, providing clear instructions.

Various optional lenses

Flexible design of the lens means the HOTFIND–L series can adopt various optional lenses with different FOV. All lenses are field replaceable. With such optional lenses, HOTFIND–L series can provide the users with different thermal images at the same distance and position.

standard package

Duo–vision technology

With the Duo–vision technology, HotFind-L series can overlap the visual image with the thermal image, making it easier to locate the problem. There are four display modes; users can choose their preference.

2.5 inch flip–able LCD

Users can adjust the angle of the LCD for the best observation result.
Flip–able design can also provide best protection to the LCD while the camera is not in use.

Bluetooth

Users can add voice annotation to the thermal image via Bluetooth, the voice annotation can be saved with the same thermal image and can be played back with the analysis software, making it easier for post analysis.

USB real time thermal video recording (optional)

HOTFIND–L series can take not only thermal images, but also thermal video with the USB Real time software, thermal video can be transferred to the PC in real time for analysis and playback

Tripod fixer (optional)

HOTFIND–L series can be fixed on a tripod through the fixer. With this feature, the HOTFIND–L series can be used for monitoring purpose.
Together with the A/C adapter(optional), the users can use the HOTFIND–L series for long time operation.
The tripod fixer can also be used on all HOTFIND series infrared cameras.

Model		HOTFIND-L	HOTFIND-LS	HOTFIND-LXS	HOTFIND-LXT
Thermal Image and optical data					
FOV/ min. focus distance		24° × 18°/ 0.1m			
Spatial resolution		1.1 mrad			
Thermal sensitivity @ 50/60 Hz		80 mK@30℃			
Detector type		FPA, uncooled microbolometer			
Resolution		384 × 288			
Spectral range		8 ~ 14μm			
Focus		Manual			
Image presentation					
LCD display		2.5'' LCD			
Visual image		Built–in digital video, 640x480pixels, full color			
Duo Vision		4 modes			
P.I.P		Yes, 4 display modes			
Video output		NTSC(60Hz) or PAL(50Hz) composite video			
Illuminator		Yes			
Measurement					
Measurement range	Range one	–20℃ to +250℃ (–4°F to +482°F)	–20℃ to +250℃ (–4°F to +482°F)	–20℃ to +250℃ (–4°F to +482°F)	–20℃ to +250℃ (–4°F to +482°F)
	Range two	——————	+200℃ to +600℃ (+392°F to +1112°F)	+200℃ to +1000℃ (+392°F to +1832°F)	+200℃ to +1000℃ (+392°F to +1832°F)
	Range three	——————	——————	——————	+800℃ to +1500℃ (+1472°F to +2732°F)
Accuracy		± 2℃, ± 2% of reading			
Measurement mode		Spot analysis up to 4 spots, auto tracking, isotherm analysis, temperature alarm			
Correction		Emissivity, ambient temperature, distance, relative humidity			
Image storage					
Type		Removable Mini SD card, 2G			
File formats – Thermal		SAT format, 14 bit measurement data included			
File formats – Visual		CCD format			
Thermal video recording		With real time software (optional)			
Voice annotation		With Bluetooth (optional)			
Laser pointer					
Type		Class 2, 1mw/ 635 nm red			
Battery system					
Battery		Rechargeable lithium battery			
Battery operation time		≈ 2.5 hours continuous operation			
Power save mode		Yes			
Environment specification					
Operating temperature range		–20℃ to +50℃ (–4°F to +122°F)			
Storage temperature range		–40℃ to +70℃ (–40°F to +158°F)			
Humidity		10% to 95%,non-condensing			
Encapsulation		IP 54			
Shock		Operational: 25G			
Vibration		Operational: 2G			
Physical characteristic					
Weight (ex. battery)		600g			
Size (L*W*H)		215 mm × 80mm × 219mm			
Tripod mounting		1/4'' _ 20			
Interface					
USB		thermal video transfers in real time with software(optional);			
Video output		NTSC(60Hz) or PAL(50Hz) composite video			
Bluetooth		Voice recording and playback (optional)			
External power supply		8–11V 3A DC (optional)			

patented product, imitation forbidden

HY-G90

An EU-patented infrared camera designed for preventive and predictive maintenance

patented product, imitation forbidden

Laser pointer

Built-in CCD with 640x480 full color

Detachable illuminator
With the illuminator, HY-G90 can take clear visual images even in a dark environment.

