

QRN-1610S

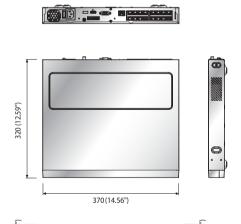
16Ch Network Video Recorder with built-in PoE Switch



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)

GUI Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai			QRN-1610S
Network Neisolution (FF-8MP protocols local Display Whene) (MMF Birdille S)	DISPLAY		
Pentocols Wisenet CANF (Profiles) Local (Annitor) 17.24 / 27.75 27.47 / 27.47			
Live Multi-Channel Display Performance (IXCE) 1.721/2.731/4.16/8.19/13/16/Auto Sequence (IXCE) 1.721/2.16/Auto Sequence (IXCE)	Camera		
Live Month Total		Local Display	1xHDMI/1xVGA
Performance Blood Monitor SMP (600ps) 3MP (120fss) 2MP (240fss) 720p (480fps). Di (480fps) Coperating Systems Christodeld	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
PERFORMANCE Operating System Embedded Compression Compression Record B Reco		Performance	[Local Monitor] 8MP (60fps)
Operating System Embedded Linux	PERFORMANCE		5MP (90tps), 3MP (120tps), 2MP (240tps), 720p (480tps), D1 (480tps
Record Backubin Manual, Scheduler (Continuous Fivent), Event (Pre / Post)			Linux
Record Resolution CF-8MP Event Trigger Event Action Flyshock Bandwidth Paylock Bandwidth Physica Bandwidth Resolution Flyshock Bandwidth Resolution Flyshock Bandwidth Flyshock Bandwidt			
Fivent Trigger — Alamm Input (A) Mideo Loss Camera event (Secons, MD) Mideo analytics, Defocus) Event Action — Alamm Input (A) Mideo Loss Camera event (Secons, MD) Mideo analytics, Defocus) — Event Action — Alamm Input (A) Mideo Loss Camera event (Secons, MD) Mideo analytics, Defocus) — Event Action — Max 3 Mideo (Secons) — Max 3 Mideo (Secon	D I		
Event Action Palyadack Bandwidth Palyadack Bandwidth Performance Max 3 Users (Local) Permote Max 3 Users (Local) Permote Search & Play Simultaneous playback Resolution Fish-Eye Dewarping Fish-Eye Dewar	Record	Туре	Manual, Schedule (Continuous / Event), Event (Pre / Post)
Playback Bandwidth Playback Bandwidth Performance Max 3 Users (Coal) Pierwite () Search (POS) / ARB Search			Alarm Input (4), Video Loss, Camera event (Sensor, MD, Video analytics, Defocus)
Search & Play Simultaneous playback Search (Fire ILL Dead) / Event Log Ist / Text Search (FOS) / ARB Search / Smart Search (Fire Ill Line vol direction, Enter / East Search (Fire Ill Line vol direction, Enter / East Search (Fire Ill Line vol direction, Enter / East Search (Fire Ill Line vol direction) Fish f-ye Devarping Fis			
Search & Play Simultaneous playback Resolution Fish-Fye Devarping Fish		Performance	
Storage Playback Control Polyback Control Polyback Control Playback Control Polyback Contro	Casuala O Dia	Mode	
Fish-Eye Dewarping Payback Control Fast Skow Forward / Backward, Move one step Up / Down Default built-in Default-in D	Search & Play		Max. 8ch (Local), Max 16ch (Network)
Playback Control Foreign Internal Foreig			
Internal 2 (Max 12TB)		Playback Control	Fast/Slow Forward / Backward, Move one step Up / Down
File backup	Storage		
Sensor I/O 4/2 (NO 15A NO/NCE) 1726 AAC (16/48) Hz) Audio Compression (G711, G726, AAC (16/48) Hz) Audio Compression (G711, G726, AAC (16/48) Hz) Audio Compression (G711, G726, AAC (16/48) Hz) NETWORK Protocol PPPGE SMTP, I/OPP, I/	D. J		
Input	· · · · · · · · · · · · · · · · · · ·		Multi channel (Upto 16ch) Play, Date-Time / Title display
Audio Communication Audio	Sensor		
NETWORK	Audio		
Protocol Pro	NETWORK	Audio Communication	2-Way
DDNS Hamwha Security DDNS Transmission Bandwidth 128MDps Max Remote Users Park Pive	NETWORK		TCP / IP LIDP / IP RTP (LIDP) RTP (TCP) RTSP NTP HTTP DHCP (Server Client)
