

# **QRN-1610S**

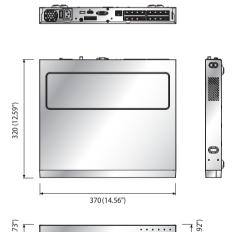
16Ch Network Video Recorder with built-in PoE Switch



#### **Key Features**

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

### **Dimensions**



Unit:mm (inch)

		QRN-1610S		
DISPLAY				
Network	Inputs	Max. 16ch		
Camera	Resolution	CIF~8MP		
	Protocols Local Display	Wisenet, ONVIF (Profile-S), RTSP 1x HDMI / 1x VGA		
Live	Multi-Channel Display	Local Monitor] 1/2H/2V/3V/4/6/8/9/13/16/Auto Sequence   Web] 1/4/9/16/Auto Sequence   [Local Monitor] 8MP (60fps)		
	Performance	5MP (90fps), 3MP (120fps), 2MP (240fps), 720p (480fps), D1 (480fps)		
PERFORMANCE				
Operating System		Linux		
	Compression Recording Bandwidth	H.265, H.264, MVPEG  Max. 128Mbps		
D I	Resolution	CIF~8MP		
Record	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 Performance	32Mbps (8ch simultaneously) Max. 3 Users (Local 1,Remote 3)		
		Date & Time (Calendar) / Event Log list / Text Search (POS) / ARB Search / Smart		
Search & Play	Mode	Search (Virtual Line w / direction, Enter / Exit)		
Searcharlay	Simultaneous playback	Max. 8ch (Local), Max 16ch (Network)		
	Resolution Fish-Eye Dewarping	CIF ~ 8MP N/A (processed on Web/CMS)		
	Playback Control	Fast/Slow Forward / Backward, Move one step Up / Down		
C1	Default Built-In	0~6TB		
Storage	Internal	2 (Max.12TB)		
Backup	File backup	BU/Exe (USB), JPG/AVI (Web, CMS)		
Sensor	Function I/O	Multi channel (Upto 16ch) Play, Date-Time / Title display  4/2 (NO 1EA. NO / NC 1EA)		
JCHOUL	Input	16 ch (network)		
Audio	Compression	G.711, G.726, AAC (16 / 48KHz)		
	Audio Communication	2-Way		
NETWORK		TCD (ID LIDD (ID DTD (LIDD) DTD (TCD) DTCD AITD LITTE DLICD (C Cl )		
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)		
		SUNAPI (Server, Client)		
DDNS	1.11	Hanwha DDNS, 3rd party DDNS		
Transmission Ba Max Remote Us		128Mbps   Search (3), Live Unicast (10), Multicast (20)		
IP Version	ers	Pv4/Pv6		
Security		User access Log, IP Filtering, 802.1x, Encryption		
		English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish,		
	GUI	Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai		
Language		Finalish, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish,		
	Web	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		
		Plug-in free web viewer: Google Chrome 47, MS Edge 20		
Web Browser	_	Plug-in Webviewer: MS Explorer 11, Apple Safari 9 (Mac OS X only)		
Viewer	Type	SSM, Webviewer, Smart Viewer, Wisenet Mobile Support SDK / CGI (SUNAPI)		
Software FUNCTIONS	CMS Support	Support SDK/ CGI (SUNAPI)		
TONCTIONS	Register	PnP, Manual		
	ricgister	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD		
Camera Setup	Setup Items	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	Monitor PoE Power consumption, On / Off Control for each PoE camera, Remote   Reset for each PoE camera		
Easy Configurat	ion	Setup Wizard (Date / Time, Network, Auto Camera Configuration),		
		P2P (QR code)		
ARB PTZ	Control	Yes Via GUI, Webviewer, 255 preset		
1 14	Support Model	iOS, Android		
Smart phone	Protocol Support	RTP, RTSP, HTTP, CGI (SUNAPI)		
Smart prione	Control	Live (16ch): Multi-Profile Support, Playback (4ch), Event push		
	Max. Remote Users	Search (3), Live Unicast (10), Multicast (20)		
System Control INDICATOR/IN	TEREACE	Mouse, Web, IR Remote control		
		LED (Status indicator) : 6ea		
Front	Indicator	HDD action 1, Alarm 1, Power 1, Record 1, Backup 1, Network1		
	VGA	1EA (1920x1080, 1280x720), supports Live, Playback, Setup,		
	HDMI Audio	1EA (3840 x 2160, 1920x1080, 1280x720), supports Live, Playback, Setup Out (1EA, RCA, Line)		
Connectors		16FA (PoF 100Mbps)		
	Ethernet	1EA (WAN, 1Gbps) - WAN: Uplink to CMS/LAN		
	Alarm	In (4EA, Terminal Block) / Out (2EA, Terminal Block)		
	USB Ext. Storage	Front 2EA (USB2.0), Rear 1 (USB3.0)		
	Serial	IVA IVA		
	Reset	Switch (1EA)		
	Power Cord	Included		
SYSTEM Log Log List Max. 20000 (System Log, Event Log each)				
Log ENVIRONMENT		i man, 20000 (bystern Eug., Everit Eug edCit)		
Operating Temperature / Humidity +0°Cto +40°C (+32°F to +104°F)				
Lumidity		200/ 050/ DLI		