Viewfinder

Status display provides clear information of battery level

Removable CF card, 1G

Video out

RS232
Headset for voice annotation

DC in

USB real time thermal video recording (optional)
HY-G90 can take thermal images and thermal video with the USB Real time software, thermal video can be transferred to a PC in real time for analysis and playback

Various optional lenses
Optional lenses with different FOV are available for the HY-G90, such as 2x telescope lens, wide angle lens. With such optional lenses, HY-G90 can provide the users with different thermal images at the same distance and position. HY-G90 can also adopt a closed-up lens for inspection of PCB boards.
All lenses are field replaceable.

3.5 inch detachable LCD with remote control
The flexible detachable LCD makes the work easier, with the remote control panel, all the cameras operations can be controlled by your thumb.

standard package

Model		HY-G90
Thermal Image and optical data		
FOV/ min. focus distance		24° x 18°/ 0.5m
Spatial resolution		1.1 mrad
Thermal sensitivity @ 50/60 Hz		80 mK @30℃
Detector type		FPA, uncooled microbolometer
Resolution		384 x 288
Spectral range		8 ~ 14μm
Focus		Auto/motorized
Digital zoom		1x to 8x
Image presentation		
LCD display		3.5'' LCD integrated with remote control
Viewfinder		Built-in, 640x480pixels, full color(TFT)
Visual image		Built-in digital video, 640x480pixels, full color
P.I.P		Yes, 4 display modes
Video output		NTSC(60Hz) or PAL(50Hz) composite video
Illuminator		Yes
Measurement		
Measurement range	Range one	−20℃ to +250℃, (−4°F to +482°F)
	Range two	+200℃ to +600℃ (+392°F to +1112°F)
		+200℃ to +1000℃ (+392°F to +1832°F) (optional)
	Range three	+800℃ to +1500℃ (+1472°F to +2732°F) (optional)
		+800℃ to +2000℃ (+1472°F to +3632°F) (optional)
Accuracy		± 2℃, ± 2% of reading
Measurement mode		Analysis up to 10 spots, auto tracking, areas analysis, isotherm analysis, line profile
Correction		Emissivity, ambient temperature, distance, relative humidity
Image storage		
Type		Removable CF card,1G
File formats – Thermal		SAT format, 14 bit measurement data included
File formats – Visual		CCD format
Thermal video recording		With real time software (optional)
Text annotation		Pre-defined text
Voice annotation		40sec with headset, saved with thermal image
Laser pointer		
Type		Class 2, 1mw/ 635 nm red
Battery system		
Battery		Rechargeable lithium battery
Battery operation time		≈ 2.5 hours continuous operation
Power save mode		Yes
Environment specification		
Operating temperature range		−20℃ to +50℃ (−4°F to +122°F)
Storage temperature range		−40℃ to +70℃ (−40°F to +158°F)
Humidity		10% to 95%,non-condensing
Encapsulation		IP 54
Shock		Operational: 25G
Vibration		Operational: 2G
Physical characteristic		
Weight (ex. battery)		1600g
Size (L*W*H)		327 mm × 143mm × 170mm
Tripod mounting		1/4'' _ 20
Interface		
USB		Thermal video transfers in real time with software (optional)
Video output		NTSC(60Hz) or PAL(50Hz) composite video
External power supply		8~11V 3A DC (optional)

HY – 6800

Standardization Administration of P.R.of China certified infrared camera for National Standard of Industrial inspecting thermal imager

- Precise temperature measurement;
- On–board 4 image trending;
- Aluminum housing; rugged design, IP54;
- Motorized focusing;
- Optional 3.5inch LCD;

Viewfinder

Keypad

RS232

Headset for voice annotation

Video out to an external 3.5 inch LCD

Precision Direct Temperature Measurement

Four movable cursors provide accurate non–contact temperature measurement from –40℃ to 2000℃.
Line profiling, area analysis, highest or lowest temperature tracking, higher or lower temperature alarms, and isothermal analysis add powerful utilities to the HY–6800 High Performance UFPA Infrared Camera.

