

	138S	136S	135S	133S
Thermal Imaging Parameters				
Infrared Resolution	640*480	384*288	320*240	160*120
Detector Type	Uncooled infrared focal plane detector	Uncooled infrared focal plane detector	Uncooled infrared focal plane detector	Uncooled infrared focal plane detector
Thermal Sensitivity (NETD)	<30mk@30°C(86°F)	<50mk@30°C(86°F)	<50mk@30°C(86°F)	<60mk@30°C(86°F)
Detector Pitch	17μm	17μm	17μm	17μm
Spectral Range	8~14μm	8~14μm	8~14μm	8~14μm
FOV	Refer to 'Lens Specs'	Refer to 'Lens Specs'	Refer to 'Lens Specs'	Refer to 'Lens Specs'
Spatial Resolution(IFOV)	Refer to 'Lens Specs'	Refer to 'Lens Specs'	Refer to 'Lens Specs'	Refer to 'Lens Specs'
Minimum Imaging Distance	Refer to 'Lens Specs'	Refer to 'Lens Specs'	Refer to 'Lens Specs'	Refer to 'Lens Specs'
Focal Length	Refer to 'Lens Specs'	Refer to 'Lens Specs'	Refer to 'Lens Specs'	Refer to 'Lens Specs'
Focus Type	Focus free	Focus free	Focus free	Focus free
Temperature Analysis				
Complete Temperature Range	-20~650°C(-4~1022°F)	-20~650°C(-4~1022°F)	-20~350°C(-4~662°F)	-20~350°C(-4~662°F)
Temperature Range	-20~120°C(-4~248°F), 0~650°C(32~1022°F).	-20~120°C(-4~248°F), 0~650°C(32~1022°F).	-20~120°C(-4~248°F), 0~350°C(32~662°F)	-20~120°C(-4~248°F), 0~350°C(32~662°F)
Accuracy	±2°C or ±2%, whichever is greater	±2°C or ±2%, whichever is greater	±2°C or ±2%, whichever is greater	±2°C or ±2%, whichever is greater
Measurement Parameters	Emissivity; Ambient temperature; Reflected temperature; Relative humidity; Distance; External optics compensation	Emissivity; Ambient temperature; Reflected temperature; Relative humidity; Distance; External optics compensation	Emissivity; Ambient temperature; Reflected temperature; Relative humidity; Distance; External optics compensation	Emissivity; Ambient temperature; Reflected temperature; Relative humidity; Distance; External optics compensation
ROI Emissivity	Support	Support	Support	Support
Image Display				
Palettes	9 standard palettes and 9 inverted palettes	9 standard palettes and 9 inverted palettes	9 standard palettes and 9 inverted palettes	9 standard palettes and 9 inverted palettes
Image Processing	Non-uniform calibration, digital enhancement	Non-uniform calibration, digital enhancement	Non-uniform calibration, digital enhancement	Non-uniform calibration, digital enhancement
Image Mirroring	Left-right, up-down, centrosymmetric	Left-right, up-down, centrosymmetric	Left-right, up-down, centrosymmetric	Left-right, up-down, centrosymmetric
Video Stream Compression Standard	H.264	H.264	H.264	H.264
Radiometric Stream	Mainstream: resolution: 640*480, frequency: 30Hz, band width: 2.5Mb Substream: resolution: 192*144, frequency: 30Hz, bandwidth: 100 Kb	Mainstream: resolution: 320*240, frequency: 30Hz, band width: 1.0Mb Substream: resolution: 192*144, frequency: 30Hz, bandwidth: 100 Kb	Mainstream: resolution: 320*240, frequency: 30Hz, band width: 1.0Mb Substream: resolution: 192*144, frequency: 30Hz, bandwidth: 100 Kb	Mainstream: resolution: 320*240, frequency: 30Hz, band width: 1.0Mb Substream: resolution: 192*144, frequency: 30Hz, bandwidth: 100 Kb
Functions				
ROIs	5 points, 10 lines and 10 regions, support Modbus output(the Modbus output is mutually exclusive with the PTZ control function.)	5 points, 10 lines and 10 regions, support Modbus output(the Modbus output is mutually exclusive with the PTZ control function.)	5 points, 10 lines and 10 regions, support Modbus output(the Modbus output is mutually exclusive with the PTZ control function.)	5 points, 10 lines and 10 regions, support Modbus output(the Modbus output is mutually exclusive with the PTZ control function.)