- Color/Material Dimension (WxHxD) Weight 2.79Kg (6.15 lb) (without HDD) \*The lastest product information / specification can be found at hanwhasecurity.com
  \* Design and specifications are subject to change without notice.
  \* Wisenet is the proprietary brand of Hanwha Techwin

Humidity ELECTRICAL Power Input Power Consumption

PoE Budget
MECHANICAL

100 to 240 VAC ±10% Max. 158.2W (2HDDs, PoE on), Max. 34.6W (2HDDs, PoE off)

Black/Metal W370.0×H44.0×D320 mm (1U) (14.56" x 1.73" x 12.59")



# **QRN-810S**

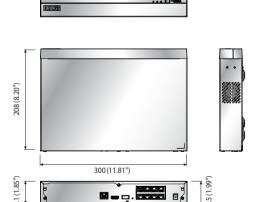
8Ch Network Video Recorder with built-in PoE Switch



#### **Key Features**

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

#### **Dimensions**



Unit:mm (inch)

DICDI ATT		QRN-810S
DISPLAY	The sector	AA. O.L.
Network	Inputs	Max.8ch
Camera	Resolution Protocols	CIF ~ 8MP Wisenet, ONVIF (Profile-S), RTSP
	Local Display	1xHDMI
	' '	[Local Monitor] 1/2H/2V/3V/4/6/8/Auto Sequence
Live	Multi-Channel Display	[Web] 1/4/8/Auto Sequence
	Performance	[Local Monitor] 8MP (60fps)
PERFORMANC	E	5MP (90fps), 3MP (120fps), 2MP (240fps), 720p (240fps), D1 (240fps)
Operating System		Linux
Operating system	Compression	H.265, H.264, MJPEG
	Recording Bandwidth	Max. 80Mbps
Record	Resolution	CIF~8MP
necora	Туре	Manual, Schedule (Continuous / Event), Event (Pre / Post)
	Event Trigger	Video Loss, Camera event (Sensor, MD, Video analytics, Defocus)
	Event Action Playback Bandwidth	e-Mail, PTZ Preset, Buzzer, Monitor Out 32Mbps (8ch simultaneously)
	Performance	Max. 3 Users (Local 1, Remote 3)
		Date & Time (Calendar), Event Log list, Text Search (POS), ARB Search,
Search & Play	Mode	Smart Search (Virtual Line w / direction, Enter / Exit)
Searcharlay	Simultaneous playback	Max. 8ch (Local, Network)
	Resolution	CIF~8MP
	Fish-Eye Dewarping Playback Control	N/A (processed on Web / CMS) Fast / Slow Forward / Backward, Move one step Up / Down
-	Default Built-In	0~6TB
Storage	Internal	1 (Max.6TB)
Backup	File backup	BU / Exe (USB), JPG / AVI (Web, CMS)
<u>'</u>	Function	Multi channel (Upto 8ch) Play, Date-Time / Title display
Sensor	1/0	N/A
Audio	Input Compression	8 ch (network) G.711, G.726, AAC (16 / 48KHz)
Addio	Audio Communication	2-Wav
NETWORK		
		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),
Protocol		PPPOE, SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S),   SUNAPI (Server, Client)
DDNS		Hanwha Security DDNS
Transmission Ba	andwidth	80Mbps
Max Remote Users		Search (3), Live Unicast (10), Multicast (20)
IPVersion		IPv4/IPv6
Security		User access Log, IP Filtering, 802.1x, Encryption
	GUI	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish,
Languago		Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai
Language	147.1	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish,
	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)
	-	Plug-in Webviewer: MS Explorer 11, Apple Safari 9 (Mac OS X only)
Viewer Software	Type CMS Support	Wisenet WAVE, SSM, Webviewer, Smart Viewer, Wisenet Mobile viewer Support SDK/CGI (SUNAPI)
FUNCTIONS	Civis support	Тафротавту Сагаотил Гу
TORCHORS	Register	PnP, Manual
-	J	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup
Camera Setup	Setup Items	Camera video setup (Simple focus Brightness / Contrast Flin / Mirror IRIS WDR
		DRN, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping setup, Hallway View Setup, Camera Webpage
C C	I D-Г	Monitor PoE Power consumption. On / Off Control for each PoE camera. Remote
Camera Contro	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		Yes
	Control	Via GUI, Webviewer, 255 preset
	Support Model	iOS, Android
Smart phone	Protocol Support	RTP, RTSP, HTTP, CGI (SUNAPI)
	Control	Live (8ch): Multi-Profile Support, Playback (4ch), Event push
Curtom Cart	Max. Remote Users	Search (3), Live Unicast (10), Multicast (20)  Mouse, Web, IR Remote control
System Control INDICATOR/IN	ITEREΔCE	iviouse, vved, ix kemote control
		LED (Status indicator): 3ea
Front	Indicator	Power Status 1, LAN 1, Record 1
	VGA	N/A
	HDMI	1 EA (3840 x 2160, 1920x1080, 1280x720)
	Audio	N/A
	Ethernet	8EA (PoE, 100Mbps) 1EA (WAN, 1Gbps) - WAN : Uplink to CMS/LAN
Connectors	Alarm	N/A