On–Board Digital Image and Voice Recording

Improves the efficiency of users with fast image capture and voice recording. The HY–6800 is capable of storing 500 images with up to 16 seconds of embedded audio per image on convenient removable flash–memory cards.

Point & Shoot

Designed for ease of use, the HY–6800 offers one button auto–span and range which adjusts the image for optimum image definition and clarity.
Thermographers can clearly identify potential problem areas while viewing image through the built-in high-resolution TFT viewfinder, or through an optional 3.5'' TFT LCD panel. Single button freeze–frame and capture enables thermographers to preview the image prior to storage to prevent repeat inspections to capture additional images.
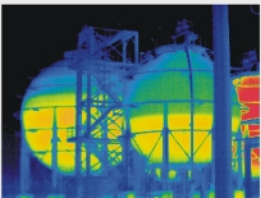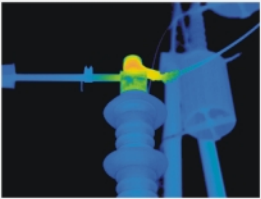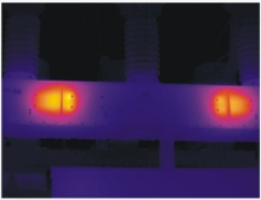
Rugged Construction

Housed in an all–aluminum sealed case, the HY–6800 IR camera is capable of withstanding the harshest of environments and meets IP54 standards.

USB Transmission (optional)

Connected to a computer through a USB interface, the HY–6800 can transmit all the captured images to a computer in real–time.

Removable CF card

Rechargeable lithium battery
2.5 hours continuous operation
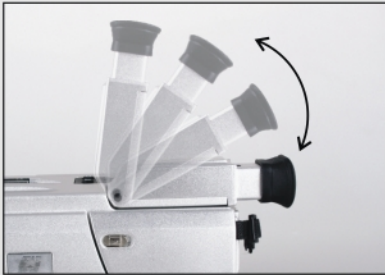
Built–in viewfinder, angle adjustable.

standard package

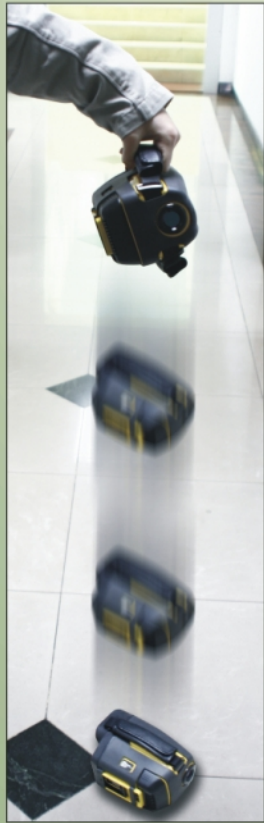| Model		HY-6800
Thermal Image and optical data		
FOV/ min. focus distance		24° × 18°/ 0.5m
Spatial resolution		1.1 mrad
Thermal sensitivity @ 50/60 Hz		80 mK@30℃
Detector type		FPA, uncooled microbolometer
Resolution		384 × 288
Spectral range		8 ~ 14μm
Focus		Motorized
Digital zoom		1x to 8x
Image presentation		
LCD display		3.5'' LCD (optional)
Viewfinder		Built–in, 640x480pixels, full color(TFT)
Video output		NTSC(60Hz) or PAL(50Hz) composite video
Measurement		
Measurement range	Range one	–20℃ to +250℃, (–4°F to +482°F)
	Range two	+200℃ to +600℃ (+392°F to +1112°F)
		+200℃ to +1000℃ (+392°F to +1832°F),(optional)
	Range three	+800℃ to +1500℃ (+1472°F to +2732°F) (optional)
		+800℃ to +2000℃ (+1472°F to +3632°F) (optional)
Accuracy		± 2℃, ± 2% of reading
Measurement mode		Analysis up to 4 spots, auto tracking, areas analysis, isotherm analysis, line profile
Correction		Emissivity, ambient temperature, distance, relative humidity
Image storage		
Type		Removable CF card
File formats – Thermal		SAT format, 14 bit measurement data included
Voice annotation		16sec with headset, saved with thermal image
Battery system		
Battery		Rechargeable lithium battery
Battery operation time		≈ 2.5 hours continuous operation
Power save mode		Yes
Environment specification		
Operating temperature range		–20℃ to +50℃ (–4°F to +122°F)
Storage temperature range		–40℃ to +70℃ (–40°F to +158°F)
Humidity		10% to 95%,non-condensing
Encapsulation		IP 54
Shock		Operational: 25G
Vibration		Operational: 2G
Physical characteristic		
Weight (ex. battery)		1700g
Size (L*W*H)		240mm × 136mm × 129mm
Tripod mounting		1/4'' _ 20
Interface		
Video output		NTSC(60Hz) or PAL(50Hz) composite video
External power supply		8~11V 3A DC (optional)

