



PixFraTM

**Thermal
Cameras
Brochure.**

Innovation for industries.

Madison Express specialises in the distribution of quality cable, connectivity and a range of Madison Group products.

We bring together detailed knowledge of local network practices and innovative products from global technology partners in a range of leading cabling and connectivity product lines.

Our experience supporting viable connectivity solutions across key market sectors is underpinned by over 30 years of insights and customer understanding.



People.

Our team is dedicated to finding the best possible solution for every project.

Our dedicated sales representatives offer convenient, friendly service, bespoke solutions and fast turnaround times on quality connectivity and associated technology products. The support of our customers and suppliers over the years, has allowed us to truly understand our partners' needs and provide professional and friendly service with all aspects of pre and post-sales support.

Distribution.

Connecting you to
world-leading brands.

We efficiently connect customers with leading, state of the art, bespoke solutions and quality products through our extensive sales, warehouse and distribution networks across Australia.

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Contact Us.

View more of our extensive range:
www.madisonexpress.com.au

About Pixfra.

Zhejiang Pixfra Technology Co., Ltd. is an innovation business subsidiary of Dahua Co., Ltd.

Pixfra are a specialist developer and manufacturer of a wide range of thermal cameras, built to suit many different industries worldwide. Madison Express is a distributor of Pixfra, and a range of products specifically developed for the Electrical, Electronic, Mining, HVAC and associated industries.

Pixfra products and solutions are widely used in various electrical and industrial situations. They can include temperature measurement, biological temperature measurement, natural ecology, new energy, carbon neutrality, perimeter prevention, outdoor sports, consumer electronics and many other fields. They can also be used to identify overheating in electrical circuits caused by poor termination, where regular inspections of thermal imaging is a requirement for some insurance companies.

Committed to developing leading thermal imaging products and solutions to serve customers around the world, Pixfra thermal camera range has a product at every specification level.



A unified connection.

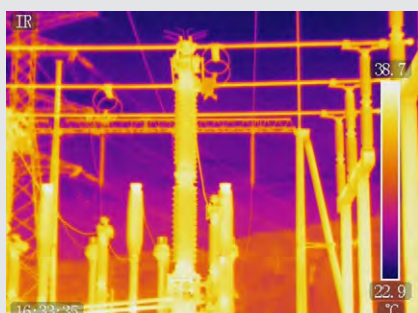
As Pixfra's Australian distributor, Madison Express supplies a range of stock from our warehouses in Brisbane, Sydney, Melbourne and Perth to ensure we can deliver product to you when you need it.

Thermal Imaging Cameras.

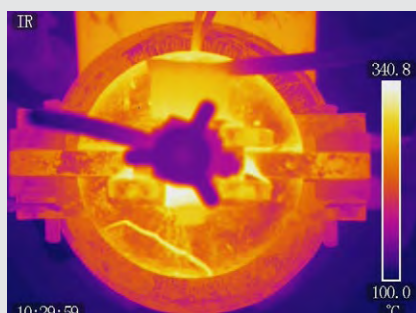
The Pixfra range of thermal cameras start with the HI20 product which is an entry level camera that is easy to keep in the tool bag. The HI20 is an easy-to-use product that assists in fault finding and checking any repairs made on the job.

The range goes all the way up to the HA68 product, which is a high end professional thermal camera. It has interchangeable lenses, manual or auto focus, and a touch screen 4.3" LCD display. It also supports multiple video modes and downloading to smartphone or PC for secondary image analysis and reporting.

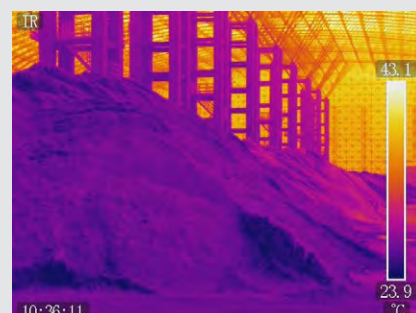
Applications of Thermal Cameras



Electrical Equipment inspection



Equipment Production



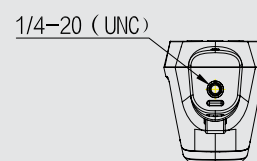
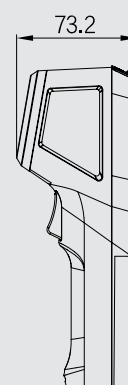
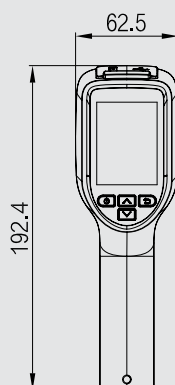
Coal mine inspection

Transmission lines, substations, power distribution rooms, chemical plants, metallurgical plants, automobile maintenance, house heating and ventilation, electrician inspections, etc.

