

QRN-1610S

16Ch Network Video Recorder with built-in PoE Switch

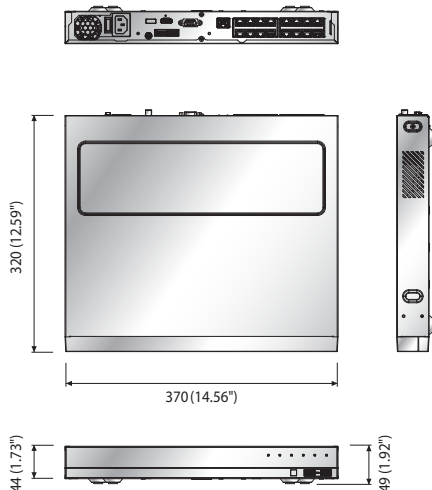


Key Features

- Up to 16ch 8megapixel supported
- H.265, H.264, MJPEG codec supported
- 128Mbps network camera recording
- Plug & play by 16 PoE ports
- Max. 2HDDs supported
- HDMI / VGA local monitor
- P2P service (QR code connect) support

Dimensions

Unit : mm (inch)



QRN-1610S

DISPLAY		
Network Camera	Inputs	Max. 16ch
	Resolution	CIF ~ 8MP
	Protocols	Wisenet, ONVIF (Profile-S)
Live	Local Display	1xHDMI / 1xVGA
	Multi-Channel Display	[Local Monitor] 1 / 2H / 2V / 3V / 4 / 6 / 8 / 9 / 13 / 16 / Auto Sequence [Web] 1 / 4 / 9 / 16 / Auto Sequence
	Performance	[Local Monitor] 8MP (60fps) 5MP (90fps), 3MP (120fps), 2MP (240fps), 720p (480fps), D1 (480fps)
PERFORMANCE		
Operating System	Embedded	Linux
	Compression	H.265, H.264, MJPEG
	Recording Bandwidth	Max. 128Mbps
Record	Resolution	CIF ~ 8MP
	Type	Manual, Schedule (Continuous / Event), Event (Pre / Post)
	Event Trigger	Alarm Input (4), Video Loss, Camera event (Sensor, MD, Video analytics, Defocus)
	Event Action	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out
	Playback Bandwidth	32Mbps (8ch simultaneously)
	Performance	Max. 3 Users (Local 1, Remote 3)
Search & Play	Mode	Date & Time (Calendar) / Event Log list / Text Search (POS) / ARB Search / Smart Search (Virtual Line w / direction, Enter / Exit)
	Simultaneous playback	Max. 8ch (Local), Max. 16ch (Network)
	Resolution	CIF ~ 8MP
	Fish-Eye Dewarping	N/A (processed on Web / CMS)
	Playback Control	Fast / Slow Forward / Backward, Move one step Up / Down
Storage	Default Built-In	0 ~ 6TB
	Internal	2 (Max. 12TB)
Backup	File backup	BU / Exe (USB), JPG / AVI (Web, CMS)
	Function	Multi channel (Up to 16ch) Play, Date-Time / Title display
Sensor	I/O	4 / 2 (NO 1EA, NO / NC 1EA)
	Input	16 ch (network)
Audio	Compression	G.711, G.726, AAC (16 / 48KHz)
	Audio Communication	2-Way
NETWORK		
Protocol	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	128Mbps
Max Remote Users	Search (3), Live Unicast (10), Multicast (20)	
	IPV4 / IPV6	
Security	User access Log, IP Filtering, 802.1x, Encryption	
	GUI	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai
Language	Web	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai
	OS	Windows 7, 8, 10, Mac OS X 10.9, 10.10, 10.11
Web Browser	Plug-in free web viewer : Google Chrome 47, MS Edge 20	
	Plug-in Webviewer : MS Explorer 11, Apple Safari 9 (Mac OS X only)	
Software	Type	SSM, Webviewer, Smart Viewer, Wisenet Mobile
	CMS Support	Support SDK / CGI (SUNAPI)
FUNCTIONS		
Camera Setup	Register	PnP, Manual
	Setup Items	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup, Camera video setup (Simple focus, Brightness / Contrast, Flip / Mirror, IRLS, WDR, D&N, SSNR, Shutter, SDR, DIS), Fisheye Dewarping setup, Halfway View Setup, Camera Webpage
Camera Control	PoE	Monitor PoE Power consumption, On / Off Control for each PoE camera, Remote Reset for each PoE camera
	Easy Configuration	Setup Wizard (Date / Time, Network, Auto Camera Configuration), P2P (QR code)
ARB	Control	Yes
	PTZ	Via GUI, Webviewer, 255 preset
Smart phone	Support Model	iPhone, Android
	Protocol Support	RTP, RTSP, HTTP, CGI (SUNAPI)
Control	Live (16ch) : Multi-Profile Support, Playback (4ch), Event push	
	Max. Remote Users	Search (3), Live Unicast (10), Multicast (20)
System Control	Mouse, Web, IR Remote control	
INDICATOR / INTERFACE		
Front	Indicator	LED (Status indicator) : 6ea HDD action 1, Alarm 1, Power 1, Record 1, Backup 1, Network 1
	VGA	1EA (1920x1080, 1280x720)
Connectors	HDMI	1EA (3840x2160, 1920x1080, 1280x720)
	Audio	Out (1EA, RCA, Line)
	Ethernet	16EA (PoE, 100Mbps) 1EA (WAN, 1Gbps) - WAN : Uplink to CMS
	Alarm	In (4EA, Terminal Block) / Out (2EA, Terminal Block)
USB	Front 2EA (USB2.0), Rear 1 (USB3.0)	
	Ext. Storage	N/A
Serial	Reset	N/A
	Power Cord	Included
SYSTEM		
Log	Log List	Max. 20000 (System Log, Event Log each)
ENVIRONMENTAL		
Operating Temperature / Humidity		+0°C to +40°C (+32°F to +104°F)
	Humidity	20% ~ 85% RH
ELECTRICAL		
Power Input		100 to 240 VAC ±10%
	Power Consumption	Max. 158.2W (2HDDs, PoE on), Max. 34.6W (2HDDs, PoE off)
PoE Budget		Max. 100W
MECHANICAL		
Color / Material		Black / Metal
	Dimension (WxHxD)	W370.0 x H44.0 x D320 mm (1U) (14.56" x 1.73" x 12.59")
Weight		2.79Kg (6.15 lb) (without HDD)