patented product, imitation forbidden

HRYXJ—A

The Ministry of Public Security of P.R.of China certified infrared camera for National Standard of Firefighting Infrared Camera

Model		HRYXJ–A
Image performance		
FOV/ min. focus distance		35° × 26° / 0.5m
Spatial resolution		3.8 mrad
Thermal sensitivity @ 50/60 Hz		100 mK @ 30℃
Detector type		FPA, uncooled microbolometer
Resolution		160 × 120
Spectral range		8 ~ 14 μ m
Image presentation		
Viewfinder		2.5'' High resolution viewfinder
Video output		NTSC(60Hz) or PAL(50Hz) composite video
Measurement		
Measurement range	Range one	−20℃ to +250℃, (−4° F to +482° F)
	Range two	+200℃ to +1000℃ (+392° F to +1832° F) (optional)
Accuracy		± 10℃
Measurement mode		Auto tracking / central spot
Battery system		
Battery		Rechargeable NiMH battery
Battery life		≈ 2.5 hours continuous operation
Battery charger		NiMh battery charger
Recharging time		2 hours
Environment characteristic		
Encapsulation		IP 67
Shock		Operational: 25G
Vibration		Operational: 2G
Water resistance		1.0m, 30 minutes
Drop		1.8m
Burnung arrestment		UL94–V0
Operating temperature	@ +80℃	30mins
	@ +120℃	10mins
	@ +260℃	5mins
Physical characteristic		
Weight (inc. battery)		1400g
Size (L*W*H)		175mm × 119mm × 125mm

Two resolutions

HRYXJ–A has two optional resolutions, 160x120 for HRYXJ–A(160) and 384x288 for HRYXJ–A(384). Both models provide the same functions, if the users demand is for higher imaging quality, HRYXJ–A(384) will be the best choice.

Built–in infrared lens

Built–in infrared lens ensures the requirement of IP67 encapsulation; it also provides better protection to the lens.
Wide angle design provides a wider field of view for the firefighters, making it more suitable for firefighting and rescue work.

Waterproof

Waterproofing is necessary in an infrared camera for firefighting. HRYXJ–A has passed the waterproof testing, it can maintain normal operations for 30 minutes under water of one meter deep.
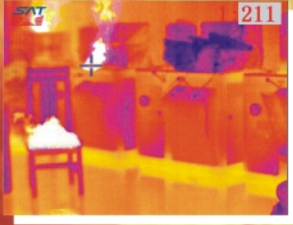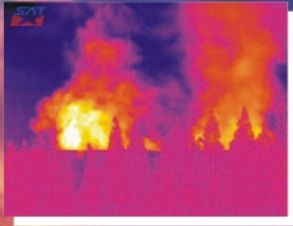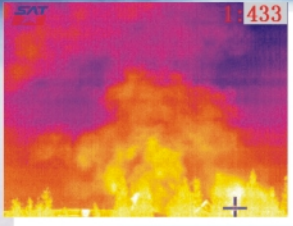
Drop test

HRYXJ–A passes the drop test, even it falls on the floor from 1.8 meter height, it still keeps its normal performance.

