



16CH AI NVR



### **Key Features**

- Up to 8K (32MP) Resolution
- AI search (BestShot, Attribute)
- Object detection and classification, License Plate Recognition (LPR)
- SATA 8ea (Up to 80TB)
- 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





## Specifications

Display		
	Inputs	Max. 16CH
Network camera	Resolution	32MP ~ CIF
	Protocols	SUNAPI, 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 16 Division - Expand Mode : HDMI1 up to 16 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
	Recording Bandwidth	Distributed mode : Up to 250 Mbps Normal mode : Up to 150 Mbps RAID mode : Up to 250 Mbps
	Resolution	32MP ~ CIF
Record	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
	Playback Bandwidth	RAID Mode : Max. 64Mbps Non-RAID Mode : Max. 32Mbps
	User	Max. 4 Users (Local 1, Remote 3)
	Simultaneous playback	Max. 64CH(Local 16CH, Remote 16CH per user)
Search & Play	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
Storago	HDD Slot	SATA 8ea(Max. 80TB, Non-RAID mode)
Storage	External	iSCSI storage
	RAID	RAID-5/6(Single, 1 Array)
	NAID	KAD 5/0(Siligic, I Allay)
Backup	File backup	BU/Exe/AVI(GUI), JPG/AVI(Network)

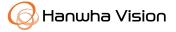


Network				
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server, Client), SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S), SUNAPI(Server, Client)			
DDNS	Hanwha DDNS			
Transmission Bandwidth	Max. 250Mbps			
Audio	Input/Output	16 CH(network)		
	Compression	G.711, G.726, AAC(16/48KHz)		
	Audio Communication	2-Way		
Max Remote Users	Search(3), Live Unicast(10), Multicast(20)			
Security	IP address filtering, User access Log, 802.1x, Encryption Device certificate(Hanwha Techwin Root CA), Signed firmware			
Web viewer	Supported OS	Windows 10, macOS 10.13		
	Supported browser	Google Chrome, Microsoft Edge, Mac Safari		
Viewer Software		WAVE, SSM, Webviewer, Smart Viewer, Wisenet mobile Support CGI(SUNAPI) for integration to 3'rd party VMS		
Functions				
Camera Setup	Register	Auto, Manual		
	ltem	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		
	Control	Via GUI, Webviewer, SPC-2000		
PTZ	Preset	300 Presets		
	Support Model	iOS, Android		
Smart phone	Protocol Support	RTP, RTSP, HTTP, CGI(SUNAPI)		
	Control	Live 16CH(Multi-Profile Support), Playback 4CH		
	Max. Remote Users	Search(3), Live Unicast(10)		
Dodundancy	Failover	N+1		
Redundancy	ARB	Support		
Easy configuration	P2P(QR code)			
Interface				
Front	Indicator	HDD, Alarm, Power, Record, Backup, Network, RAID		
Storage	ОК			
Reset	ОК			
HDD Key Lock	ОК			
HDMI	2EA ( Playback/Setup → HDMI1) HDMI1 : 3840x2160 30Hz HDMI2 : 1920x1080 60Hz			
Audio	Out 1EA (3.5mm Audio Jack)			
Ethernet	RJ-45 3EA (LAN/WAN, 1Gbps)			
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)			

System Control Mouse, Keyboard, Web, Controller (SPC-2000)



Language	English, French, German, Italian, Rumanian, Serbian, Croatian, Hu Vietnamese	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese, Japanese, Thai, Vietnamese		
Environmental				
Operating Temperature	0°C to +40°C(32°F to 104°F)	0°C to +40°C(32°F to 104°F)		
Operating Humidity	20% ~ 85% RH	20% ~ 85% RH		
Electrical				
Power Input	100 ~ 240 VAC $\pm$ 10%; 50/60 Hz,	100 ~ 240 VAC ±10%; 50/60 Hz, 2.1A		
Power Consumption	Max. 205W (With 10TB HDDs 8E/	Max. 205W (With 10TB HDDs 8EA)		
Mechanical				
Color / Material	Black / Metal	Black / Metal		
Dimension (WxHxD)	438 x 86 x 434.9 mm	438 x 86 x 434.9 mm		
Weight	Approx. 9.1Kg (20.1 lb, HDD not	Approx. 9.1Kg (20.1 lb, HDD not included)		
Intelligent Analysis				
Al Search	Object Attribute	Human, Face, Vehicle, Lisence plate		
	LPR	English, Number (Wisenet AI, P/X Camera)		



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### CAD

Unit:mm [inch]

