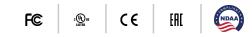




32CH AI NVR



Key Features

- Up to 8K (32MP) Resolution
- AI search (BestShot, Attribute)
- Object detection and classification
- SATA 16ea (Up to 160TB)
- Easy Channel/Event/Alarm configuration
- Video preview support
- Dynamic Event support
- Bookmark management (Up to 100 set)
- Simple connection with mobile phone through QR code



32CH AI NVR



Specifications

Display		
Network camera	Inputs	Max. 32CH
	Resolution	32MP ~ CIF
	Protocols	Wisenet, ONVIF
Decoding	Local Display	[Dual Display] HDMI 1: 3840 x 2160 (30Hz) HDMI 2: 1920x1080 (60Hz)
	Multi Screen Display	[Local Monitor] - Dynamic layout, Virtual channel view - Clone Mode : Up to 36 Division - Expand Mode : HDMI1 up to 36 Div. HDMI2 up to 16 Div. [Web] 1/ 2H/ 2V/ 3V/ 4/ 6/ 8/ 9
	Resolution	32M(15fps, H.265 Only), 12M(30fps, H.265 Only), 8.3M(120fps), 1080p(480fps), 720P(960fps), D1(1920fps)
Performance		
Operating System	Embedded	Linux
	Compression	H.265, H.264, MJPEG, WiseStream(H.265, H.264)
Record	Recording Bandwidth	Distributed mode : Up to 400 Mbps Normal mode : Up to 150 Mbps {RAID mode} Normal : Up to 400 Mbps Degrade/ Rebuild : Up to 320 Mbps
	Resolution	32MP ~ CIF
	Mode	Normal, Dual Stream, Schedule(Continuous/Event), Even (Pre/Post), Bookmark
	Event Trigger	Alarm Input, Video Loss, Camera Event(Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event
	Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shotdown
Search & Play	Playback Bandwidth	Max. 64Mbps(32CH simultaneously)
	User	Max. 4 Users (Local 1, Remote 3)
	Simultaneous playback	Max. 80CH(Local 32CH, Remote 16CH per user)
	Fisheye Dewarping	Support (Local 1CH), CMS
	Mode	Date & Time(Calendar), Event list, Text Search, Smart Search
	Resolution	CIF ~ 32MP (Up to H.264 9MP, H.265 32MP)
	Playback Control	Fast/Slow Forward / Backward, Move one step Up / Dowr



