

# XRN-1610

16CH Network Video Recorder

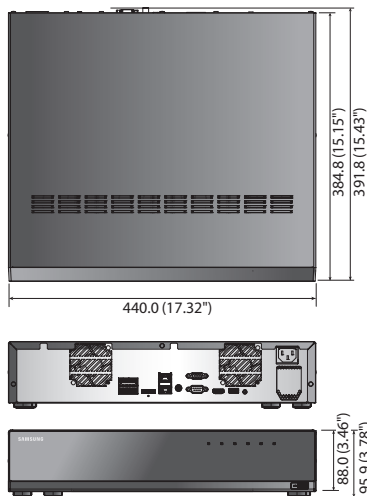


## Key Features

- Up to 16CH 12megapixel supported
- H.265, H.264, MJPEG codec supported
- WiseStream support
- 180Mbps network camera recording
- Max. 8HDDs, e-SATA storage supported
- HDMI / VGA local monitor

## Dimensions

Unit : mm (inch)



XRN-1610		
<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
Recording	Compression	H.265, H.264, MJPEG, WiseStream (H.265, H.264)
	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)
	Simultaneous Playback	Max. 16CH (Local monitor, Network)
Storage	Resolution	CIF ~ 12MP
	Fish-eye Dewarping	Processed on Web / CMS
	Playback Control	Fast/Slow Forward/Backward, Move one step up/down
	Default Built-in	0TB ~ 6TB
Backup	Internal / External	8 SATA (Max. 48TB) / 1 e-SATA, iSCSI (Max. 384TB * PROMISEVESSRAID R2600)
	File Backup Function	BU/EXE (GUI), JPG/AVI (Network)
Sensor	Input / Output	8 / 4 (NO/NC selectable)
Audio	Input / Compression	16CH (Network) / G.711, G.726, AAC (16/48KHz)
	Audio Communication	2-way (Pass-through between camera and SSM)
<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)
Web Browser		Plug-in free Webviewer
		- Supported Browser : Google Chrome 47, MS Edge 20
		- WMF : 1CH live (800 x 600), Setup
Viewer Software		Plug-in Webviewer
	Type	- Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
	CMS Support	SSM, Webviewer, SmartViewer, iPOLiS mobile viewer
		SDK / CGI (SUNAPI)
<b>FUNCTIONS</b>		
Camera Setup	Register	Auto mode, Manual mode
	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, SSNR, Shutter, SDR, DIS)
4) Fisheye dewarping, Hallway view setup, Camera webpage		
Easy Configuration		Setup Wizard (Language Date/Time, Network, Auto camera configuration)
ARB (Auto Recovery Backup)		Yes
PTZ	Control / Preset	Via GUI, Webviewer, SPC-2000 (USB) / 255 presets
	OS	Android, iOS
Smart Phone	Protocol Support	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
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	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. 76.3W (8 HDDs)
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	5.44Kg (11.99 lb)

\* The latest product information / specification can be found at <http://security.hanwhatechwin.com>

# XRN-1610S

16CH Network Video Recorder with PoE Switch

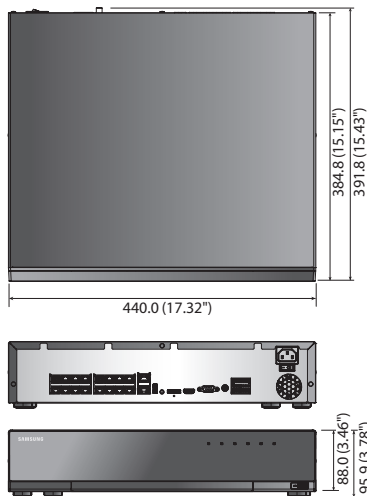


## Key Features

- 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

## Dimensions

Unit : mm (inch)