Professional Software	MoniTIR Digital Integrated Management Platform	MoniTIR Digital Integrated Management Platform	MoniTIR Digital Integrated Management Platform	MoniTIR Digital Integrated Management Platform
Network Connection				
Ethernet Type	10M/100M/1000M adaptive	10M/100M/1000M adaptive	10M/100M/1000M adaptive	10M/100M/1000M adaptive
Network Protocols	IPv4, UDP, TCP, RTSP, RTCP, RTP	IPv4, UDP, TCP, RTSP, RTCP, RTP	IPv4, UDP, TCP, RTSP, RTCP, RTP	IPv4, UDP, TCP, RTSP, RTCP, RTP
Cuncurrent Access	Mainstream and substream: 10; Radiometric stream: 1	Mainstream and substream: 10; Radiometric stream: 1	Mainstream and substream: 10; Radiometric stream: 1	Mainstream and substream: 10; Radiometric stream: 1
Access Standard	ONVIF	ONVIF	ONVIF	ONVIF
Electrical Connection				
Power Interface	Screw-on wire terminal	Screw-on wire terminal	Screw-on wire terminal	Screw-on wire terminal
Network Interface	Screw-on RJ45 with status indicator LED	Screw-on RJ45 with status indicator LED	Screw-on RJ45 with status indicator LED	Screw-on RJ45 with status indicator LED
Alarm Input/Output Interface	1 relay output: Load capacity: 24V, 1.5A 1 optocoupler output: Output capacity: 3.3~24V, maximum output current 35mA 1 optocoupler input: Input capacity: 3.3~24V, input current 5~15mA	1 relay output: Load capacity: 24V, 1.5A 1 optocoupler output: Output capacity: 3.3~24V, maximum output current 35mA 1 optocoupler input: Input capacity: 3.3~24V, input current 5~15mA	1 relay output: Load capacity: 24V, 1.5A 1 optocoupler output: Output capacity: 3.3~24V, maximum output current 35mA 1 optocoupler input: Input capacity: 3.3~24V, input current 5~15mA	1 relay output: Load capacity: 24V, 1.5A 1 optocoupler output: Output capacity: 3.3~24V, maximum output current 35mA 1 optocoupler input: Input capacity: 3.3~24V, input current 5~15mA
Serial Port	RS-485	RS-485	RS-485	RS-485

Power System				
Power Supply	12V/24V DC, PoE	12V/24V DC, PoE	12V/24V DC, PoE	12V/24V DC, PoE
Power Consumption	<4W	<3W	<3W	<3W
Certification and Reliability				
Electromagnetic Compatibility	GB/T 18268.1/EN IEC 61326-1	GB/T 18268.1/EN IEC 61326-1	GB/T 18268.1/EN IEC 61326-1	GB/T 18268.1/EN IEC 61326-1
Enclosure Rating	IP66(GB/T 4208/IEC 60529) Electrostatic 8kV (Contact) /15kV (Air discharge) (GB/T 17626.2/IEC 61000-4-2) Voltage spikes 4kV(GB/T 17626.5/IEC 61000-4-5) Power frequency magnetic field 100A/m(GB/T 17626.8/IEC 61000-4-8)	IP66(GB/T 4208/IEC 60529) Electrostatic 8kV (Contact) /15kV (Air discharge) (GB/T 17626.2/IEC 61000-4-2) Voltage spikes 4kV(GB/T 17626.5/IEC 61000-4-5) Power frequency magnetic field 100A/m(GB/T 17626.8/IEC 61000-4-8)	IP66(GB/T 4208/IEC 60529) Electrostatic 8kV (Contact) /15kV (Air discharge) (GB/T 17626.2/IEC 61000-4-2) Voltage spikes 4kV(GB/T 17626.5/IEC 61000-4-5) Power frequency magnetic field 100A/m(GB/T 17626.8/IEC 61000-4-8)	IP66(GB/T 4208/IEC 60529) Electrostatic 8kV (Contact) /15kV (Air discharge) (GB/T 17626.2/IEC 61000-4-2) Voltage spikes 4kV(GB/T 17626.5/IEC 61000-4-5) Power frequency magnetic field 100A/m(GB/T 17626.8/IEC 61000-4-8)
Impact	25g(GB/T 2423.5/IEC 60068-2-27)	25g(GB/T 2423.5/IEC 60068-2-27)	25g(GB/T 2423.5/IEC 60068-2-27)	25g(GB/T 2423.5/IEC 60068-2-27)
Vibration	2g(GB/T 2423.10/IEC 60068-2-6)	2g(GB/T 2423.10/IEC 60068-2-6)	2g(GB/T 2423.10/IEC 60068-2-6)	2g(GB/T 2423.10/IEC 60068-2-6)
RoHS Compliant	Compliant	Compliant	Compliant	Compliant
Physical Parameters				
Operating Temperature	-20°C ~ 65°C(-4°F~149°F)	-20°C ~ 65°C(-4°F~149°F)	-20°C ~ 65°C(-4°F~149°F)	-20°C ~ 65°C(-4°F~149°F)
Storage Temperature	-40°C ~ 70°C(-40°F~158°F)	-40°C ~ 70°C(-40°F~158°F)	-40°C ~ 70°C(-40°F~158°F)	-40°C ~ 70°C(-40°F~158°F)
Relative Humidity	<90%RH	<90%RH	<90%RH	<90%RH
Dimensions	189mm*83mm*73mm	189mm*83mm*73mm	189mm*83mm*73mm	189mm*83mm*73mm
Weight	900g	900g	900g	900g
Casing Material	Aluminum alloy	Aluminum alloy	Aluminum alloy	Aluminum alloy
Mounting Method	Support UNC 1/4-20 interface for tripod connection from the bottom and the top	Support UNC 1/4-20 interface for tripod connection from the bottom and the top	Support UNC 1/4-20 interface for tripod connection from the bottom and the top	Support UNC 1/4-20 interface for tripod connection from the bottom and the top
Product Configuration				
Standard Configuration	Single-spectrum infrared camera, power adapter, power adapter plug, document bag (packing list, calibration certificate, quick start manual), packaging box	Single-spectrum infrared camera, power adapter, power adapter plug, document bag (packing list, calibration certificate, quick start manual), packaging box	Single-spectrum infrared camera, power adapter, power adapter plug, document bag (packing list, calibration certificate, quick start manual), packaging box	Single-spectrum infrared camera, power adapter, power adapter plug, document bag (packing list, calibration certificate, quick start manual), packaging box