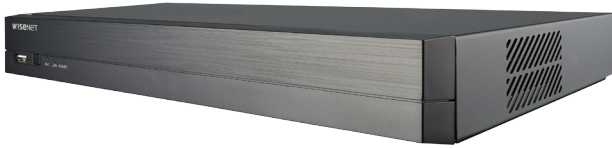
* The latest product information / specification can be found at hanwha-security.com

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* Wisenet is the proprietary brand of Hanwha Techwin, formerly known as Samsung Techwin.

QRN-810S

8Ch Network Video Recorder with built-in PoE Switch

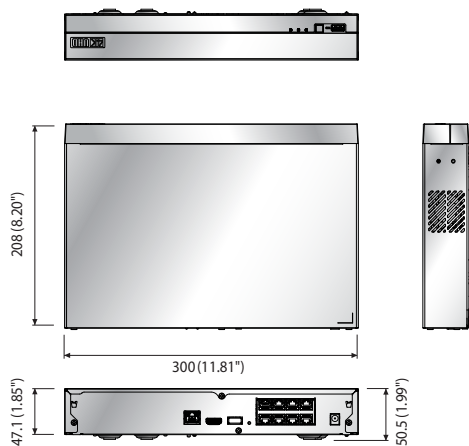


Key Features

- Up to 8ch 8megapixel supported
- H.265, H.264, MJPEG codec supported
- 80Mbps network camera recording
- Plug & play by 8 PoE ports
- Max. 1HDD supported
- HDMI local monitor
- P2P service (QR code connect) support

Dimensions

Unit : mm (inch)



