

Long-Wave Infrared Thermal Imager

Model number: RB640IR

Product Features

- 640×480 Pixel Uncooled Vanadium Oxide Detector
- Temperature Measurement Range: -20°C~600°C
Temperature Accuracy: $\pm 2^{\circ}\text{C}$ or $\pm 2\%$ (of the reading), taking the larger value
- Accurate Temperature Measurement: 10 points, 10 areas, and 3 lines of temperature measurement (tracking highest and lowest temperatures); supports irregular temperature measurement box drawing
- Supports Modbus TCP industrial protocol for outputting temperature data
- Rich development interface for easy system integration



Overall System Parameters

Model		RB640IR
Detector Performance	Detector Type	Uncooled Vanadium Oxide Detector
	Pixel	640×480
	Pixel Pitch	17μm
	Thermal Sensitivity	$\leq 0.06^{\circ}\text{C}@F1, 300\text{K}$
	Wavelength Range	8-14um
Lens	Uncooled Lens	13mm、25mm
	Focusing Method	Uncooled Lens with Fixed Focal Length
Temperature Measurement Performance	Temperature Measurement Range	First Range: -20°C to 180°C Second Range: 100°C to 600°C
	Temperature Accuracy	$\pm 2^{\circ}\text{C}$ or $\pm 2\%$ (of the reading), taking the larger value
	Temperature Measurement Mode	Real-time measurement of 10 movable points, 10 movable areas, and 3 lines (capture of maximum temperature, minimum temperature, and average temperature measurement), with support for irregular box drawing
	Emissivity Calibration	Emissivity adjustable from 0.01 to 1.0
	Temperature Unit	Celsius, Fahrenheit
	Temperature Correction	Distance Temperature Correction, Linear Temperature Correction
	Germanium Plate Correction	Correction based on the germanium plate transmissivity and ambient temperature
	Raw Image Output	25Hz
Alarm Function	Alarm	Multiple alarm methods, including high-temperature alarm, low-temperature alarm, and inter-zone temperature difference alarm
	Alarm	1 alarm output, 1 alarm input

	Input/Output	
Operation Function	Image Adjustment	Brightness, Gain, DDE, Filtering
	Electronic Zoom	1-16x continuous electronic zoom
	Calibration Function	Manual calibration, automatic calibration upon startup; scheduled calibration after normal operation
	Flip/Mirror	Support
	Image Display	10 pseudo-color palettes
	PTZ Control	support
	Storage Function	Built-in storage, supports 12GB
	Scheduled Recording	support
	Character Display	Time, Date, Channel Name, and Custom Channel Name
Network	Ethernet	RJ-45
	Video Compression Format	H.264
	Protocol	TCP/IP,,RTSP, NTP, HTTP, HTTPS, DHCP, FTP,
	Security	HTTPS (SSL) Login Authentication, Categorized Login Authentication, IP Address Filtering, User Access Logs, 802.1X Authentication Method
	Image Access Protocol	ONVIF 、GB28181、 RTSP
	Temperature Output	SDK Output, MODBUS RTU/TCP Protocol Output
Power System	Power	DC12V
	Power Consumption	≤4W (Normal Operation)
Interface	Power Interface	support
	Network Interface	RJ45
	Serial Port	RS485
Environmental Parameters	Operating Temperature	-20°C~ +60°C
	Storage Temperature	-40°C~ +70°C
Physical Characteristics	Weight	< 200g

On-Site Image and Rendering