Front 1EA (USB2.0), Rear 1 (USB3.0) N/A

Max. 20000 (System Log, Event Log each) +0°C to +40°C (+32°F to +104°F) 20% ~ 85% RH

54V DC / 1.67A Max. 76.2W (1HDD, PoE on), Max. 8.1W (1HDD, PoE off) Max. 50W

Black/Metal W300.0xH47.1xD208.4mm (1U) (11.81"x1.85"x8.20")

Switch (1EA)

1.01 Kg (2.22 lb) (without HDD) \*The lastest product information / specification can be found at hanwhasecurity.com
\* Design and specifications are subject to change without notice.
\* Wisenet is the proprietary brand of Hanwha Techwin

SYSTEM

ELECTRICAL Power Input Power Consumption

PoE Budget
MECHANICAL Color / Material

Dimension (WxHxD)

USB Ext. Storage Serial Reset

Power Cord

Log LogList
ENVIRONMENTAL
Operating Temperature / Humidity
Humidity



# **QRN-410S**

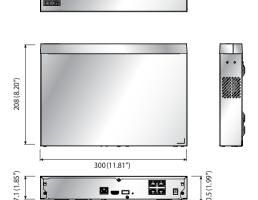
4Ch Network Video Recorder with built-in PoE Switch



#### **Key Features**

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

### **Dimensions**



Unit:mm (inch)

		ORN-4105
DISPLAY		Qniv-4103
	Inputs	Max.4ch
Network	Resolution	CIF~8MP
Camera	Protocols	Wisenet, ONVIF (Profile-S), RTSP
	Local Display	1x HDMI
Live	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)
PERFORMANC		
Operating System		Linux
	Compression	H.265, H.264, MJPEG
	Recording Bandwidth	Max.40Mbps
Record	Resolution	CIF~8MP
11000101	Туре	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 Performance	32Mbps (4ch simultaneously) Max. 3 Users (Local 1,Remote 3)
	Periormance	Date 8. Time (Calendar) / Event Log list / Toxt Search (BOS) / APP Search / Smart
Search & Play	Mode Simultaneous playback	Date & Time (Calendar) / Event Log list / Text Search (POS) / ARB Search / Smart Search (Virtual Line w/ direction, Enter / Exit)   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)
D. J.	File backup	BU / Exe (USB), JPG / AVI (Web, CMS)
Backup	Function	Multi channel (Upto 4ch) Play, Date-Time / Title display
Sensor	I/O	N/A
	Input	4ch (network)
Audio	Compression	G.711, G.726, AAC (16/48KHz)
	Audio Communication	2-Way
NETWORK		TCD (ID LIDD (ID DTD (IDD) DTD (TCD) DTCD AITD LITTD DLICD (C Cl )
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 DDNS, 3rd party DDNS
Transmission Ba	andwidth	50Mbps
Max Remote Us	sers	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)
Viewer	Туре	Wisenet Wave, SSM, Webviewer, Smart Viewer, Wisenet Mobile viewer
Software	CMS Support	Support SDK/CGI (SUNAPI)
FUNCTIONS	In the	
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 Contro	I 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	C	Yes
PTZ	Control	Via GUI, Webviewer, 255 preset

PIZ	Control	Via GUI, Webviewer, 255 preset
Smart phone	Support Model	iOS, Android
	Protocol Support	RTP, RTSP, HTTP, CGI (SUNAPI)
	Control	Live (4ch): Multi-Profile Support, Playback (4ch), Event push
	Max. Remote Users	Search (3), Live Unicast (10), Multicast (20)
System Control		Mouse, Web
INDICATOR/II	NTERFACE	
Front	Indicator	LED (Status indicator) : 3ea Power Status 1, LAN 1, Record 1
	VGA	N/A
	HDMI	1 EA (3840 x 2160, 1920x1080, 1280x720)
	Audio	N/A
	Ethernet	4EA (PoE, 100Mbps) 1EA (WAN, 100Mbps) - WAN : Uplink to CMS/LAN
Connectors	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)
ENVIRONMEN	ITAL	
Operating Temperature / Humidity		+0°C to +40°C (+32°F to +104°F)
Humidity		20%~85%RH
FLECTRICAL		

54V DC / 1.2A Max. 47W (1HDD, PoE on), Max. 7.4W (1HDD, PoE off)

Black/Metal W300.0xH47.1xD208.4mm (1U) (11.81"x1.85"x8.20")

- 0.99Kg (2.18 lb) (without HDD) \*The lastest product information / specification can be found at hanwhasecurity.com
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ELECTRICAL Power Input Power Consumption

PoE Budget
MECHANICAL Color / Material Dimension (WxHxD)