DDNS Hamwha Security DDNS Transmission Bandwidth 128Mpps Max Remote Users Search (3), Live Unicast (10), Multicast (20) IPVersion Security Search (3), Live Unicast (10), Multicast (20) IPVersion IPV4 (1PV6 Security GUI Language GUI Language 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 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 Windows 7, 8), 10 Mac OS X109, 1010, 1011 Web Browser Web Pug-in-free web viewer: Google Chrome 47, MS Edge 20 Plug-in-free web viewer: Google Chrome 47, MS Edge 20 Plug-in-free web viewer: MS Explored 11, Apple Safari 91(Mac OS X only) Viewer Software GMS Support Support Support Support SUS/CG (SUNAP) Register Ph.P. Manual Register Register Ph.P. Manual Register Register Setup Iter developed the proper	Protocol		PPPOE, SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S
Transmission Bandwidth Max Remote Users Search (3), Live Unicast (10), Multicast (20) IPv4 / IPv6 Security Security User access Log Priltering, 80.21x, Encryption Inpulsh French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, IPani, Prophysion, P	DDNS		SUNAPI (Server, Client) Hanwha Security DDNS
IPVersion IPve/I/Pv6 IPversion IPve/I/Pv6 Security User access Log. Priltering, 802.1x, Encryption User access Log. Priltering, 802.1x, Encryption Capital Principle C	Transmission Ba		128Mbps
Security		ers	
GUI Czech, Portuguese, Danish, Rumaniana, Serbian, Croatian, Hungafian, Greek, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai English, French, German, Italian, Spanish, Russain, Turkish, Polish, Dutch, Swedish, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai English, French, German, Italian, Spanish, Russain, Turkish, Polish, Dutch, Swedish, Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai Pulug-in Freweb weiver: Google Chrome 47, MS Edge 20 Pulug-in Webviewer: SSX 109, 10.10, 10.11 Plug-in frewe web weiver: Google Chrome 47, MS Edge 20 Plug-in Webviewer: MS Explorer 11, Apple Safari 9 (Mac OS X only) Web Browser Viewer Software CMS Support Register Ph.P. Manual Paddress, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup, Camera video setup, Simple focus, Brightness / Contrast, Flip / Mirror, IRIS, WDR, D8N, SSNR, Shutter, SSDR, DSI, Pisheye Dewarping setup, Hallway View Setup, Camera video setup, Simple focus, Brightness / Contrast, Flip / Mirror, IRIS, WDR, D8N, SSNR, Shutter, SSDR, DSI, Pisheye Dewarping setup, Hallway View Setup, Camera video setup, Stranger			
Language Web Web Common Italian Spanish, Korean, Chinese (Simplified), Japanèse, Thái Dutch, Swedish Czech, Portuguese, Danish, Rusnan, Turkish, Polish, Dutch, Swedish, Norwegian, Finnish, Korean, Chinienese (Simplified), Japanèse, Thái Oxeek, Norwegian, Finnish, Korean, Chinienese (Simplifiede), Japanèse, Thái Windows 7, 8, 10, Mac OS X 10, 9, 10, 10, 10, 11 Web Browser Web Browser Type Software Type Software CMS Support Register PPI, Manual Paddress, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD Setup Items Register PPP, Manual Paddress, 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, DS), Fisheye Dewarping setup, Hallway View Setup, Camera video setup (Simple focus, Brightness) Contrast, Flip / Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DS), Fisheye Dewarping setup, Hallway View Setup, Camera video setup (Simple focus, Brightness) Contrast, Flip / Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DS), Fisheye Dewarping setup, Hallway View Setup, Camera video setup (Simple focus, Brightness) Contrast, Flip / Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DS), Fisheye Dewarping setup, Hallway View Setup, Camera video setup (Simple focus, Brightness) Contrast, Flip / Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DS), Fisheye Dewarping setup, Hallway View Setup, Camera video setup (Simple focus, Brightness) Contrast, Flip / Mirror, IRIS, Publicated (Simple