PFI-HI20.

Features

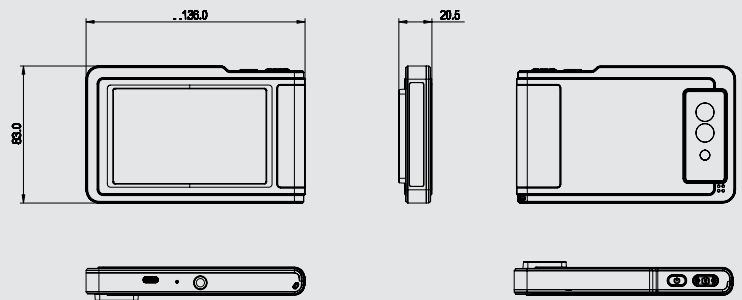
- Vanadium oxide uncooled focal plane detector.
- Ultra-low power consumption:
Less than 1 W = Continuous use for more than 9 hours on a single charge.
- Temperature measurement range of -20°C to $+550^{\circ}\text{C}$, ($\pm 2^{\circ}\text{C}$, $\pm 2\%$).
- Temp. measurement of hot/cold spot, central spot, 3 custom spots, 1 line & 1 area.
- SD card for storage.
- Laser pointer.
- Buzzer for alarm of temperature abnormality.
- Specific computer client for online monitoring of images.
- Supports 5 VDC power supply or built-in lithium battery.
- IP54 rated.



PFI-HC28-TB3F4.

Features

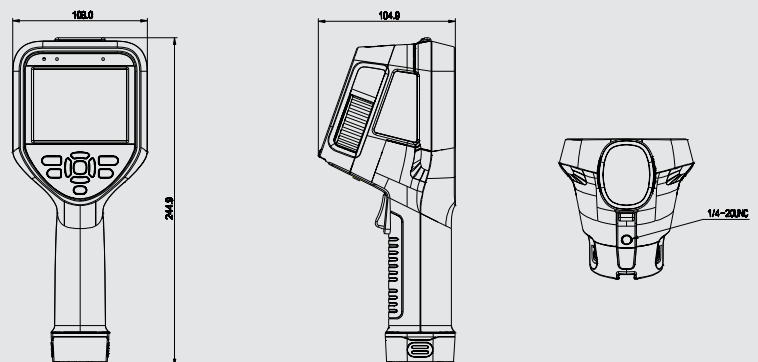
- Vanadium oxide uncooled focal plane detector.
- 8 Megapixel progressive scan CMOS, and supports multiple video modes such as fusion and PIP.
- Temperature measurement range of -20°C to $+550^{\circ}\text{C}$.
- 4.3-inch LCD display for touch screen operation.
- Supports spot, line and area temperature measurement:
An alarm is triggered when temp. reading exceeds configured threshold.
- Text note and voice note for marking locale information.
- Replaceable battery lasts up to 7 hours.
- Secondary image analysis through external reporting software.



PFI-HS45.

Features

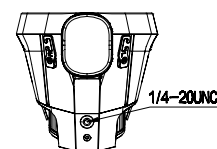
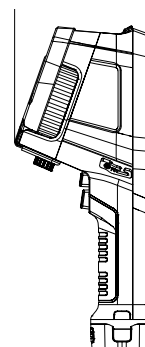
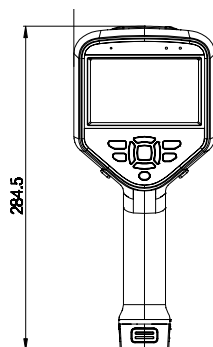
- Vanadium oxide uncooled, focal plane array detector.
- 5 Megapixel progressive scan CMOS, supports multiple video modes such as fusion and PIP.
- Temperature measurement range of -20°C to $+550^{\circ}\text{C}$.
- 3.5-inch LCD display with touch screen operation.
- Supports spot, line and area temperature measurements.
Alarm is triggered when the temperature exceeds the configured threshold.
- Text and voice note functions for marking local information.
- 2 Replaceable batteries, each lasting up to 5.5 hours on a single charge.
- Secondary analysis on free PC based software, with exportable reports.