	Supported HDD	Up to 10TB
	HDD Slot	SATA 16ea(Max. 160TB, Non-RAID mode), Hot swap
Storage	External	iSCSI storage
	RAID	RAID-5/6(Array Size : 8 HDD x 2 Array)
	File backup	BU/Exe/AVI(GUI), JPG/AVI(Network)
Backup	Function	Multi channel (Up to 16CH) Play, Date-Time/Title display
Network		
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server, Client), PPPoE, SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S), SUNAPI(Server, Client)	
DDNS	Hanwha DDNS	
Transmission Bandwidth	Max. 400Mbps	
	Input/Output	32 CH(network)
Audio	Compression	G.711, G.726, AAC(16/48KHz)
	Audio Communication	2-Way
Max Remote Users	Search(3), Live Unicast(10), Multicas	st(20)
Security	IP address filtering, User access Log, Device certificate(Hanwha Techwin	,802.1x, Encryption Root CA), Signed firmware
	Supported OS	Windows 10, macOS 10.13
Web viewer	Supported browser	Google Chrome, Microsoft Edge, Mac Safari
	SSM, Webviewer, Smart Viewer, Wisenet mobile Support CGI(SUNAPI) for integration to 3'rd party VMS	
Viewer Software		
Viewer Software Functions		
Functions	Support CGI(SUNAPI) for integration	n to 3'rd party VMS
Functions Camera Setup	Support CGI(SUNAPI) for integration Register	Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera
Functions Camera Setup	Support CGI(SUNAPI) for integration Register Item	Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage
Functions Camera Setup	Support CGI(SUNAPI) for integration Register Item Control	Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000
Functions Camera Setup PTZ	Support CGI(SUNAPI) for integration Register Item Control Preset	Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets
Functions Camera Setup PTZ	Support CGI(SUNAPI) for integration Register Item Control Preset Support Model	Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets iOS, Android
Functions Camera Setup PTZ	Support CGI(SUNAPI) for integration Register Item Control Preset Support Model Protocol Support	Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets iOS, Android RTP, RTSP, HTTP, CGI(SUNAPI)
Functions Camera Setup PTZ Smart phone	Support CGI(SUNAPI) for integration Register Item Control Preset Support Model Protocol Support Control Control	h to 3'rd party VMS Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets iOS, Android RTP, RTSP, HTTP, CGI(SUNAPI) Live 16CH(Multi-Profile Support), Playback 4CH
Functions Camera Setup PTZ Smart phone	Support CGI(SUNAPI) for integration Register Item Control Preset Support Model Protocol Support Control Max. Remote Users	Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets iOS, Android RTP, RTSP, HTTP, CGI(SUNAPI) Live 16CH(Multi-Profile Support), Playback 4CH Search(3), Live Unicast(10)
Functions Camera Setup PTZ Smart phone Redundancy	Support CGI(SUNAPI) for integration Register Item Item Control Preset Support Model Protocol Support Control Max. Remote Users Failover	h to 3'rd party VMS Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets iOS, Android RTP, RTSP, HTTP, CGI(SUNAPI) Live 16CH(Multi-Profile Support), Playback 4CH Search(3), Live Unicast(10) N+1
Functions Camera Setup PTZ Smart phone Redundancy Easy configuration	Support CGI(SUNAPI) for integration Register Register Item Control Preset Support Model Protocol Support Control Max. Remote Users Failover ARB	h to 3'rd party VMS Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets iOS, Android RTP, RTSP, HTTP, CGI(SUNAPI) Live 16CH(Multi-Profile Support), Playback 4CH Search(3), Live Unicast(10) N+1
Functions Camera Setup PTZ Smart phone Redundancy Easy configuration Interface	Support CGI(SUNAPI) for integration Register Register Item Control Preset Support Model Protocol Support Control Max. Remote Users Failover ARB	h to 3'rd party VMS Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets iOS, Android RTP, RTSP, HTTP, CGI(SUNAPI) Live 16CH(Multi-Profile Support), Playback 4CH Search(3), Live Unicast(10) N+1
Functions Camera Setup PTZ Smart phone Redundancy Easy configuration Interface Front	Support CGI(SUNAPI) for integration Register Item Item Control Preset Support Model Protocol Support Control Max. Remote Users Failover ARB P2P(QR code)	Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets iOS, Android RTP, RTSP, HTTP, CGI(SUNAPI) Live 16CH(Multi-Profile Support), Playback 4CH Search(3), Live Unicast(10) N+1 Support
Functions Functions Camera Setup PTZ Smart phone Redundancy Easy configuration Interface Front Storage	Support CGI(SUNAPI) for integration Register Register Item Control Preset Support Model Protocol Support Control Max. Remote Users Failover ARB P2P(QR code) Indicator	Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets iOS, Android RTP, RTSP, HTTP, CGI(SUNAPI) Live 16CH(Multi-Profile Support), Playback 4CH Search(3), Live Unicast(10) N+1 Support
Functions Functions Camera Setup PTZ Smart phone Redundancy Easy configuration Interface Front Storage Reset	Support CGI(SUNAPI) for integration Register Register Item Control Preset Support Model Protocol Support Control Max. Remote Users Failover ARB P2P(QR code) Indicator OK	Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets iOS, Android RTP, RTSP, HTTP, CGI(SUNAPI) Live 16CH(Multi-Profile Support), Playback 4CH Search(3), Live Unicast(10) N+1 Support
	Support CGI(SUNAPI) for integration Register Register Item Control Preset Support Model Protocol Support Control Max. Remote Users Failover ARB P2P(QR code) Indicator OK Power button	Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets iOS, Android RTP, RTSP, HTTP, CGI(SUNAPI) Live 16CH(Multi-Profile Support), Playback 4CH Search(3), Live Unicast(10) N+1 Support
Functions Functions Camera Setup PTZ Smart phone Redundancy Easy configuration Interface Front Storage Reset HDD Key Lock	Support CGI(SUNAPI) for integration Register Register Item Control Preset Support Model Protocol Support Control Protocol Support Control Max. Remote Users Failover ARB P2P(QR code) Indicator OK Power button OK	Auto, Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage Via GUI, Webviewer, SPC-2000 300 Presets iOS, Android RTP, RTSP, HTTP, CGI(SUNAPI) Live 16CH(Multi-Profile Support), Playback 4CH Search(3), Live Unicast(10) N+1 Support



Alarm	In 8EA, Out 4EA	
USB	4EA(Front 2 x USB 2.0, Rear 2 x USB 3.0)	
Power inlet	AC 1EA	
System		
Log	Log List Max. 100,000 (System Log, Event Log each)	
System Control	Mouse, Keyboard, Web, Controller (SPC-2000)	
Language	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese, Japanese, Tha Vietnamese	
Environmental		
Operating Temperature	0°C to +40°C(32°F to 104°F)	
Operating Humidity	20% ~ 85% RH	
Electrical		
Power Input	$100 \sim 240 \text{ VAC} \pm 10\%; 50/60 \text{ Hz}$	
Power Consumption	Max. 285W (972.5 BTU with HDD 16ea)	
Mechanical		
Color / Material	Black / Metal	
Dimension (WxHxD)	440.0 x 132.0 x 571.1mm	
Weight	Approx. 13.6Kg(30 lb, HDD not included)	
Intelligent Analysis		
Al Search	Object Attribute Person, Face(with Wisenet AI camera), Vehicle, Lisence plate	
	LPR English, Number (Wisenet Al, P/X Camera)	



32CH AI NVR



CAD

Unit:mm [inch]