Temperature measurement

High temperature in a fire will threaten the lives of firefighters, the temperature measuring function of the HRYXJ–A can identify the places with high temperature, helping the firefighters to get away from a dangerous situation.
There is always risk of reignition even after the fire has been extinguished, firefighters can find places with high temperature with the HRYXJ–A, and take actions to prevent the reignition.
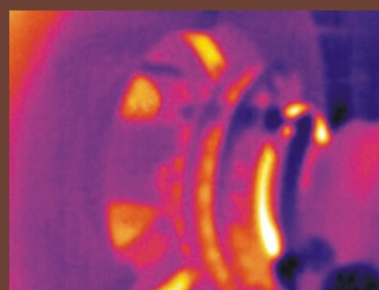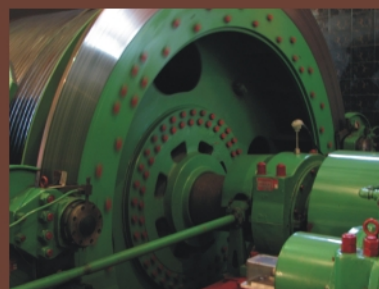
standard package

YRH250

State Administration of Coal Mine Safety certified infrared camera for coal mining application

YRH250 is an infrared camera specially designed for the coal mining industry. The housing of YRH250 is made by enhanced engineered plastic, which strengthens the ex−proof ability of the camera, but keeps it light weight. Internal PCBs have been through insulation processing, special ex−proof batteries are provided, making sure the YRH250 strictly complies with the requirements for coal mining applications.

- Ex proof certified by National work safety Chongqing mine apparatus testing center
- Certification with SAFETY CERTIFICATE OF APPROVAL FOR COAL MING PRODUCTS (No.20067030)
- Certified by DEKRA EXAM GmbH in Germany (for appointed German distributor only)
- Precise temperature measuring
- Robust design for extreme working condition, IP54 Encapsulation
- Easy to use

Various observation angle

Ex−proof battery

can be used with tripod

USB and video output

standard package

CE certificate

patented product, imitation forbidden

| Model	YRH250
Thermal Image and optical data	
FOV/ min. focus distance	38° × 28.5° / 0.1m
Spatial resolution	4.14mrad
Thermal sensitivity @ 50/60 Hz	100 mK@30° C
Detector type	FPA, uncooled microbolometer
Resolution	160 × 120
Spectral range	8 − 14 µ m
Focus	Manual
Image presentation	
LCD display	2.5'' LCD
Video output	NTSC(60Hz) or PAL(50Hz) composite video
Measurement	
Measurement range	−20° C to +250° C (−4° F to +482° F)
Accuracy	± 2° C, ± 2% of reading
Measurement mode	Analysis up to 4 spots, auto tracking, isotherm analysis
Correction	Emissivity, ambient temperature, distance, relative humidity
Image storage	
Type	Built−in CF card
File formats − Thermal	SAT format, 14 bit measurement data included
Laser pointer	
Type	Class 2, 1mw/635 nm red
Battery system	
Battery	Rechargeable lithium battery
Battery operation time	≥2.5 hours continuous operation
Battery charger	Yes (cannot be used under mining field)
Power save mode	Yes
Environment specification	
Operating temperature range	−20° C to +50° C (−4° F to +122° F)
Storage temperature range	−40° C to +70° C (−40° F to +158° F)
Humidity	10% to 95%, non−condensing
Encapsulation	IP 54
Shock	Operational: 25G
Vibration	Operational: 2G
Physical characteristic	
Weight (ex. battery)	600g
Size (L*W*H)	211 mm × 80mm × 195mm
Tripod mounting	1/4''_ 20
Interface	
USB	Download thermal images
Video output	NTSC(60Hz) or PAL(50Hz) composite video
External power supply	8−11V 3A DC (optional, cannot be used under mining field)
Others	
Ex−proof form	Mine safe
Ex−proof marking	IBL
Security authentication	Mine safety certificate (no.20067030)
Certificate	Ex−proof Electronic equipment AC certificate (No. 32006212)

NV628

Built–in night vision safety enhancement system

Surveys show that the distance or time spent driving during the night takes up only 28% of total driving; however, the death rate caused by accidents occurring during night driving takes up 55% of the whole death rate.

With concerns for the safety of lives, SATIR has lately launched a new night vision system for night driving, which greatly enhances the safety of night driving, establishing another milestone for night driving safety technology.