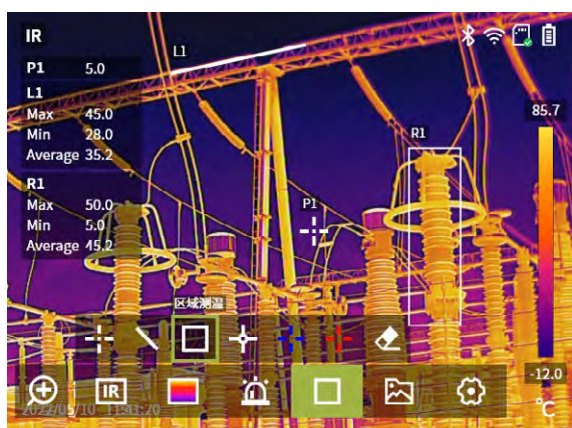
PFI-HA68.

Features

- Vanadium oxide, uncooled focal plane detector.
- 8 Megapixel progressive scan CMOS, supports multiple video modes such as fusion and PIP.
- Temperature measurement range of -20°C to $+650^{\circ}\text{C}$.
- 4.3-inch LCD display with touch screen.
- Supports spot, line and area temperature measurements. Alarm is triggered when the temperature exceeds the configured threshold.
- Text and voice note functions for marking local information.
- Rechargeable and removable battery, lasts up to 6.5 hours on a single charge.
- Secondary image analysis through external reporting software.



Smart Measurement Functions.



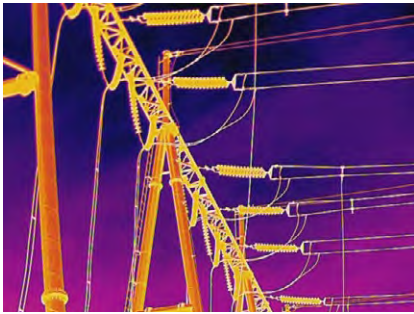
Features

- Temperature Measurement Range: -20°C ~ 650°C
- Temperature Measure Accuracy: $\text{MAX}(\pm 2^{\circ}\text{C}, \pm 2\%)$
- Temperature Measurement rules: Center spot, Hot spot, Cold spot, Use r Preset Point/Line/Area
- Support individual or global temperature measurement parameters configuration like distance and emissivity
- Support 8 color palettes
- Support thermal, optical, fusion, PIP image modes

Works with Professional PC Client

- Real-time display in PC client
- Support picture management heat map analysis generate reports for the later data analysis

Display Modes.



IR Mode



Visible Mode



Fusion Mode



Picture-In-Picture Mode

Thermal Photo



Actual Photo



Technical Specifications.

Model	HI20	HC28-TB3F4	HS45	HA68
Thermal				
Detector Type	Vanadium oxide uncooled focal plane detector	Vanadium oxide uncooled focal plane detector	Vanadium oxide, uncooled, focal plane array detector	Vanadium oxide uncooled focal plane detector
Effective Pixels	256 (H) × 192 (V)	256 (H) × 192 (V)	400 (H) × 300 (V)	640 (H) × 512 (V)
Pixel Pitch	12 μm	12 μm	12 μm	12 μm
Spectral Range	8 μm–14 μm	8 μm–14 μm	8 μm–14 μm	8 μm–14 μm
Sensitivity (NETD)	≤40 mK@f/1.0	≤40 mK@f/1.0	≤40 mK@f/1.0	≤40 mK@f/1.0
Focal Length	3.5 mm	3.5 mm	7 mm; 10 mm	17 mm; 8.5mm*; 34mm*; 50mm*
Field of View	H: 37.8°; V: 50.6°	H: 55.6°; V: 42°	7 mm: H: 35.5°; V: 27.0°	17mm: H: 25.4°; V: 20.5°
				8.5mm*: H: 52°; V: 42°
			10 mm: H: 27.0°; V: 20.4°	34mm*: H: 13°; V: 10°
				50mm*: H: 9°; V: 7°
Focus Control	Fixed-focal		Manual	Manual/Auto
Close Focus Distance	0.5 m (1.64 ft)	0.5 m with 1–8x digital zoom	0.5 m with 1–8x digital zoom	0.5 m with 1–8x digital zoom & optional lens 0.5x; 2x; 3x zoom
Color Palettes	4 (white hot/black hot/rainbow/iron red)	8 (white hot/black hot/fusion/rainbow/golden autumn/midday/iron red/amber)	8 (white hot/black hot/fusion/rainbow/golden autumn/midday/iron red/amber)	8 (white hot/black hot/fusion/rainbow/golden autumn/midday/iron red/amber)
Temperature Measurement Range		Low temperature mode: –20°C to +150°C	Low temperature mode: –20°C to +150°C	Low temperature mode: –20°C to +150°C
		High temperature mode: +100°C to +550 °C Auto mode	High temperature mode: +100°C to +550°C Auto mode	High temperature mode: +100°C to +650 °C Auto mode
Temperature Measurement Mode		Spot: 4 Line: 4 Area: 4 Supports 12 rules simultaneously	Spot: 10 Line: 10 Area: 10 Supports 10 rules simultaneously	Spot: 10 Line: 10 Area: 10 Supports 10 rules simultaneously

*Optional lens (0.5x lens with 8.5mm FoV. 2x lens with 34mm FoV. 3x lens with 50mm FoV)

Technical Specifications.