focus, Brightness) Contrast, Flip / Mirror, IRIS, Publicated (Simple focus, Brightness) Contrast, Flip / Mirror, IRIS, Publicated (Simple focus, Brightness) Contrast, Flip / Mirror, IRIS, Publicated (Simple focus, Brightness) Contrast, Flip / Mirror, IRIS, Publicated (Simple focus, Brightness) Contrast, Flip / Mirror, IRIS, Publicated (Simple focus, Brightness) Contrast, Flip / Mirror, IRIS, Publicated (Simple focus, Brightness) Contrast, Flip / Mirror, IRIS, Publicated (Simple focus, Brightness) Contrast, Flip / Mirror	,	CIII	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish
English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish	Languago	GUI	Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai
Windows 7,8,10, Mac OS X 109, 10,10 10,11 Web Browser Viewer Diug-in free web viewer: Google Chrome 47, MS Edge 20 Plug-in Mebviewer: MS Explorer 11, Apple Safari 9 (Mac OS X only) Software CMS Support Register Setup Items Register PP., Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup, Camera Video setup, (Simple focus, Brightness / Contrast, Flip / Mirror, IRIS, WOR, 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 Setup Wizard (Date / Time, Network, Auto Camera Configuration), P2P (OR code) Protocol Support System Control Max. Remote Users System Control INDICATOR / INTERFACE Front Indicator	Language	Woh	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish,
Windows 7,8,10, Mac OS X 109, 10,10 10,11 Web Browser Viewer Diug-in free web viewer: Google Chrome 47, MS Edge 20 Plug-in Mebviewer: MS Explorer 11, Apple Safari 9 (Mac OS X only) Software CMS Support Register Setup Items Register PP., Manual IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup, Camera Video setup, (Simple focus, Brightness / Contrast, Flip / Mirror, IRIS, WOR, 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 Setup Wizard (Date / Time, Network, Auto Camera Configuration), P2P (OR code) Protocol Support System Control Max. Remote Users System Control INDICATOR / INTERFACE Front Indicator		vveo	Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai
Plugi-in Webviewer, IMS Exploirer 11, Apple Safari 9 (Mac OS X only) Viewer	OS		Windows 7, 8, 10, Mac OS X 10.9. 10.10. 10.11
Viewer Type SSM, Webviewer, Smart Viewer, Wisenet Mobile Software CMS Support Support SDK / CG (SUNAPI)	Web Browser		Plug-in Webviewer: MS Explorer 11, Apple Safari 9 (Mac OS X only)
FUNCTIONS Register			SSM, Webviewer, Smart Viewer, Wisenet Mobile
Camera Setup Setup Items		Сіліз эпррогі	эфронзык/ санзанагі)
Setup Items Setup Setup Setup Setup Setup Setup, Camera video setup (Simple focus, Brightness / Control NDR Setup, Camera Webpage Monitor PoE Power consumption, On / Off Control for each PoE camera, Remote Reset for each PoE camera Webpage 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 (OR code) ARB Yes PTZ Control Via GUI, Webviewer, 255 preset Support Model Phone, 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) Mouse, Web., RRemote control INDICATOR / INTERFACE Front Indicator LED (Status indicator): Sea HDD action 1, Alarm 1, Power 1, Record 1, Backup 1, Network1 IEA (3840 x 2160, 1920x 1080, 1280x 720) Audio Out (1EA, RCA, Line) IEA (4840 x 2160, 1920x 1080, 1280x 720) Connectors IEA (WAN, 1Gbps) - WAN: Uplink to CMS IEA (4870x 1640, 1920x 1080, 1920x 1080x 108		Register	
Setup, Camera Webpage	Camera Setup	C	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup, Camera video setup (Simple focus, Brightness / Contrast Flip / Mirror, IRIS)
Monitor PoE Power consumption, On / Off Control for each PoE camera	carriera se cap	Setup Items	WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping setup, Hallway View