By simply turning on the power, the night vision system will start up. With the LCD display, drivers can see obstacles 300 meters away, so the driver can recognize the road, pedestrians, motorcyclists, and other obstacles etc. This night vision system can also reduce the stress brought about by exhausting night time driving, enabling the driver to keep alert and take proper actions to respond to emergencies.
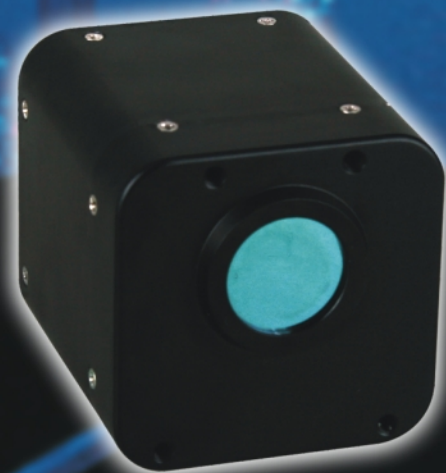
- High resolution, high imaging quality
- Powered by Cigarette lighter power
- Wide angle lens for better field of view
- Compact design, 400g only

Observation distance	800m (for vehicle)
FOV/focusing distance	28°x 21°/ 3m
MRTD	1.27 mrad
Detector	UFPA, microbolometer
Resolution	384 x 288
Wavelength	8–14um
LCD display	7" TFT LCD Display (optional)
Video output	PAL(50Hz) / NTSC (60Hz)
Power supply	12V 3A, cigarette lighter connector
Encapsulation	IP65/69
Shock	25G
Vibration	2G
Weight	400g
Size (camera body) (L*W*H)	80 mm x 57.5mm x 57.5mm

Detection distance in actual situation may vary, depending on the environmental situation; SATIR will not be responsible or liable for any problem or accidence caused by the use of the night vision system or the errors in the judgments to the thermal images.

3333 FRL

NV618

Detachable night vision safety enhancement system

- High resolution, high imaging quality
- Portable design, can be mounted on different automobiles
- Easy to install or remove
- Powered by Cigarette lighter power
- Wide angle lens for better field of view
- Compact design

Observation distance	800m (for vehicle)
FOV/focusing distance	28°x 21°/ 3m
MRTD	1.27 mrad
Detector	UFPA, microbolometer
Resolution	384 x 288
Wavelength	8–14um
LCD display	7" TFT LCD Display (optional)
Video output	PAL(50Hz) / NTSC (60Hz)
Power supply	12V 3A, cigarette lighter connector
Encapsulation	IP65/69
Shock	25G
Vibration	2G
Weight	850g
Size (camera body) (L*W*H)	140 mm x 110mm x 110mm

Far Infrared Night Vision Enhance System (NV618/NV628)

