

Temperature Measuring Products

Type: Thermometric Bispectral Thermal Imaging

Model No.: NVT-HD2200 Series



Overview

It integrates full-high-definition visible imaging, passive infrared thermal imaging detector, thermal lens and high-definition video coding services. Based on the thermal radiation imaging principle, the data information of thermal imaging camera field of view can be accessed by FPGA, which can realize non-target objects and space areas. Contact temperature measurement can structure and visualize the full-screen temperature information of the image, and realize the unified coding of thermal imaging and visible light images under the same SOC. It can access video private network with single IP or virtual dual IP. Infrared thermal imaging channel is not affected by the environmental line, so it can detect and visualize the target 24 hours a day and night in bad fog and haze weather, zero illumination, all-weather and so on. The product structure is made of aluminium alloy die casting, which has beautiful shape and unique heat dissipation design to ensure the stability of long-term work.

Different focal lenses can be selected according to the use scenarios, which is very suitable for all-weather video surveillance occasions requiring small-scale thermal imaging detection under indoor and outdoor, harbor, unattended base station, power facilities, museums, banks, warehouses and oilfields. It can provide reliable all-weather imaging (no light/back light/strong light, rain/snow/fog, etc.) for indoor and industrial automation monitoring, and can realize the overall solution of heat source detection, temperature detection and over-temperature early warning in these monitoring scenarios.

Features:

Bispectral All-weather Imaging

The integration of visible and infrared thermal imaging adapts to various severe weather conditions. In the areas of dark night, insufficient light, low contrast, direct sunlight, Bush and jungle, bad weather conditions such as rain, snow, smoke and haze can be effectively imaged.

Integral protection of abundant Interface

Integrated fuselage, providing power supply, network, alarm input and output, audio output, memory card interface; integrated network port anti-static, lightning protection; power supply anti-reverse connection, lightning protection, short circuit protection; fuselage protection level IP66.

Rich Compatibility

Support Onvif, GB/T 28181 protocol compatibility, SDK development kit and CMS management platform system.

Temperature Measurement Areas

Human Face Mode: 1-30 faces in visible light image

Industrial Temperature Measurement Regional Mode: Support full-screen temperature measurement in thermal image; Or 16 points, 16 lines, 16 regular regions, 16 irregular regions in 64 zones

Temperature Display Mode

Human Face Temperature Measurement: Face Detection Mode in visible light, the highest temperature value of human forehead will be superimposed on the image.

Point Temperature Measurement: Any point in infrared thermal imaging can be timely displayed.

Regional Temperature Measurement: The lowest temperature, highest temperature and average temperature of the whole screen or the region are displayed in time.

All data can be identified in thermal image or visible image.

Temperature Measurement Distance

According to the scene, 13mm, 19mm infrared focal lens and 1-30m range temperature measurement are selected.

Temperature Monitoring Range & Accuracy

General Mode: High Gain Mode: -20-120°C, Error ± 2 °C or: $\pm 2\%$;

Human Body Temperature Mode: Under the specified working environment conditions, when the Black box temperature at 33°C ~ 37°C, error less than ± 0.3 °C.

Intelligent Application of Warning Based on Heat Source (Temperature) Detection

High and low temperature abnormal alarm, differential temperature alarm and other early warning mechanisms;

Integrated micro-intelligent engine supports intelligent motion detection, sensor linkage alarm, cross-line and cross-border detection, area intrusion detection, real-time visual evaluation and visual alarm recognition, area intrusion, providing all-weather motion detection and clear and transparent moving images. This is optional.

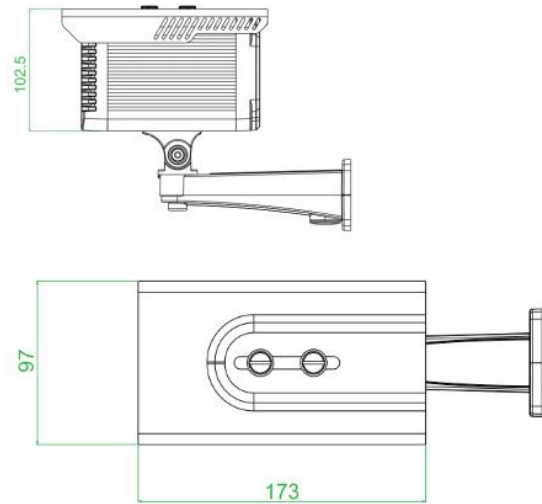
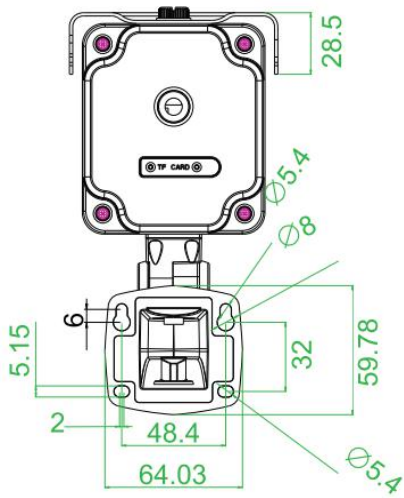
Specifications:

Product	Model No.		NVT-HD2202-L		NVT-HD2201-L	
	Type		Double Spectrum Temperature-measuring Integrated Network Camera			
Thermal Imaging	Detector Type		Uncooled Vanadium Oxide Focal Plane Detector			
	Image Size		640*512		336*256	
	Pixel		17μm			
	Spectral Range		7.5~13.5μm			
	Thermal Sensitivity (NETD)		<50 mK @ 25°C, F#1.0			
	Palette		White Heat, Black Heat and multiple thermal imaging pseudo-color options			
	Temperature Range		Human: 30--40°C; Error :±0.3°C; Industrial : -20°C-- +120°C Error :±3°C or ±3% range; Wide Range Range Optional: -40--550°C; Error ±10°C or ± 5% Range			
	Detection Distance		Person: 1-30 meters (* Detection Distance depends on the selected lens, laboratory data)			
	HLC		Support			
Thermal Imaging Camera	Focal Length		9mm	13mm	19mm	
	Aperture		1.25(336)/1.4(640)		1.25	1.25
	Field View	640*512	69°×56°	45°×37°	32°×26°	
		336*256	37°×25°	25°×19°	17°×13°	
	Digital Video		Parallel Channel: COMS(8/14 bit), BT656(8bit)			
	Image Enhancement		AGC, Digital Data Enhancement			
	Image Control		Continuous Digital Zoom, Dynamic Zoom & Rotary Zoom, Image Optimization			
	Image Effects		Rotation, Mirror, Custom Image Mode			
OSD		Multi-zone Intelligent OSD, Support multi-line national standard characters. The				

Product	Model No.	NVT-HD2202-L	NVT-HD2201-L
	Type	Double Spectrum Temperature-measuring Integrated Network Camera	
		font size, color and position can be customized.	
Visible Camera	Imaging Sensor	1/2.8" inch Progress Scan CMOS	
	Resolution	Full HD/1080P (1920x1080)	
	Focal Length	8/12mm	
	Aperture	F 1.4	
	Min. Illumination	0.002Lux (F1.2,AGC ON, Color)	
	Shutter Speed	1/6~1/8000s	
	WDR Range	120dB	
	Day & Night Switch	Auto Day & Night IR Filter Switch Mechanism	
	Video Compression	H.264 BP/MP/HP, H.265 Main Profile ,MJPEG	
	Audio Compression	G.711(ALAW)/MP2 /G.711(MULAN)	
	Video Bit Rate	32Kpbs~8Mbps, The frame speed and bandwidth of the multiplex video stream can be adjusted at all resolutions at full frame rate, Support VBR/CBR	
	Exposure Control	Auto, Manual, Priority (Shutter or Max AGC), Brightness, etc	
	Exposure Mode	Auto, Center Exposure, Global Average Exposure, Manually Specified Area	
	Exposure Compensation	5 Levels Adjustable	
	BLC	Off/ On	
	HLC	Off/ On	
DNR	3D-MCTF DNR		
White Balance	Auto, Scene (Incandescent Lamp, Fluorescent Lamp, Sunlight, Flash Lamp, etc.), Manual		
Intelligence (Smart)	Accurate Temperature Measurement	Support Full-screen Temperature Measurement; Or Point Temperature Measurement, Line Temperature Measurement, Regular Area, Irregular Area , Each Kind 16 Points, Total 64 Points;	
	Heat Source Detection	Support	
	Temperature Abnormal Alarm	Temperature Increment Alarm and Differential Temperature Alarm	
	Intelligent Detection	Intelligent Motion Detection, Region Invasion Detection, Cross-border Detection, Entry Area Detection, Leave Area Detection, etc. External Sensor Linkage	
	Intelligent Coding	Supports Low Bit Rate and Low Delay Adaptive Coding	
	Dynamic ROI	Dynamic Region of Interest (ROI) Settings to Support Fixed Region Settings or Dynamic Tracking	

Product	Model No.	NVT-HD2202-L	NVT-HD2201-L
	Type	Double Spectrum Temperature-measuring Integrated Network Camera	
	Intelligent Alarm	Network Disconnection Detection, IP Conflict Detection, Storage Card Status Detection, Storage Space Detection	
	Others	One-click Factory Setting Recovery, Anti-flicker, Three-bit Stream, Heartbeat, Image Rotation, Privacy Mask, Watermark, Access Port Settings	
Network	Protocol	IPv4,TCP/IP,UDP,HTTP,DHCP,RTP/RTCP,FTP,UPnP,DDNS,NTP,IGMP,ICMP	
	Compatibility Protocol	ONVIF, GB/T 28181	
	Security Mode	Password Protection, Multi-level User Access Rights	
	User Maintenance	Can be upgraded remotely through the network to achieve remote maintenance	
	Log Management	Support Log Management, Operation Log, Alarm Log, Abnormal Log Record & Query	
	API integration	Support Micro SDHC/SDXC, TF Card Offline Storage (selection), storage of video clips and snapshots (selection), with the back-end platform to achieve secondary intelligent retrieval, analysis and playback of event video.	
Interface	Communication Interface	1 CH RJ45 10M/100M Adaptive Ethernet Port	
	Power Interface	DC12V, 2.1 Direct Interpolation	
	Others	Alarm I/O, Audio, SD Card Slot, etc.	
General	Working Temperature	-40°C ~ +85°C	
	Storage Temperature	-55°C ~ +95°C	
	Environmental Humidity	Less than 90% RH (no condensation)	
	Electrostatic/Surge protection	TVS 6000V lightning protection, surge protection and surge protection, in line with GB/T17626.5 four-level standards	
	Protection Level	IP66	
	Power Supply	DC12V ± 10%, About 6W	
	Dimension (mm)	L150 x W85 x H98 (without housing and brackets) L173 x W97 x H103 (with housing, without bracket)	
	Weight	About 980g	
	Standard Wall Mounted Bracket	Standard 1/4" inch screw hole	

Dimension (Unit : mm)



The design of product appearance and specifications is subject to change without prior notice. Please refer to the actual product.

Nature Electronic Technology Co., Ltd.