QRN-810S

DISPLAY		
Network Camera	Inputs	Max. 8ch
	Resolution	CIF ~ 8MP
	Protocols	Wisenet, ONVIF (Profile-S)
Live	Local Display	1x HDMI
	Multi-Channel Display	[Local Monitor] 1 / 2H / 2V / 3V / 4 / 6 / 8 / Auto Sequence [Web] 1 / 4 / 8 / Auto Sequence
	Performance	[Local Monitor] 8MP (60fps) 5MP (90fps), 3MP (120fps), 2MP (240fps), 720p (240fps), D1 (240fps)
PERFORMANCE		
Operating System	Embedded	Linux
	Compression	H.265, H.264, MJPEG
	Recording Bandwidth	Max. 80Mbps
Record	Resolution	CIF ~ 8MP
	Type	Manual, Schedule (Continuous / Event), Event (Pre / Post)
	Event Trigger	Video Loss, Camera event (Sensor, MD, Video analytics, Defocus)
	Event Action	e-Mail, PTZ Preset, Buzzer, Monitor Out
	Playback Bandwidth	32Mbps (8ch simultaneously)
	Performance	Max. 3 Users (Local 1, Remote 3)
Search & Play	Mode	Date & Time (Calendar), Event Log list, Text Search (POS), ARB Search, Smart Search (Virtual Line w / direction, Enter / Exit)
	Simultaneous playback	Max. 8ch (Local, Network)
	Resolution	CIF ~ 8MP
	Fish-Eye Dewarping	N/A (processed on Web / CMS)
	Playback Control	Fast / Slow Forward / Backward, Move one step Up / Down
Storage	Default Built-In	0 ~ 6TB
	Internal	1 (Max. 6TB)
	File backup	BU / Exe (USB), JPG / AVI (Web, CMS)
Backup	Function	Multi channel (Up to 8ch) Play, Date-Time / Title display
	Sensor	I/O
	Input	8 ch (network)
Audio	Compression	G.711, G.726, AAC (16 / 48KHz)
	Audio Communication	2-Way
NETWORK		
Protocol	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	80Mbps
Max Remote Users	Search (3), Live Unicast (10), Multicast (20)	
	IP Version	IPv4 / IPv6
	Security	User access Log, IP Filtering, 802.1x, Encryption
Language	GUI	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai
	Web	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai
	OS	Windows 7, 8, 10, Mac OS X 10.9, 10.10, 10.11
Web Browser	Plug-in free web viewer	Google Chrome 47, MS Edge 20
	Plug-in Webviewer	MS Explorer 11, Apple Safari 9 (Mac OS X only)
	Software	SSM, Webviewer, Smart Viewer, Wisenet Mobile
CMS Support	Support SDK / CGI (SUNAPI)	
FUNCTIONS		
Camera Setup	Register	PnP, 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, SSDR, DIS), Fisheye Dewarping setup, Hallway View Setup, Camera Webpage
	Camera Control	PoE
Easy Configuration	Monitor PoE Power consumption, On / Off Control for each PoE camera, Remote Reset for each PoE camera	
	Setup Wizard (Date / Time, Network, Auto Camera Configuration)	
	P2P (QR code)	
ARB	Control	Yes
	Support Model	Via GUI, Webviewer, 255 preset
	Protocol Support	RTP, RTSP, HTTP, CGI (SUNAPI)
Smart phone	Control	Live (8ch) : Multi-Profile Support, Playback (4ch), Event push
	Max. Remote Users	Search (3), Live Unicast (10), Multicast (20)
	System Control	Mouse, Web, IR Remote control
INDICATOR / INTERFACE		
Front	Indicator	LED (Status indicator) : 3ea Power Status 1, LAN 1, Record 1
	VGA	N/A
	HDMI	1 EA (3840 x 2160, 1920 x 1080, 1280 x 720)
Connectors	Audio	N/A
	Ethernet	8EA (PoE, 100Mbps) 1EA (WAN, 1Gbps) - WAN : Uplink to CMS
	Alarm	N/A
USB	Front 1EA (USB2.0), Rear 1 (USB3.0)	
	Ext. Storage	N/A
	Serial	N/A
Reset	Switch (1EA)	
	Power Cord	Included
SYSTEM		
Log	Log List	Max. 20000 (System Log, Event Log each)
ENVIRONMENTAL		
Operating Temperature / Humidity		+0°C to +40°C (+32°F to +104°F)
	Humidity	20% ~ 85% RH
ELECTRICAL		
Power Input		54VDC / 1.67A
	Power Consumption	Max. 76.2W (1HDD, PoE on), Max. 8.1W (1HDD, PoE off)
	PoE Budget	Max. 50W
MECHANICAL		
Color / Material		Black / Metal
	Dimension (WxHxD)	W300.0 x H47.1 x D208.4 mm (1U) (11.81" x 1.85" x 8.20")
	Weight	1.01Kg (2.22 lb) (without HDD)

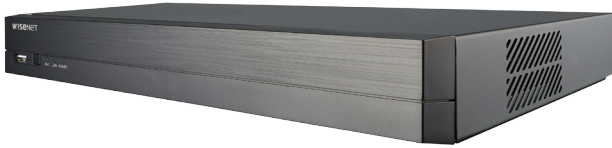
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QRN-410S

4Ch Network Video Recorder with built-in PoE Switch

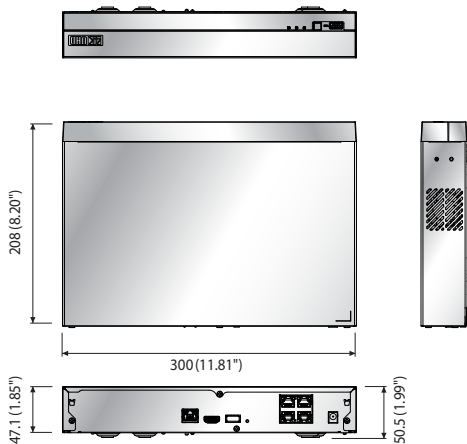


Key Features

- Up to 4ch 8megapixel supported
- H.265, H.264, MJPEG codec supported
- 40Mbps network camera recording
- Plug & play by 4 PoE ports
- Max. 1HDD supported
- HDMI local monitor
- P2P service (QR code connect) support

Dimensions

Unit : mm (inch)



