

# XRN-1610SA

16CH Network Video Recorder with PoE Switch

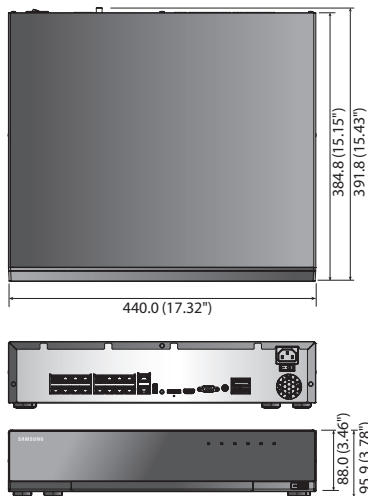


## Key Features

- Up to 16CH 121 megapixel cameras supported
- H.265, H.264, MJPEG codec supported
- WiseStream support
- 180Mbps network camera recording
- Plug & play by 16 PoE/PoE+ ports
- Max. 4 HDDs, e-SATA storage supported
- HDMI / VGA local monitor
- P2P service (QR code connect) support

## Dimensions

Unit : mm (inch)



		XRN-1610SA
<b>DISPLAY</b>		
Video	Inputs / Resolution	Up to 16CH / CIF ~ 12MP
	Protocols	Wisenet, ONVIF, RTSP
Live	Local Display	1x HDMI, 1x VGA dual monitor
	Multi Screen Display	[Local monitor] 1 / 2V / 3V / 4 / 6 / 8 / 9 / 13 / 16 / Auto sequence, [Web] 1 / 4 / 9 / 16 / Auto sequence
	Performance	[Local monitor] 12MP (30fps), 8MP (120fps), 5MP (180fps), 3MP (240fps), 2MP (480fps), 720p (480fps), D1 (480fps) [Web] 5MP (30fps), 3MP (60fps), 2MP (120fps), 720p (240fps), D1 (480fps)
<b>PERFORMANCE</b>		
Operating System	Embedded	Linux
	Compression	H.265, H.264, MJPEG, WiseStream (H.265, H.264)
Recording	Recording Bandwidth	180Mbps
	Resolution	CIF ~ 12MP
	Mode	Manual, Schedule (Continuous / Event), Event (Pre / Post)
	Event Trigger	Alarm input (8), Video loss, Camera event (Sensor, MD, Video analytics), VA event (Tampering, Enter / Exit, Passing, Virtual-line, (Dis)Appear, Face Detection, Audio detection), Defocus camera event
Search & Playback	Event Action	E-mail, PTZ preset, Alarm out, Buzzer, Monitor out
	Playback Bandwidth	32Mbps (16CH simultaneously)
	Performance	Max. 4 users (Set 1, Remote 3)
	Mode	Date & Time (Calendar) / Event log list / Text search (POS, ANPR)
Storage	Simultaneous Playback	Max. 16CH (Local monitor, Network)
	Resolution	CIF ~ 12MP
	Fish-eye Dewarping	Processed on Web / CMS
Backup	Playback Control	Fast/Slow Forward/Backward, Move one step up/down
	Default Built-in	0TB ~ 8TB
File Backup	Internal / External	4 SATA (Max. 32TB) / 1 e-SATA, iSCSI (Max. 384TB * PROMISE VESSRAID R2600)
	Function	BU/EXE (GUI), JPG/AVI (Network)
Audio	Input / Output	Max. 16CH play, Date-time/title display
	Input / Compression	8 / 4 (NO/NC selectable)
Audio Communication	16CH (Network) / G.711, G.726, AAC (16/48KHz)	
Audio Communication	2-way (Pass-through between camera and client software)	
<b>NETWORK</b>		
Protocol Support		TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server, Client), PPPoE, SMTP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S), SUNAPI (Server, Client)
DDNS		Hanwha DDNS, 3rd party DDNS
Transmission Bandwidth		Max. 256Mbps (iSCSI off) (128Mbps, iSCSI on)
Max. Remote Users		Search 3 / Live unicast 10 / Live multicast 20
IP		IPv4 / IPv6
Security		IP address filtering, User access log, 802.1x Authentication, Encryption (ID/PW, Recording, Transmission, Backup)
Language	GUI / Web	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese, Japanese, Thai (GUI)
OS		Supported OS : Window XP (Service pack 2 or above), Vista, 7, 8, 10, Mac OS X (10.7 or above) Plug-in free Webviewer
