

IVI 640 ULTRA

Built For The Experts

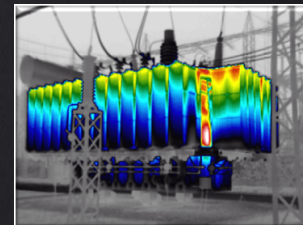
High Performance
 Thermal Camera



Introduce

The IVI ULTRA Series high-performance thermal camera is designed to make the inspection, maintenance and troubleshooting work easier, faster and more accurate. It adopts a new generation of uncooled IR focal-plane detectors, which provides sharper thermal images and higher measurement accuracy. With its rotatable lens and screen structure, up to 13 million pixels visible light camera module, high precision rangefinder, and supplemented by some professional functions such as AI recognition naming.

Also, intelligent area measurement, flexible emissivity settings by areas, super-resolution reconstruction, strive to meet the needs of every thermography expert.

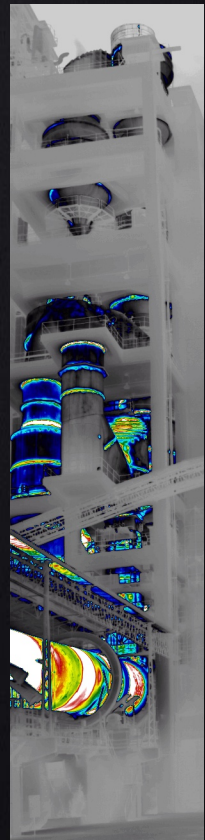


Application

- Electric Utilities Inspections
- Oil and Gas Maintenance
- Building Inspections
- Research and Development

Features and Benefits

- IVI640 ULTRA series come equipped with our Thermo Tools Professional Software for the generation of IR Reports
- With a new generation of focus motor and professional laser rangefinder, 1-touch auto-focus in 0.4 second
- Upgraded visible light camera, flagship model up to 13 million pixels, supports infrared and visual imaging dual-channel video recording
- Support AI voice recognition, text photo recognition and typing, convenient for customizing the image name
- Optional lenses are available such as macro/wide-angle/Medium telephoto lens/ telephoto lens, support automatic calibration, easy to replace
- Support cloud services, upload local images to the cloud at any time, for remote analysis and problem feedback
- -40°C ~ 2000°C ultra-wide temperature range, support automatic switching, suitable for more application scenarios



Specifications

Model	IVI640 ULTRA	
IR Imaging Performance		
Detector type	640×480@17μm, VOx	
Spectral	7.5~14μm	
Frame rate	30Hz / 9Hz Digital -50HZ / 60HZ Analog	
NETD	30mk	
Lenses Options (* Focal length/ FOV / IFOV / Min focus distance # FOV / IFOV / Working distance @ FOV)		
Standard Lens*	25mm/ 24°×18° / 0.66mrad/ 0.3m	
Wide Angle*	13mm/45.4°×34.8°/1.31mrad/0.15m	
Telephoto*	55mm/11.3°×8.5°/0.31mrad/2m	
Ultra Telephoto*	85mm/7.3°×5.5°/0.2mrad/4m	
Macro Lens#	67mm/23.3mm*17.5mm/37.5μm	
High Temp®	24.6°*18.5°	
Focus	1-touch fast autofocus, support electric/manual focus switch	
Lens Identification	Automatically identify and calibrate the lens without manual switching	
Image Presentation		
Visual Image	13 million pixels, autofocus	
LCD Display	5",1280×720 High Light Touch Screen	
Viewfinder	1280×960 LCOS Screen	
Image Mode	IR image/Visual image/PIP/MIF / MSX type	
Digital Zoom	1×~35× continuously	
Color Palettes	12 Color Palettes, and customizable	
Super-resolution	4× Super-resolution, 1280 x 960	
Functions		
AI Voice Naming	Support AI voice naming, AI text recognition naming (text can be recognized by taking pictures), and typing	
Professional Laser Auto Focus Rangefinder	The distance between the thermal camera and target is automatically measured and displayed on the thermal image	
Temperature Measurement for Areas	Automatically measure the area of the boxes and circles	
Smart Stroke	Automatically outline the target contour by setting the area and tolerance (color difference between two pixels)	
Measurement Corrections	Support emissivity correction, atmospheric transmittance correction and optical transmittance correction	
Level Span	Automatic, semi-automatic, manual	
Panorama Image Mosaic	YES	
Cloud Service	Support local and cloud data upload and download	
Measurement		
Temp Measurement Range	Support auto-switching, Filter 1:-40°C~150°C; 2:100°C~800°C; Optional 700°C~2000°C(High temperature lens required)	
Accuracy	±1°C~±1%, whichever is greater	
Temp Measurement Area (IR/PIP)	spot ×16, line ×16, area × 16	
Analysis Storage	The analysis object can be saved with the image (spots, lines, areas)	
Auto Max & Min Temp Tracking (IR / PIP)	It can track the highest temperature/lowest temperature/average temperature of the whole screen and the analysis object at the same time	
Isotherm	Up and down, centered interval	
Temperature Alarm	Automatic alarm (image and sound) when exceeding the alarm temperature threshold, and supports the area alarm function	
Storage		
Image Format	Built-in 64G, external SD card supports up to 64G	
Image Internal Storage	Picture format JPG (with temperature information)	
Video Format	MP4 (without temperature information) or IRGD (with temperature information)	
Dual-path Recording	Support simultaneous recording of visible light and infrared video (with temperature data), support manual storage/timing storage	
Other		
Hardware	Flashlight, laser (laser indication, ranging, focus), WIFI, microphone (adjustable volume), speaker (adjustable volume), electronic compass, GPS, light sensor, Bluetooth	
Interface	TYPE-C (used to transmit native image data with PC), power supply (12V), SD card, Gigabit Ethernet, Micro HDMI, tripod interface	
Battery	Rechargeable lithium battery (according to UN38.3 certification); can work for 4 hours (comprehensive working time); with sleep mode	
Working Temperature	Working temperature: -20°C~50°C Storage temperature: -40°C~70°C	
Encapsulation	IP54	
Size/Weight	206mm×145mm×135mm, 1350g	
Certificates	CE, FCC, ROHS, KC, UN38.3, certification of Academy of Metrology, certification of Electric Power Research Institute	
Standard Accessories	Thermal Camera, Lens Cover, 2 Lithium Batteries, Power Adapter, Adapter Plug (5), TYPE-C to USB cable, Micro HDMI to HDMI cable, Network Cable, Quick Start Guide, User Manual, Data Download Card, SD Card (64GB), Shoulder Strap, Safety box, Calibration Certificate	
Optional Accessories	Lithium Battery, Carrying bag, Cradle Charger, Bluetooth Headset, Extended Lens, Lens Bag	