## XRN-1610S

<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>		
Recording	Operating System	Linux
	Compression	H.265, H.264, MJPEG, WiseStream (H.265, H.264)
	Recording Bandwidth	180Mbps
	Resolution	CIF ~ 12MP
	Mode	Manual, Schedule (Continuous / Event), Event (Pre / Post)
Event Trigger	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
	Event Action	E-mail, PTZ preset, Alarm out, Buzzer, Monitor out
	Playback Bandwidth	32Mbps (16CH simultaneously)
Search & Playback	Performance	Max. 4 users (Set 1, Remote 3)
	Mode	Date & Time (Calendar) / Event log list / Text search (POS, ANPR)
	Simultaneous Playback	Max. 16CH (Local monitor, Network)
	Resolution	CIF ~ 12MP
Storage	Fish-eye Dewarping	Processed on Web / CMS
	Playback Control	Fast/Slow Forward/Backward, Move one step up/down
	Default Built-in	0TB ~ 6TB
Backup	Internal / External	4 SATA (Max. 24TB) / 1 e-SATA, iSCSI (Max. 384TB * PROMISE VESSRAID R2600)
	File Backup	BU/EXE (GUI), JPG/AVI (Network)
Sensor	Function	Max. 16CH play, Date-time/title display
Audio	Input / Output	8 / 4 (NO/NC selectable)
	Input / Compression	16CH (Network) / G.711, G.726, AAC (16/48KHz)
Audio Communication		2-way (Pass-through between camera and SSM)
<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)
Web Browser		Plug-in free Webviewer - 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>		
Camera Setup	Register	PnP mode, Manual mode
	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, SSNR, 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) * 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
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 / sepecification can be found at <http://security.hanwhatechwin.com>

# XRN-2010

32CH Network Video Recorder

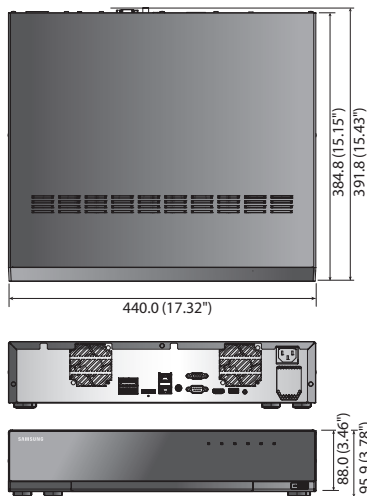


## Key Features

- Up to 32CH, Max. 12MP Camera supported
- 256Mbps network camera recording
- Support 4K video out on HDMI monitor
- Support Dual monitor video out
- Support H.265, H.264, MJPEG compression
- WiseStream support
- Max. 8 internal HDDs (48TB), e-SATA / iSCSI storage support
- ARB & Failover (N+1) support

## Dimensions

Unit : mm (inch)



XRN-2010		
<b>DISPLAY</b>		
Video	Inputs	Up to 32CH
	Resolution	CIF ~ 12MP
	Protocols	Samsung, ONVIF
Live	Local Display	1x HDMI, 1x VGA dual monitor
	Multi Screen Display	[Local monitor] 1 / 2V / 3V / 4 / 9 / 16 / 25 / 36 / Sequence, [Web] 1 / 4 / 9 / 16 / 25 / 36 / Sequence
	Performance	[Local monitor] 12M (30fps), 8.3M (120fps), 1080p (480fps), 720P (960fps), D1 (960fps)
<b>PERFORMANCE</b>		
Operating System	Embedded	Linux
	Compression	H.265, H.264, MJPEG, WiseStream (H.265, H.264)
Recording	Recording Bandwidth	Max. 256Mbps
	Resolution	CIF ~ 12MP
	Mode	Normal, Schedule (Continuous / Event), Event (Pre / Post)
	Event Trigger	Alarm input, Video loss, Camera event (Sensor, MD, Video analytics)