Web Browser		- Supported Browser : Google Chrome 47, MS Edge 20, Mozilla Firefox - WMF : 1CH live (800 x 600), Setup Plug-in Webviewer
Viewer Software	Type	- Supported Browser : MS Explorer 11, Apple Safari 9 * Mac OS X only
Viewer Software	CMS Support	Wisenet WAVE, SSM, Webviewer, SmartViewer, Wisenet Mobile viewer SDK / CGI (SUNAPI)
<b>FUNCTIONS</b>		
Register		PnP mode, Manual mode
Camera Setup	Setup Items	1) IP address, Add profile edit, Bitrate, Compression, GOP, Quality
		2) Camera event setup - MD, VA : Tampering, Enter / Exit, Passing (Virtual-line), (Dis)Appear, Face detection, Audio detection)
		3) Video setup (Simple focus, Brightness / Contrast, Flip / Mirror, IRIS, WDR, D&N, SSM, Shutter, SSM, DIS)
		4) Fisheye Dewarping, Hallway View setup, Camera webpage
Camera Control	PoE (PoE+)	Monitor PoE/PoE+ Power Consumption, On/Off Control for Each PoE/PoE+ Camera, Remote Reset for Each PoE/PoE+ Camera
Camera Control	Time Sync.	NVR time protocol for PoE/PoE+ camera (Time sync based on NVR time)
Easy Configuration		Setup Wizard (Language Date/Time, Network, Auto Camera Configuration), P2P (QR code) * Selectable between PnP and manual mode
ARB (Auto Recovery Backup)		Yes
PTZ	Control / Preset	Via GUI, Webviewer, SPC-2000 (USB) / 255 presets
Smart Phone	OS / Protocol Support	Android, iOS / RTP, RTSP, HTTP, CGI (SUNAPI)
	Control	Live (16CH) : Multi-profile support, Playback
System Control	Max. Remote Users	Search 3 / Live unicast 10 / Live multicast 20
		Mouse, IR Remote, Web, SPC-2000 (USB)
<b>INDICATOR / INTERFACE</b>		
Front	Indicator	Power status LED 1ea, HDD Action LED 1ea, Alarm Status LED 1ea
	USB	Record status LED 1ea, Network Action LED 1ea, Backup LED 1ea
Connections	HDMI	2ea (Front 1ea / Rear 1ea)
	VGA	1ea (Supports Live / Playback / Setup)
	Audio / Serial	Support up to 4K (3840 x 2160, Single monitor mode)
	Ethernet	1ea (Supports Playback, Setup, Live screen up to 16 division mode)
	Alarm	Out 1ea (RCA, Line) / 1ea for UPS (Plan to support as project basis)
Reset / Power Cord		16ea (PoE/PoE+, 100Mbps), 2ea (LAN/WAN, 1Gbps) - LAN : Uplink to camera/monitoring switch - WAN : Uplink to CMS/LAN In 8ea (Terminal block) / Out 4ea (Terminal block) Yes (Factory Reset, Alarm Reset) / Included
<b>SYSTEM</b>		
Log	Log List	Max. 20,000 (System log, Event log each)
<b>GENERAL</b>		
Electrical	Input Voltage / Current	100 ~ 240V AC
	Power Consumption	Max. 271.9W (4 HDDs, PoE/PoE+ On), Max. 51.9W (4 HDDs, PoE/PoE+ Off) * PoE/PoE+ Budget : Max. 220W
Environmental	Operating Temperature	+0°C ~ +40°C (+32°F ~ +104°F)
	Operating Humidity	20% ~ 85% RH
Mechanical	Color / Material	Black / Metal
	Dimensions (WxHxD)	440.0 x 88.0 x 384.8mm (17.32" x 3.46" x 15.15") (2U)
	Weight	5.1Kg (11.24 lb)

\* The latest product information / specification can be found at [hanwhasecurity.com](http://hanwhasecurity.com)

\* Design and specifications are subject to change without notice.

\* Wisenet is the proprietary brand of Hanwha Techwin.