Easy Configuration Easy Configuration Setup Wizard (Date / Time, Network, Auto Camera Configuration), P2P (QR code) ARB Yes PTZ Control Via GUI, Webviewer, 255 preset Support Model Phone, Android IPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Control Live (Tech): Multi-Profile Support, Playback (4ch), Event push Max. Remote Users System Control Max. Remote Users System Control Indicator Indicator Indicator Indicator LED (Status indicator): 6ea HDD action 1, Alarm 1, Power 1, Record 1, Backup 1, Network1 VGA IEA (1920x1080, 1280x720) HDMI 1EA (3840 x 2160, 1920x1080, 1280x720) Audio Out (1EA, RCA, Line) Ethernet IEA (WAN, 16pps)- WAN; Uplink to CMS IEA (WAN), 16pps)- WAN; Uplink to CMS 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 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 Dimension (WxHxD) W3700 x H44.0 x D320 mm (1U) (14.56" x 1.73" x 12.59")	C	D. F.	
P2P (QR code)	Camera Control	POE	Reset for each PoE camera
ARB	Easy Configurat	ion	Setup Wizard (Date / Time, Network, Auto Camera Configuration) , P2P (OR code)
Support Model			Yes
Protocol Support Control Live (166h): Multi-Profile Support, Playback (4ch), Event push Max. Remote Users Search (3), Live Unicast (10), Multicast (20)	PTZ		
Max.Remote Users Search (3), Live Unicast (10), Multiricast (20)	Consut whoma		RTP, RTSP, HTTP, CGI (SUNAPI)
Mouse, Web, IR Remote control INDICATOR / INTERFACE	Smart prione		
Indicator	System Control	ıvıax. Kemote Users	
HDDaction 1, Alarm 1, Power 1, Record 1, Backup 1, Network1		TERFACE	
VGA	Front	Indicator	
HDMI		VGA	
Ethernet		HDMI	1EA (3840 x 2160, 1920x1080, 1280x720)
Connectors			
Connectors			1EA (WAN, 1Gbps)'- WAN : Uplink to CMS
Ext. Storage	Connectors		In (4EA, Terminal Block) / Out (2EA, Terminal Block)
Serial N/A Reset Switch (1EA) Power Cord Included			
Power Cord Included		Serial	N/A
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 Nax. 158.2W (2HDDs, PoE on), Max. 34.6W (2HDDs, PoE off) Poeb 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")			
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 100 to 240 VAC ±10% Power Input 100 to 240 VAC ±10% Power Consumption Max. 188.2W (2HDDs, PoE on), Max. 34.6W (2HDDs, PoE off) PoE Budget Max. 100W MECHANICAL Color / Material Color / Material Black / Metal Dimension (WxHxD) W370.0 x H44.0 x D320 mm (1U) (14.56" x 1.73" x 12.59")	SYSTEM	1 OVVCI COIU	Included
Operating Temperature / Humidity +0°C to +40°C (+32°F to +104°F) Humidity 20% ~ 85% RH ELECTRICAL Power Input Power Onsumption Max 158.2W (2HDDs, PoE on), Max, 34.6W (2HDDs, PoE off) PoE Budget Max 100W MECHANICAL Color / Material Dimension (WxHxD) W370.0x H44.0x D320 mm (1U) (14.56"x 1.73"x 12.59")	Log		Max. 20000 (System Log, Event Log each)
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 Dimension (WxHxD) W370.0 x H44.0 x D320 mm (1U) (14.56" x 1.73" x 12.59")			10°C to 140°C (123°E to 1104°E\
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 Dimension (WxHxD) W370.0x H44.0x D320 mm (1U) (14.56"x 1.73"x 12.59")		perature / Humidity	
Power Consumption Max. 158.2W (2HDDs, PoE on), Max. 34.6W (2HDDs, PoE off) PoE Budget Max. 100W MECHANICAL Color / Material Dimension (WxHxD) Black / Metal Ux370.0 x H44.0 x D320 mm (1U) (14.56" x 1.73" x 12.59")			1 2070 - 03701111
PoE Budget Max. 100W MECHANICAL Color / Material Black / Metal Dimension (WxHxD) W370.0x H44.0x D320 mm (1U) (14.56"x 1.73"x 12.59")			
MECHANICAL Color / Material Black / Metal Dimension (WxHxD) W370.0 x H44.0 x D320 mm (1U) (14.56" x 1.73" x 12.59")		otion	
Color / Material Black / Metal Dimension (WxHxD) W370.0 x H44.0 x D320 mm (1U) (14.56" x 1.73" x 12.59")			Max I I I I I I I I I I I I I I I I I I I
	PoE Budget		Max. 100vv
	PoE Budget MECHANICAL Color/Material		Black/Metal