QRN-410S

DISPLAY		
Network Camera	Inputs	Max. 4ch
	Resolution	CIF ~ 8MP
	Protocols	Wisenet, ONVIF (Profile-S)
Live	Local Display	1x HDMI
	Multi-Channel Display	[Local Monitor] 1 / 2H / 2V / 3V / 4 / Auto Sequence [Web] 1 / 4 / Auto Sequence
	Performance	[Local Monitor] 8MP (60fps) 5MP (90fps), 3MP (120fps), 2MP (120fps), 720p (120fps), D1 (120fps)
PERFORMANCE		
Operating System	Embedded	Linux
	Compression	H.265, H.264, MJPEG
	Recording Bandwidth	Max. 40Mbps
Record	Resolution	CIF ~ 8MP
	Type	Manual, Schedule (Continuous / Event), Event (Pre / Post)
	Event Trigger	Video Loss, Camera event (Sensor, MD, Video analytics, Defocus)
	Event Action	e-Mail, PTZ Preset, Buzzer, Monitor Out
	Playback Bandwidth	32Mbps (4ch simultaneously)
	Performance	Max. 3 Users (Local 1, Remote 3)
Search & Play	Mode	Date & Time (Calendar) / Event Log list / Text Search (POS) / ARB Search / Smart Search (Virtual Line w / direction, Enter / Exit)
	Simultaneous playback	Max. 4ch (Local, Network)
	Resolution	CIF ~ 8MP
	Fish-Eye Dewarping	N/A (processed on Web / CMS)
	Playback Control	Fast / Slow Forward / Backward, Move one step Up / Down
	Default Built-In	0 ~ 6TB
Storage	Internal	1 (Max. 6TB)
	File backup	BU / Exe (USB), JPG / AVI (Web, CMS)
	Function	Multi channel (Up to 4ch) Play, Date-Time / Title display
Sensor	I/O	N/A
	Input	4 ch (network)
	Compression	G.711, G.726, AAC (16 / 48KHz)
Audio	Audio Communication	2-Way
NETWORK		
Protocol	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	50Mbps
Max Remote Users	Search (3), Live Unicast (10), Multicast (20)	
	IP Version	IPv4 / IPv6
	Security	User access Log, IP Filtering, 802.1x, Encryption
Language	GUI	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai
	Web	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai
	OS	Windows 7, 8, 10, Mac OS X 10.9, 10.10, 10.11
Web Browser	Plug-in free web viewer	Google Chrome 47, MS Edge 20
	Plug-in Webviewer	MS Explorer 11, Apple Safari 9 (Mac OS X only)
	SSM, Webviewer, Smart Viewer, Wisenet Mobile	
Software	CMS Support	Support SDK / CGI (SUNAPI)
FUNCTIONS		
Camera Setup	Register	PnP, 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, SSDR, DIS), Fisheye Dewarping setup, Hallway View Setup, Camera Webpage
	Camera Control	PoE
Easy Configuration	Monitor PoE Power consumption, On / Off Control for each PoE camera, Remote Reset for each PoE camera	
	Setup Wizard (Date / Time, Network, Auto Camera Configuration)	
	P2P (QR code)	
ARB	Control	Yes
	Support Model	Via GUI, Webviewer, 255 preset
	Protocol Support	RTP, RTSP, HTTP, CGI (SUNAPI)
Smart phone	Live (4ch) : Multi-Profile Support, Playback (4ch), Event push	
	Search (3), Live Unicast (10), Multicast (20)	
	Max. Remote Users	
System Control		Mouse, Web
INDICATOR / INTERFACE		
Front	Indicator	LED (Status indicator) : 3ea Power Status 1, LAN 1, Record 1
	VGA	N/A
	HDMI	1 EA (3840 x 2160, 1920 x 1080, 1280 x 720)
Connectors	Audio	N/A
	Ethernet	4EA (PoE, 100Mbps) 1EA (WAN, 100Mbps) - WAN : Uplink to CMS
	Alarm	N/A
USB	Front 1EA (USB2.0), Rear 1 (USB3.0)	
	Ext. Storage	N/A
	Serial	N/A
Reset	Switch (1EA)	
	Power Cord	Included
SYSTEM		
Log		Log List
		Max. 20000 (System Log, Event Log each)
ENVIRONMENTAL		
Operating Temperature / Humidity		+0°C to +40°C (+32°F to +104°F)
Humidity		20% ~ 85% RH
ELECTRICAL		
Power Input		54VDC / 1.2A
Power Consumption		Max. 47W (1HDD, PoE on), Max. 74W (1HDD, PoE off)
PoE Budget		Max. 25W
MECHANICAL		
Color / Material		Black / Metal
Dimension (WxHxD)		W300.0 x H47.1 x D208.4 mm (1U) (11.81" x 1.85" x 8.20")
Weight		0.99Kg (2.18 lb) (without HDD)

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