	Event Action	E-mail, PTZ preset, Alarm out, Buzzer, Monitor out
Search & Playback	Playback Bandwidth	32Mbps (16CH simultaneously)
	Performance	Max. 4 users (Local 1, Remote 3)
	Mode	Date & Time (Calendar) / Event log list / Text search
	Simultaneous Playback	Max. 16CH (Local monitor, CMS)
	Resolution	CIF ~ 12MP
Storage	Fish-eye Dewarping	WEB / CMS
	Playback Control	Fast/Slow Forward/Backward, Move one step up/down
	Built-in / Internal HDD	0TB ~ 6TB / 8 (Max. 48TB)
Backup	External	iSCSI storage (Max. 384TB), Promise VessRaid R2600
	File Backup (Via Web)	BU/Exe (GUI), JPG/AVI (Network)
Sensor	Function	Multi channel (Up to 16CH) play, Date-time/title display
	Input / Output	8 / 4 (NO/NC selectable)
Audio	Input	32CH (Network)
	Compression	G.711, G.726, AAC (16/48KHz)
	Audio Communication	2-way
<b>NETWORK</b>		
Interface		RJ-45, Gigabit ethernet x 2
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		512Mbps (iSCSI off), 256Mbps (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
Language		English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese, Japanese, Thai
OS		Window 7, 8, 10, Mac OS X (10.8 or above)
Web Browser		MS IE, Google Chrome, Mac Safari, Firefox
Viewer Software	Type	SSM, Webviewer, SmartViewer, iPOLiS mobile viewer
	CMS Support	SDK / CGI (SUNAPI)
<b>FUNCTIONS</b>		
Camera Setup	Register	Auto, Manual
	Setup Items	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup, Camera video setup (Simple focus, Brightness/ Contrast, Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SDDR, DIS), Fisheye dewarping mode, Hallway view setup, Camera webpage
PTZ	Control / Preset	Via GUI, Webviewer, SPC-2000 / 255 presets
Smart Phone	OS	Android, iOS
	Protocol Support	RTP, RTSP, HTTP, CGI (SUNAPI)
	Control	Live (16CH) : Multi-profile support, Playback (1CH)
Redundancy	Max. Remote Users	Search 3 / Live unicast 10
	Failover / ARB	N + 1 / Yes
System Control		Mouse, Web, SPC-2000 (Controller)
<b>INDICATOR / INTERFACE</b>		
Front	Indicator	LED (Status indicator) : 6ea HDD action 1, Alarm 1, Power 1, Record 1, Backup 1, Network1
	HDMI	Main : 1 ea (Both support Live / PB / Setup) Support up to 4K (3840 x 2160, Single monitor mode)
	VGA	Sub : 1 ea (Support live screen up to 16 div. mode)
	Audio	Out 1 ea (RCA, Line)
	Ethernet	RJ-45 2ea (LAN/WAN, 1Gbps)
Connections	Alarm	In 8ea (Terminal block), Alarm reset 1ea Out 4ea (Terminal block) - Relay out1 (NO/NC/COM) - Relay out 2 ~ 4 (NO/COM)
	USB	2ea (Front 1, Rear 1)
	Storage	1 e-SATA
	Serial / Reset	RS-232C / Switch 1ea
	Power Cord	1ea AC Inlet
<b>SYSTEM</b>		
Log	Log List	Max. 20,000 (System log, Event log each)
<b>GENERAL</b>		
Electrical	Input Voltage / Current	100 ~ 240V AC ±10%, 50/60Hz / 4 ~ 1.5A
	Power Consumption	Max. 99W (338BTU, 6TB HDD x 8ea)
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	4.86Kg (10.71 lb) (without HDD)