effective distance of light: 100 meters

detection distance of NV618/NV628: 300meters

detection distance of NV618/NV628: 800meters

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JK150/350/650

JK series can work with surveillance network and provides effective and reliable surveillance result.
SATIR can customize the infrared camera for various customers' application.
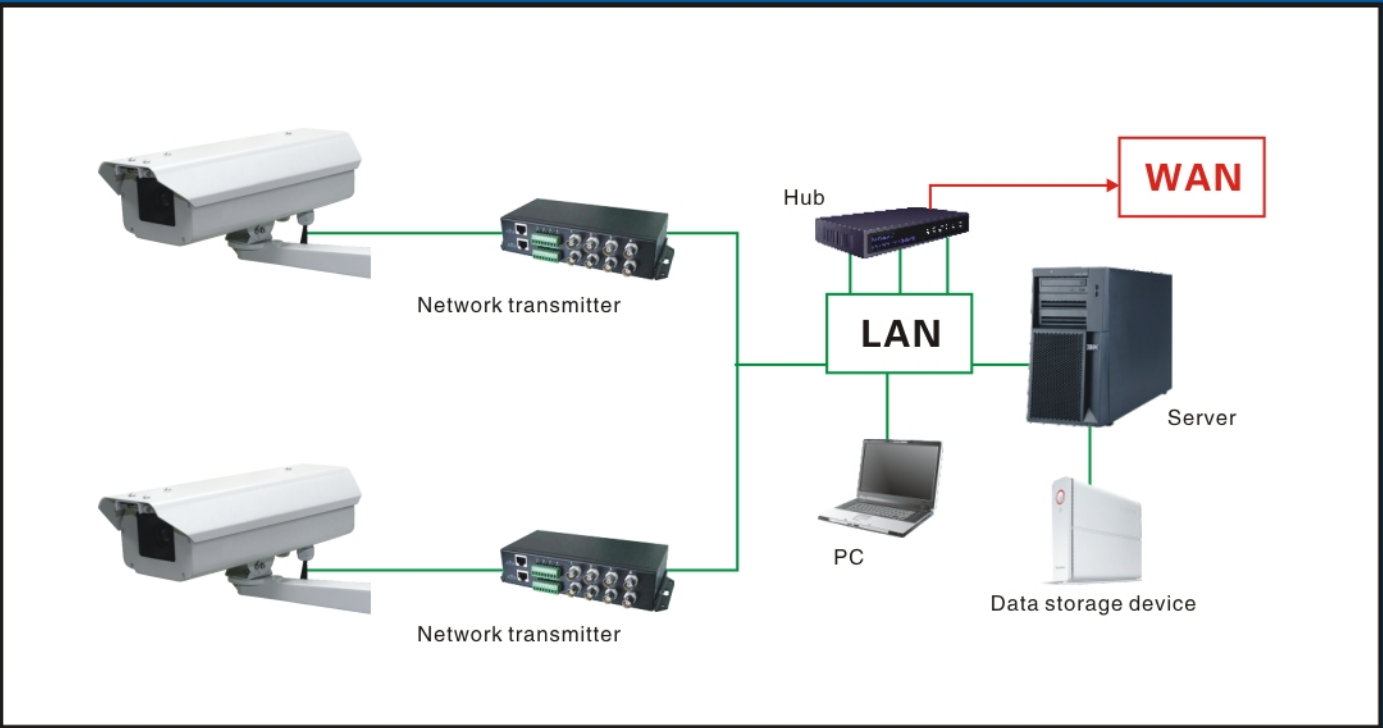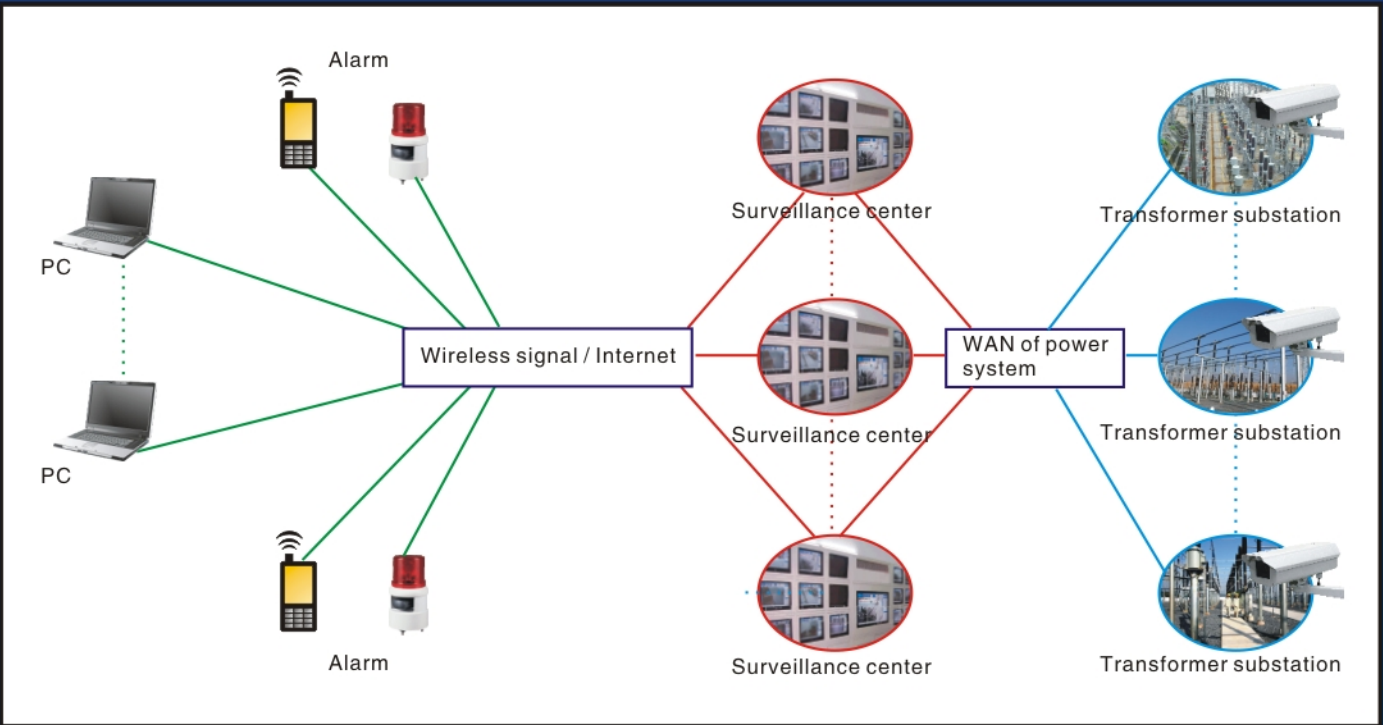
SATIR JK series of infrared cameras applies infrared technology to surveillance, even in a completely dark environment, the JK series infrared cameras can still provide clear thermal images, no light is needed at all.

