## NVC-HDSPT9530PD-100HL

NVC-HDSPT9530PD-100HL Thermal Imaging PTZ Camera (Hereinafter referred to as Thermal Camera) is a series of Double Windows PTZ Thermal Camera, can realize Dual Spectral Imaging in Infrared Band and Visible Light Band, Infrared Full Screen Thermometric, High and Low Temperature Alarm, Temperature Report Analysis, etc functions. It is suitable for Monitoring in Large Areas, like Forest-fire Prevention, Coastal Border Protection, Electric Power Detection, Fire Fighting, Cross River (SEA) Bridge, Expressway, and other Critical Areas.



**NVC-HDSPT9530PD-100HL** Thermal Camera is equipped with Focal Length 25-100mm, Pixel 640×512(336×256) Infrared Camera and 30X Optical Zoom 2.1MP Ultra Low Illumination HD Visible Camera, which can realize 24 Hours Monitoring. The System can work normally in Harsh Climatic Conditions, with the Performance of Low Temperature Resistance, High Temperature Resistance and High Humidity, it can be automatically monitored without Interruption in Different Climatic, such as Low Temperature, Severe Cold, Heavy Rain, Snow, Dense Fog, or Hot/Humid Heat. The Thermal Camera is connected by Ethernet, it can independently to search IP Address or compose a Monitoring Network, then transmit the Infrared Image, Visible Image and Thermometric Date in Real-time to Information Center or Workstation(Control Center).

## **Key Feature**

- > 2.1MP30X Optical Zoom Ultra Low Illumination HD Visible Camera
- ➤ 640\*512(336×256)Un-cooled Vanadium Oxide Infrared Detector
- ➤ Ultra Large Relative Aperture and Ultra High Sensitivity Performance Infrared OpticalLens
- > High Precision Infrared Full Screen Thermometric, Excess-temperature Alarm, Temperature Analysis and Temperature Report
- ➤ The Visible Camera support Defog, 4A Control, Day&Night ICR, 3D DNR, etc
- > Appropriative Outdoor Shield and High Precision Heavy PTZ
- > Full compatible with a variety of Network Communication Protocols

## **Technical Specifications**

Model	Туре	COIRDouble Windows PTZ Thermal Imaging Camera
	Model	NVC-HDSPT9530PD-100HL
Infrared Detector	Effective Resolution	640*512/336*256
	Detector Type	Un-cooled Vanadium Oxide Focal Plane Array
	Pixel Pitch	17μm
	Spectral Range	7.5 $\sim$ 13.5 $\mu$ m
	Input Voltage	4.4V ∼6V DC
	Power Consumption	< 1.2 W
	Thermal Sensitivity(NETD)	<50mK @25℃, F#1.0
	Frame Rate	25 FPS (30 FPS)
	Temperature Isotherm	Support
	Start Time	< 3.5/S
	FFC Duration	< 0.5/S