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>

# XRN-2011

32CH Network Video Recorder

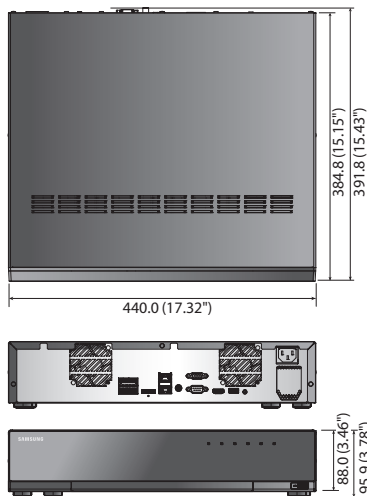


## Key Features

- Up to 32CH, Max. 12MP Camera supported
- 256Mbps network camera recording
- Support 4K video out on HDMI monitor
- Support Dual monitor video out
- Support H.265, H.264, MJPEG compression
- WiseStream support
- Max. 8 internal HDDs (48TB), e-SATA / iSCSI storage support
- Support RAID 5
- Easy installation with front swap hard disks
- ARB & Failover (N+1) support

## Dimensions

Unit : mm (inch)



		XRN-2011
<b>DISPLAY</b>		
Video	Inputs	Up to 32CH
	Resolution	CIF ~ 12MP
	Protocols	Samsung, ONVIF
Live	Local Display	1x HDMI, 1x VGA dual monitor
	Multi Screen Display	[Local monitor] 1 / 2V / 3V / 4 / 9 / 16 / 25 / 36 / Sequence, [Web] 1 / 4 / 9 / 16 / 25 / 36 / Sequence
	Performance	[Local monitor] 12M (30fps), 8.3M (120fps), 1080p (480fps), 720P (960fps), D1 (960fps)
<b>PERFORMANCE</b>		
Operating System	Embedded	Linux
Recording	Compression	H.265, H.264, MJPEG, WiseStream (H.265, H.264)
	Recording Bandwidth	Max. 256Mbps, Max. 100Mbps (RAID 5 mode)
	Resolution	CIF ~ 12MP
	Mode	Normal, Schedule (Continuous / Event), Event (Pre / Post)
	Event Trigger	Alarm input, Video loss, Camera event (Sensor, MD, Video analytics)
Search & Playback	Event Action	E-mail, PTZ preset, Alarm out, Buzzer, Monitor out
	Playback Bandwidth	32Mbps (16CH simultaneously)
	Performance	Max. 4 users (Local 1, Remote 3)
	Mode	Date & Time (Calendar) / Event log list / Text search
	Simultaneous Playback	Max. 16CH (Local monitor, CMS)
Storage	Resolution	CIF ~ 12MP
	Fish-eye Dewarping	WEB / CMS
	Playback Control	Fast/Slow Forward/Backward, Move one step up/down
	Built-in / Internal HDD	0TB ~ 6TB / 8 (Hot swap) - Max. 48TB (Non-RAID), Max. 36TB (RAID 5)
	External RAID	iSCSI storage (Max. 384TB), Promise VessRaid R2600 RAID 5 (Array size : 4 HDD x 2 array)
Backup	File Backup (Via Web) Function	BU/Exe (GUI), JPG/AVI (Network)
Sensor	Input / Output	8 / 4 (NO/NC selectable)
	Input	32CH (Network)
Audio	Compression	G.711, G.726, AAC (16/48KHz)
	Audio Communication	2-way
<b>NETWORK</b>		
Interface		RJ-45, Gigabit ethernet x 2
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		512Mbps (iSCSI off), 256Mbps (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
Language		English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese, Japanese, Thai
OS		Window 7, 8, 10, Mac OS X (10.8 or above)
Web Browser		MS IE, Google Chrome, Mac Safari, Firefox
Viewer Software	Type	SSM, Webviewer, SmartViewer, iPOLiS mobile viewer
Viewer Software	CMS Support	SDK / CGI (SUNAPI)
<b>FUNCTIONS</b>		
Camera Setup	Register	Auto, Manual
	Setup Items	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup, Camera video setup (Simple focus, Brightness/Contrast, Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSSR, DIS), Fisheye dewarping mode, Hallway view setup, Camera webpage
PTZ	Control / Preset	Via GUI, Webviewer, SPC-2000 / 255 presets
Smart Phone	OS	Android, iOS
	Protocol Support	RTP, RTSP, HTTP, CGI (SUNAPI)
	Control	Live (16CH) : Multi-profile support, Playback (1CH)
Redundancy	Max. Remote Users	Search 3 / Live unicast 10
	Failover / ARB	N + 1 / Yes
System Control		Mouse, Web, SPC-2000 (Controller)
<b>INDICATOR / INTERFACE</b>		
Front	Indicator	LED (Status indicator) : 6ea HDD action 1, Alarm 1, Power 1, Record 1, RAID 1, Network1
	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	Out 1ea (RCA, Line)
	Ethernet	RJ-45 2ea (LAN/WAN, 1Gbps)
Connections	Alarm	In 8ea (Terminal block), Alarm reset 1ea Out 4ea (Terminal block) - Relay out1 (NO/NC/COM) - Relay out 2 ~ 4 (NO/COM)
	USB	2ea (Front 1, Rear 1)
	Storage	1 e-SATA
	Serial / Reset	RS-232C / Switch 1ea
	Power Cord	1ea AC Inlet
<b>SYSTEM</b>		
Log	Log List	Max. 20,000 (System log, Event log each)
<b>GENERAL</b>		
Electrical	Input Voltage / Current	100 ~ 240V AC ±10%, 50/60Hz / 4 ~ 1.5A
	Power Consumption	Max. 99W (338BTU, 6TB HDD x 8ea)
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	5.43Kg (11.97 lb) (without HDD)

\* The latest product information / specification can be found at <http://security.hanwhatechwin.com>



# XRN-3010

64CH Network Video Recorder

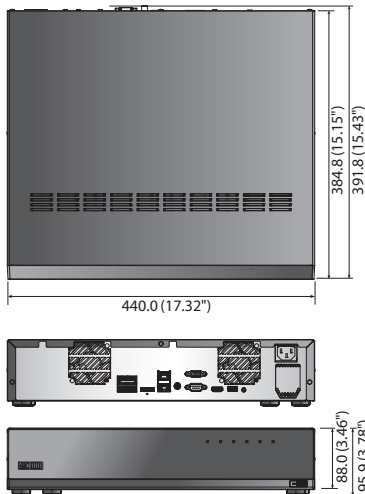


## Key Features

- Up to 64CH, Max. 12megapixel camera supported
- Max. 300Mbps network camera recording
- Support 4K video out on HDMI monitor
- Support Dual monitor video out
- Support H.265, H.264, MJPEG compression
- WiseStream support
- Max. 8 internal HDDs (64TB), e-SATA storage support
- ARB & Failover (N+1) support

## Dimensions

Unit : mm (inch)