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

 * Design and specifications are subject to change without notice.

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





QRN-810S

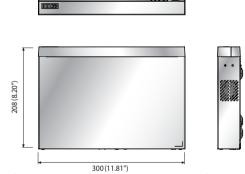
8Ch Network Video Recorder with built-in PoE Switch



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
Inputs	Max 8ch
Resolution	CIF~8MP
Protocols	Wisenet, ONVIF (Profile-S)
Local Display	1xHDMI
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
	3MP (901ps), 3MP (1201ps), 2MP (2401ps), 720p (2401ps), D1 (2401ps
	Linux
Compression	H.265, H.264, MJPEG
	Max.80Mbps
	CIF ~ 8MP Manual, Schedule (Continuous / Event), Event (Pre / Post)
	Video Loss, Camera event (Sensor, MD, Video analytics, Defocus)
Event Action	e-Mail, PTZ Preset, Buzzer, Monitor Out
	32Mbps (8ch simultaneously)
	Max. 3 Users (Local 1,Remote 3) Date & Time (Calendar), Event Log list, Text Search (POS), ARB Search,
Mode	Smart Search (Virtual Line w/direction, Enter/Exit)
Simultaneous playback	Max. 8ch (Local, Network)
	CIF~8MP
	N/A (processed on Web/CMS) Fast/Slow Forward / Backward, Move one step Up / Down
Default Built-In	0~6TB
Internal	1 (Max.6TB)
File backup	BU/Exe (USB), JPG/AVI (Web, CMS) Multi-chapped (Lipto Sch) Play Data Time / Title display
	Multi channel (Upto 8ch) Play, Date-Time / Title display N/A
Input	8 ch (network)
Compression	G.711, G.726, AAC (16 / 48KHz)
Audio Communication	2-Way
	TCP/IP LIDP/IP RTP (LIDP) RTP (TCP) RTSP NTP HTTP DHCP (Sen/or Cliant)
	TCP / IP, UDP / IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server, Client), PPPG, SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S
	SUNAPI (Server, Client)
ndwidth	Hanwha Security DDNS 80Mbps
	Search (3), Live Unicast (10), Multicast (20)
	IPv4/IPv6
	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
Weh	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Swedish, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek,
WCD	Norwegian, Finnish, Korean, Chinese (Simplified), Japanese, Thai
	Windows 7, 8, 10, Mac OS X 10.9. 10.10. 10.11
	Plug-in free web viewer : Google Chrome 47, MS Edge 20 Plug-in Webviewer : MS Explorer 11, Apple Safari 9 (Mac OS X only)
Туре	SSM, Webviewer, Smart Viewer, Wisenet Mobile
CMS Support	Support SDK / CGI (SUNAPI)
Register	PnP, Manual
negistei	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setus
Setup Items	P address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setur, Camera video setup (Simple focus, Brightness / Contrast, Flip / Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping setup, Hallway View Setup,
to proceedings	D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping setup, Hallway View Setup, Camera Webpage
PoF	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)
on	P2P (QR code)
C11	Yes
(ontrol	LVID L-LU Mobusowor 155 procet
Control Support Model	Via GUI, Webviewer, 255 preset
Support Model	iPhone, Android
Support Model Protocol Support Control	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push
Support Model Protocol Support	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20)
Support Model Protocol Support Control Max. Remote Users	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push
Support Model Protocol Support Control Max. Remote Users	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20)
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1
Support Model Protocol Support Control Max. Remote Users IERFACE Indicator VGA	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1EA (3840 x 2160, 1920x1080, 1280x720)
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1 EA (3840 x 2160, 1920x1080, 1280x720) N/A
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (PoE, 100Mbps) 1EA (WAN, I Gbps) - WAN: Uplinkto CMS
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet Alarm	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1 EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (POE, 100Mbps) 1EA (WAN, 1Gbps)-WAN: Uplinkto CMS N/A
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (PoE, 100Mbps) 1EA (WAN, I Gbps) - WAN: Uplinkto CMS
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet Alarm USB	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (POE, 100Mbps) 1EA (WAN, 1Gbps) - WAN: Uplinkto CMS N/A Front 1EA (USB2.0), Rear 1 (USB3.0) N/A N/A
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet Alarm USB Ext. Storage Sexial Reset	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (POE, 100Mbps) 1EA (WAN, 1Gbps) - WAN: Uplink to CMS N/A Front 1EA (USB2.0), Rear 1 (USB3.0) N/A N/A N/A N/A Switch (1EA)