Model	HI20	HC28-TB3F4	HS45	HA68
Visible				
Max. Resolution		3264 (H) × 2448 (V)	2592 (H) × 1944 (V)	3264 (H) × 2448 (V)
Pixel		8 MP	5 MP	4K
Digital Zoom		Yes. 1-8x	Yes. 1-8x	Yes. 1-8x
Visible Focus Control		Fixed-focal	Fixed focus	Fixed-focal
Focal Length		4 mm	4 mm	3 mm
Field of View		H: 64.9°; V: 51°	H: 84.1°; V: 45.4°	H: 84.1°; V: 45.4°
Flashlight On/Off Control		Auto/Manual	Manual	Auto/Manual
Audio and Video				
Video Compression	H.265	H.265	H.264	H.264
Resolution	640 (H) × 480 (V)	Thermal: 1280 (H) × 960 (H) Visible: 1280 (H) × 960 (H)	Thermal: 1280 × 960 Visible: 1920 × 1080	Thermal: 1280 × 1024 Visible: 1920 × 1080
Video Frame Rate	25 fps	25 fps	25 fps	25 fps
Image Encoding Format	JPEG			
Screen				
Screen Size		4.3 inch	3.5 inch	4.3 inch
Screen Type		LCD touch screen	LCD touch screen	LCD touch screen
Resolution		800 (H) × 480 (H)	640 × 480	640 × 480
Screen Brightness			Low; middle; high	Low; middle; high
Function				
Image Modes		Thermal/Visible/ Fusion/PIP/MFI	Thermal/Visible/ Fusion/PIP	Thermal/Visible/ Fusion/PIP
Buzzer		Yes	Yes	Yes
Parameter Calibration		Temperature; humidity; radiance	Temperature; humidity; emissivity	Temperature; humidity; radiance
Text Notes		Yes (≤200 words)	Yes (≤200 words)	Yes (≤200 words)
Voice Notes		Yes (≤60 s)	Yes (≤60 s)	Yes (≤60 s)
Software		Yes	Yes	Yes
Port				
Analog Output				1; BNC port
Audio Input			Built-in Mic	Built-in Mic
Wi-Fi		Yes	Yes	Yes
USB		Type-C	Type-C	Type-C

Technical Specifications.

Model	HI20	HC28-TB3F4	HS45	HA68
Power				
Power Supply	5 VDC	Built-in lithium batteries	Built-in lithium batteries	Built-in lithium batteries
Battery Capacity		3,600 mAh	6,000 mAh	10,000 mAh
Battery Type		Rechargeable	Rechargeable	Rechargeable
Power Consumption	<1 W	≤2.1 W	≤4 W	≤4 W
Operating Time		≥4 h	≥5.5 h	≥6.5 h
Charging Time		≤2 h	≤3 h (desktop charging)	≤4 h (desktop charging)
Environment				
Operating Temperature	-20°C to +50°C	-20°C to +50°C	-20 °C to +50 °C	-20°C to +50°C
Operating Humidity	≤95%	≤95%	≤95%	≤95%
Storage Temperature	-20°C to +60°C	-20°C to +60°C	-20 °C to +60 °C	-20°C to +60°C
Physical Characteristics				
Protection	IP54	IP54	IP54	IP54
Anti-corrosion Level		Basic Protection	Basic Protection	Basic Protection
Drop Test Height		1 m	2 m	2 m
Structure				
Product Dimensions	192.4 × 62.55 × 73.2 mm (L × W × H)	136 × 83 × 20.5 mm (L × W × H)	244.9 × 103 × 104.9 mm (L × W × H)	284.5 × 127 × 125 mm (L × W × H)
Packaging Dimensions	239 × 147 × 109 mm (L × W × H)	179 × 142 × 69 mm (L × W × H)	430 × 295 × 145 mm (L × W × H)	430 × 295 × 145 mm (L × W × H)
Net Weight	≤350 g	≤245	≤0.65 kg	≤1.1 kg
Gross Weight	≤ 1 kg	≤600 g	≤4 kg	≤4.5 kg
Lens		Included		Included
Accessory		Type-C cable; wristband		Battery; desktop charger power adaptor; desktop charger; USB type-C cable; sun visor; wrist strap; Micro SD (64 G); BNC cable
Bracket		Tripod (optional)		Tripod (optional)



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