## XRN-3010

DISPLAY		
Video	Inputs	Up to 64CH
	Resolution	CIF ~ 12MP
	Protocols	Samsung, ONVIF
Live	Local Display	1x HDMI, 1xVGA dual monitor
	Multi Screen Display	[Local monitor] 1 / 2V / 3V / 4 / 9 / 16 / 25 / 36 / Sequence, [Web] 1 / 4 / 9 / 16 / 25 / 36 / Sequence
	Performance	[Local monitor] 12MP (30fps), 8.3MP (120fps), 1080p (480fps), 720P (960fps), D1 (1560fps)
PERFORMANCE		
Operating System	Embedded	Linux
	Compression	H.265, H.264, MJPEG, WiseStream (H.265, H.264)
Recording	Recording Bandwidth	Max. 300Mbps
	Resolution	CIF ~ 12MP
	Mode	Normal, Schedule (Continuous / Event), Event (Pre / Post)
	Event Trigger	Alarm input (8), Video loss, Camera event (Sensor, MD, Video analytics, Defocus)
	Event Action	E-mail, PTZ preset, Alarm out, Buzzer, Monitor out
Search & Playback	Playback Bandwidth	32Mbps (16CH simultaneously)
	Performance	Max. 4 users (Local 1, Remote 3)
	Mode	Date & Time (Calendar) / Event log list / Text search / ARB search / Smart search (Virtual line w/direction, Enter / Exit)
	Simultaneous Playback	Max. 16CH (Local monitor, CMS)
	Resolution	CIF ~ 12MP
Storage	Fish-eye Dewarping	WEB / CMS
	Playback Control	Fast/Slow Forward/Backward, Move one step up/down
	Default Built-In	0TB ~ 8TB
Backup	Internal HDD	8 (Max. 64TB)
	File Backup (Via Web)	BU/Exe (GUI), JPG/AVI (Network)
Sensor	Function	Multi channel (Up to 16CH) play, Date-time/title display
	Input / Output	8 / 4 (NO/NC selectable)
Audio	Input	64CH (Network)
	Compression	G.711, G.726, AAC (16/48KHz)
	Audio Communication	2-way
NETWORK		
Interface		RJ-45, Gigabit ethernet x2
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		Hanwha security DDNS
Transmission Bandwidth		512Mbps
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
Language		English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese, Japanese, Thai
OS		Window 7, 8, 10, Mac OS X (10.8 or above)
Web Browser		MS IE, Google Chrome, Mac Safari, Firefox
Viewer Software	Type	SSM, Webviewer, SmartViewer, iPOLiS mobile viewer
	CMS Support	SDK / CGI (SUNAPI)
FUNCTIONS		
Camera Setup	Register	Auto, Manual
	Setup Items	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup, Camera video setup (Simple focus, Brightness/ Contrast, Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSSR, DIS), Fisheye dewarping mode, Hallway view setup, Camera webpage
PTZ	Control / Preset	Via GUI, Webviewer, SPC-2000 / 255 presets
	OS	Android, iOS
Smart Phone	Protocol Support	RTP, RTSP, HTTP, CGI (SUNAPI)
	Control	Live (16CH) : Multi-profile support, Playback (1CH)
	Max. Remote Users	Search 3 / Live unicast 10 / Live multicast 20
Redundancy	Failover / ARB	N + 1 (Include fail-back) / Yes
System Control		Mouse, Web, SPC-2000 (Controller)
INDICATOR / INTERFACE		
Front	Indicator	LED (Status indicator) : 6ea HDD action 1, Alarm 1, Power 1, Record 1, Backup 1, Network1
	VGA	Sub : 1ea (Support live screen up to 16 div. mode)
	HDMI	Main : 1ea (Both support Live / PB / Setup) Support up to 4K (3840 x 2160, Single monitor mode)
Connections	Audio	Out 1ea (RCA, Line)
	Ethernet	RJ-45 2ea (LAN/WAN, 1Gbps)
	Alarm	In 8ea (Terminal block), Alarm reset 1ea Out 4ea (Terminal block) - Relay out1 (NO/NC/COM) - Relay out 2 ~ 4 (NO/COM)
	USB	2ea (Front 1, Rear 1)
	Storage	1 e-SATA
	Serial / Reset	RS-232C / Switch 1ea
	Power Cord	1ea AC Inlet
SYSTEM		
Log	Log List	Max. 20,000 (System log, Event log each)
GENERAL		
Electrical	Input Voltage / Current	100 ~ 240V AC ±10%, 50/60Hz / 4 ~ 1.5A
	Power Consumption	Max. 99W (338BTU, 8TB HDD x 8ea)
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	4.86Kg (10.71 lb) (without HDD)

\* The latest product information / specification can be found at hanwha-security.com  
\* Design and specifications are subject to change without notice.