

# XRN-1610SA

16CH Network Video Recorder with PoE Switch

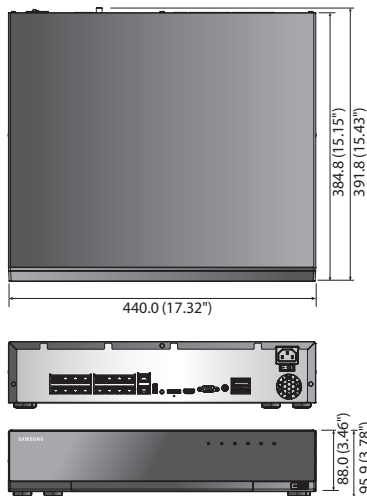


## Key Features

- Up to 16CH 12megapixel supported
- H.265, H.264, MJPEG codec supported
- WiseStream support
- 180Mbps network camera recording
- Plug & play by 16 PoE/PoE+ ports
- Max. 4HDDs, 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	Samsung, ONVIF
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
	Internal / External	4 SATA (Max. 24TB) / 1 e-SATA, iSCSI (Max. 384TB * PROMISE VESSRAID R2600)
Audio	File Backup	BU/EXE (GUI), JPG/AVI (Network)
	Function	Max. 16CH play, Date-time/title display
Audio Communication	Input / Output	8 / 4 (NO/NC selectable)
	Input / Compression	16CH (Network) / G.711, G.726, AAC (16/48KHz)
<b>NETWORK</b>		
Protocol Support	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	iPOLIS 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 - WMF : 1 CH live (800 x 600), Setup Plug-in Webviewer - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only	
Viewer Software	Type	SSM, Webviewer, SmartViewer, iPOLIS mobile viewer
	CMS Support	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, SSMR, Shutter, SDDR, 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
	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 (1CH, Max. 2MP)
	Max. Remote Users	Search 3 / Live unicast 10 / Live multicast 20
System Control	Mouse, IR Remocon, 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 2ea (Front 1ea / Rear 1ea)
Connections	HDMI	Main : 1ea (Both support Live / PB / Setup) Support up to 4K (3840 x 2160, Single monitor mode)
	VGA	Sub : 1ea (Support live screen up to 16 div. mode)
	Audio / Serial	Out 1ea (RCA, Line) / 1ea for UPS (Plan to support as project basis)
	Ethernet	16ea (PoE (PoE+), 100Mbps), 2ea (LAN/WAN, 1Gbps) - LAN : Downlink to camera / PoE (PoE+) Hub - WAN : Uplink to CMS
	Alarm	In 8ea (Terminal block) / Out 4ea (Terminal block)
	Reset / Power Cord	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
	Color / Material	Black / Metal
Mechanical	Dimensions (WxHxD)	440.0 x 88.0 x 384.8mm (17.32" x 3.46" x 15.15") (2U)
	Weight	5.1Kg (11.24lb)

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

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

\* Wisenet is the proprietary brand of Hanwha Techwin.