- Advanced infrared technology for surveillance, no visual light needed
- Wide angle lens provides extremely wide FOV.
- Robust and enhanced optic design, IP66 encapsulation
- Built-in automatic heating system ensures performance under cold conditions;
- Anti sun-radiation protection system protects the core unit
- Simple installation, easy operation
- Customized service to meet the different needs of customers
- Fitted with pan tilt control system

Model	JK150	JK350	JK650
FOV	52° × 39°		
Detector type	Focal Plane Array (FPA), uncooled microbolometer		
Resolution	160X120	384 × 288	640x480
Spectral resolution	5.67mrad	2.36mrad	TBA
Spectral range	8 ~ 14 μm		
Video output	NTSC (60Hz) or PAL (50Hz)		
Power supply	24V AC		
Consumption (normal/peak)	5W/ (heating) 28W	5W/ (heating) 28W	TBA
Working temperature	−35℃ to +50℃		
Storage temperature	−40℃ to +70℃		
Humidity	10% to 95%, non−condensing		
Encapsulation	IP66		
Size	375mm X 136mm X 107mm		
Weight	About 1930g		

Alarm
PC
PC
Wireless signal / Internet
Surveillance center
Surveillance center
Surveillance center
WAN of power system
Transformer substation
Transformer substation
Transformer substation
Alarm

Hub
WAN
Network transmitter
LAN
Server
PC
Data storage device
Network transmitter

Please contact our customer service for more information.

Infrared camera for human body temperature detection

Instant identification

Applying infrared imaging technology, SATIR body temperature scanner can instantly identify people with abnormal body temperature. It can be used widely in crowded public areas such as airports, docks, stations, shopping malls, hospitals, schools etc.

Non-contact measurement

No need for direct contact, operators can be well protected, avoiding infection.

Easy to use

Temperature reading can be shown directly, no need for people to be stopped for inspection.

Temperature alarm

Fully automatic with maximum temperature tracking, alarm will be triggered when temperature is over the preset temperature point.

Precise measurement

Temperature fluctuation of less than 0.5℃ for 12 hours continuous operation.

High performance/ cost ratio

Unlike others, SATIR infrared imaging body temperature scanner provides high performance but with low cost. There is no need for installation, it is portable, and can be located in various locations.

Quick diagnose, precise identification to human with fever

Infrared camera for human body temperature detection with the best performance/cost ratio

MC601

- High performance with low price;
- Portable, easy to use;

MC602

- High performance with low price;
- Portable, easy to use;
- Duo vision is provided for easy comparison;

MC603

- High resolution: 384x288;
- Duo vision is provided for easy comparison;
- Portable, easy to use;

MC602C

- High resolution thermal imaging quality;
- Comparison between thermal and visual image, quick diagnose;
- Thermal video taken in real time with online software, suitable for crowded public areas;
- Easy installation;