	Signal Interface	Support Independent I/O Interface, RS232		
	Focal Length	25mm ~ 100mm		
Infrared Lens	Zoom Mode	> 4X Electric Continuous Optical Zoom		
	F#	0.8		
	Angle of View	25°×18.8° ~ 6.2×4.6°		
	Human Body 1.8m×0.5m	Detection	2400m	
		Recognition	600m	
		Detection	6400m	
	Objects 2.3m×2.3m	Recognition	1600m	
	Video Standard	NTSC/PAL		
	Digital Video	H.264 BP/MP/HP,H.265 Main Profile,MJPEG		
	Digital Zoom	×2, ×4, ×8		
	Image Enhancement	Auto Gain Control, Digital Data Enhancement		
	Brightness	Auto/Manual		
	Image Control	Continuous Digital Zoom, Dynamic Zoom, Rotation Zoom, Image Optimization		
Infrared Image	Polar Pseudo-color	14 kinds of Pseudo-color can be adjusted		
	Encoding-board Store Preset	1280		
	Electronic Compass	The Current Direction and Angle of the Prototype Lens can be superimposed on the Monitoring Screen		
	Privacy Mask	OFF/ON		
	OSD	Multiregion OSD: Support Time and Date, Scene Name and Custom OSD (8 Lines, Multiple Characters Per Line)		
	Image Correction	Auto/Manual		
	Thermometric Range	High Gain: -40°C ~150°C; Low Gain: -40°C ~550°C		
	Thermometric Precision	±1.5℃		
	Thermometric Correction	Auto/Manual		
		Full Frame Frequency Temperature Record, Highest&Lowest Temperature Catch, Excess-temperature&Low Temperature Alarm, Abnormal Heating-up, etc differential Temperature Alarm(Color, Voice)		
		Thermal Imaging Video Image Support Point, Line and Region Thermometric Rules, a Maximum of 12 Points, 12 Regions and 1 Lines can be set to support the Temperature Field Curve Recording		
Temperature	Thermometric Mode	It Support Historical Temperature Query Function. And it can query the History Temperature Records of any Point, Line and Region in the Thermal Imaging Picture by the Client Software, and display it in a Sudden Form		
Measurement		It Support Thermal Imaging Video Regional Intrusion Detection, Cross Boundary Detection, Entry Area Detection, Out of Area Detection, etc		
	Radiance Correction	0.01 $\sim$ 1.0 Radiant Rate can be adjusted, or adjusted by Predefined Material Radiant Rate Table		
	Background Temperature Correction	Auto		
	Atmospheric Transmittance Correction	According to the Input Ambient Temperature, Distance, Relative Humidity		
	Temperature Anomaly Alarm	OFF/ON		
	Video Coding	with High Stability, > 7*24 hours to run stably		
		1CH CVBS Video Input Interface		
		with Ethernet Interface, Support TCP/IP/ SIP/RTSP/RTP/RTCP, etc Network Protocols		
		2CH RS485/1CH RS422 Interface		
Video Coding		≥1CH Audio Input/Output Interface		
	Video&Audio Code	Support H.264/H.265/MPEG-4 Codec Protocols		
		Support H.264 Main Stream/Substream Coding Format and Video Stream Parameters to be set separately		
		Support Multiple Resolutions: 336*256, 640*512, 720*576, 1280*1024		
		Support G.711u Audio Codec Algorithm, Mute Functions		

		Support Video Coding Parameters adjustable; Support Resolutions/Code Stream/Frame Rate, Frame	
		TypeParameters Adjustable; Support Video Brightness, Contrast, Chroma, SaturationParametersAdjustable	
		Each channels of All Video Channels Support OSD	
	PTZ Operation	Support Real-time Flow Transmission Mode, UDP/TCP Optional	
	112 Operation	Support PTZ Control, PTZ Control Right Management, PTZ Preset Management, PTZ Locking	
		Support Pelco-P, Pelco-D, and other PTZ Protocols	
	Device Management	Support Planning Management of Local Upgrade, Remote Upgrade, Batch Upgrade and Support Upgrade	
		Support Centralized Management of the Service and Configuration of the Front-end Device by Center Server	
	Face Detection	Inspecting Personnels and Statistics of number of personnel under a certain Focal Length	
	PersonIdentification	Identification and Display of Personnel Information	
	Object Identification	Identifying and Displaying Objects Information	
	Smoke Detection	The Appearance of Smoke in the Monitor Screen can be detected	
	Motion Detection	The Moving Objects and Moving Direction and Speed in the Monitor Screen can be detected	
Intelligent Business	Temperature DataAnalysis	Real-time Temperature Analysis, Historical Temperature Statistical Analysis, Temperature Warning	
	Scene State Analysis	According to the Preset Rules todetermine the Scene is normal or not	
	Intelligent Management System	Management and Scheduling of Customer's Manpower, Material Resources and Time through Large Data Statistical Analysis and Mathematical Model Calculation	
	Electronic Map	Support Vector Electronic Map Display	
	Auto Cruise	Support 24 Cruise Lines, Cruise by Time	
	Detect Volume Weight	Calculate the Volume and Weight of Pipelines and Tanks, etc in Given Distance, Azimuth.	
	Image Sensor	1/1.9"2.38MP Sony Progressive Scan CMOS	
	Max. Resolution	Full HD/1080P(1920x1080)	
	Focus Length	6∼180mm	
	Aperture	F1.5~F4.3	
	Optical Zoom	30X Optical Zoom	
	Min. Illumination	Color 0.002Lux (F1.2,AGC ON), B/W 0.0002Lux (F1.2,AGC ON)	
	Electronic Shutter Speed	1/6~1/8000s	
	WDR	120dB	
	Day & Night Switch	Auto Day& Night IR Cut Optical Filter	
	Video Compression	H.264 BP/MP/HP, H.265 Main Profile,MJPEG	
	Audio Compression	G.711 / AAC / MP2	
	TVL	>1000TVL	
	Multi-streams	1080P + Full D1 + CVBS	
Visible Camera	Video Code Rate	32Kpbs~8Mpbs, Under All Resolutions, Output Multi-channels Video Streams and Bandwidth with Full Frame Rate at same time are adjusted; Support VBR/ CBR	
	Focus Mode	Auto Focus, Zoom Focus (Zoom Trigger AF), Manual Focus	
	Exposure Control	Auto, Manual, Priority(Shutter or Max AGC), Brightness, etc	
	Exposure Mode	Auto, Center Exposure, Global Average Exposure, Manual Designated Area	
	ExposureCompensation	5 Levels can be adjusted	
	White Balance	Auto, Scene (Incandescent/ Fluorescent Lamp, Daylight, Flash Light, etc), Manual	
	AGC	Auto, Threshold Control	
	BLC	OFF/ON	
	HLC	OFF/ON	
	Image Effects	Rotation, Mirror, Latitude-longitude Image Mode, Self-defined Image Mode	
	Noise Reduction	3D-MCTF Digital Noise Reduction	
	Day & Night	Auto(ICR) / Color / B/W	
	ICR CUT	Auto/ Timing/ Alarm Trigger	
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	OSD	Multi-Zone, Support Date, Time, Scene Name, Self-defined OSD(5 lines)
		OFF/ON
	Defog  Dynamic ROI	Dynamic ROI Setting, Support to Set Fixed Area or Dynamic Tracking Separately
	Intelligent Alarm	Face Detection, Motion Detection, Sensor Linkage Alarm, Boundary Violation Detection, Regional Intrusion Detection, Left Objects Detection, Lens Cover, Flow Statistics, etc
	Interface	RS485/RS-422 Optional
	Protocol	IPv4, TCP/IP, UDP, HTTP, DHCP, RTP/RTCP/RTSP, FTP, DDNS, NTP, IGMP, ICMP
	Load Weight	<pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre></pre> <pre></pre>
	Rotation Speed	0.01° ~ 30°/s
	Pitching Rotation Speed	0.01° ~ 15°/s
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	Horizontal Angle Range	0° ~ 360°
	Pitch Angle Range	-45°~ 45°
	Preset	256
PTZ	Positioning Accuracy	±0.01°
	Auto Scan	3
	Auto Cruise	6
	Communication Protocol	Support PELCO-D, etc PTZControl Protocols
	Focusing	Support PTZTriggered Auto Focus Function
	Baud Rate	2400/4800/9600/19200bps
	Control Method	RS-485/422
	Heating System	Automatic Heating SystemOptional, suitable for High and Cold Regions
	Input Voltage	AC24V(±20%)
	Wind Resistance Level	≤12
	USB	Support External USB Storage Devices
	Network Interface	100M Ethernet, RJ45 Interface
	CVBS	Analog Video Output
	SD Card	32G High Speed TF Card
Network& Interface	Supported Protocol	IPv4, TCP/IP, UDP, HTTP, DHCP,RTP/RTCP/RTSP, FTP, DDNS, NTP, IGMP, ICMP
	Compatible Protocol	ONVIF, GB/T 28181
	Safe	Password Protection, Multiuser Access Control
	Web Service	Built-in WEB Access Page
	Working Temperature	-40°C ~ +85°C
	Storage Temperature	-55°C ∼ +95°C
	Temperature Impact	5°C/min
	Operation Humidity	5% $\sim$ 95%, Non-condensing
Environment	Concussion	Half Sine Wave, Acceleration 30g, Pulse Width 6ms, Installation and Use of Direction Impact 3 Times
	Vibration	10HZ∼40HZ, 0.015g^2/HZ; 40HZ∼500HZ, 0.00015g^2/HZ,Rms:1.04291g, 5min, X,Y,Z Axis
	Protection Level	IP66, Salt Fog-proof
	Certifications	CE/FCC
	Lightning Surge	GB/T17626.5
	Double IP	The Infrared and Visible Light are assigned a IP separately, then easy to control 2 Imaging Systems
System	Cruise Function	A number of Cruise Routes can be completed according to the SettedPreset Position, support the One Key Cruise Function
	Electrostatic Anti-disturbance	The Anti-interference of Electrostatic Discharge conforms to the Requirement of Grade 3 in GB/T 17626.2-2006, Air Discharge 15kV, Contact Discharge 9kV
	Maintainability	with One Key Recovery Function
		Support Remote Upgrade
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		with the Operating State Indicator Light and Network Indicator Light to reflect the Running State of the Equipment in time
Quality Certification	ISO9001	Support
	Third Party Detection	Chinese CEPREI Laboratory (Ministry of Industry and Information Technology Institute of Electronics Fifth)

## Dimension