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet Alarm USB Ext. Storage Serial	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (POE, 100Mbps) 1EA (WAN, 1Gbps) - WAN: Uplinkto CMS N/A Front 1EA (USB2.0), Rear 1 (USB3.0) N/A N/A
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet Alarm USB Ext. Storage Serial Reset Power Cord	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (POE, 100Mbps) 1EA (WAN, 1Gbps) - WAN: Uplink to CMS N/A Front 1EA (USB2.0), Rear 1 (USB3.0) N/A N/A N/A N/A Switch (1EA)
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet Alarm USB Ext. Storage Sexial Reset	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (PoE, 100Mbps) 1EA (WAN, I Gbps)- WAN: Uplink to CMS N/A Front 1EA (USB2.0), Rear 1 (USB3.0) N/A N/A N/A Switch (1EA) Included
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet Alarm USB Ext. Storage Serial Reset Power Cord Log List	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (PoE, 100Mbps) 1EA (WAN, IGbps)- WAN: Uplink to CMS N/A Front 1EA (USB2.0), Rear 1 (USB3.0) N/A Switch (1EA) Included Max 20000 (System Log, Event Log each) +0°C to +40°C (+32°F to +104°F)
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet Alarm USB Ext. Storage Serial Reset Power Cord Log List AL	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1 EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (PoE, 100Mbps) 1EA (WAN, 1Gbps) - WAN: Uplink to CMS N/A Front 1EA (USB2.0), Rear 1 (USB3.0) N/A Switch (1EA) Included Max 20000 (System Log, Event Log each)
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet Alarm USB Ext. Storage Serial Reset Power Cord Log List AL	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (POE, 100Mbps) 1EA (WAN, 1Gbps)-WAN: Uplink to CMS N/A Front 1EA (USB2.0), Rear 1 (USB3.0) N/A Switch (1EA) Included Max 20000 (System Log, Event Log each) +0°C to +40°C (+32°F to +104°F) 20%~85% RH
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet Alarm USB Ext. Storage Serial Reset Power Cord Log List AL erature / Humidity	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1 EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (PoE, 100Mbps) 1EA (WAN, 1Gbps)-WAN: Uplink to CMS N/A Front 1EA (USB2.0), Rear 1 (USB3.0) N/A N/A N/A Switch (1EA) Included Max 20000 (System Log, Event Log each) +0°C to +40°C (+32°F to +104°F) 20% ~ 85% RH
Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet Alarm USB Ext. Storage Serial Reset Power Cord Log List AL	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (POE, 100Mbps) 1EA (WAN, 1Gbps)-WAN: Uplink to CMS N/A Front 1EA (USB2.0), Rear 1 (USB3.0) N/A Switch (1EA) Included Max 20000 (System Log, Event Log each) +0°C to +40°C (+32°F to +104°F) 20%~85% RH
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Support Model Protocol Support Control Max. Remote Users FERFACE Indicator VGA HDMI Audio Ethernet Alarm USB Ext. Storage Serial Reset Power Cord Log List AL erature / Humidity	iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (8ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web, IR Remote control LED (Status indicator): 3ea Power Status 1, LAN 1, Record 1 N/A 1EA (3840 x 2160, 1920x1080, 1280x720) N/A 8EA (PoE, 100Mbps) 1EA (WAN, 1Gbps)-WAN: Uplinkto CMS N/A Front 1EA (USB2.0), Rear 1 (USB3.0) N/A N/A Switch (1EA) Included Max. 20000 (System Log, Event Log each) 40°C to +40°C (+32°F to +104°F) 20%~85% RH S4V DC/ 1.67A Max. 76.2W (1HDD, PoE on), Max. 8.1W (1HDD, PoE off)
	Local Display Multi-Channel Display Performance Embedded Compression Recording Bandwidth Resolution Type Event Trigger Event Action Playback Bandwidth Performance Mode Simultaneous playback Resolution Fish-Eye Dewarping Playback Control Default Built-In Internal File backup Function I/O Input Compression Audio Communication GUI Web Type CMS Support Register Setup Items PoE

- Black/Metal | W300.0×H47.1×D208.4 mm (1U) (11.81" x 1.85" x 8.20") | 1.01Kg (2.22 lb) (without HDD)
- *The lastest product information / specification can be found at hanwha-security.com

 * Design and specifications are subject to change without notice.

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





ORN-410S

4Ch Network Video Recorder with built-in PoE Switch

DISPLAY

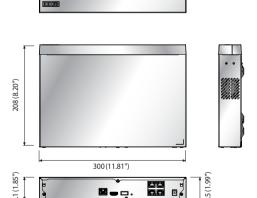
Unit:mm (inch)



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 (OR code connect) support

Dimensions



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Inputs Max.4ch CIF ~ 8MF Network Resolution Wisenet, ONVIF (Profile-S)

1x HDMI Camera Protocols Local Display [Local Monitor] 1/2H/2V/3V/4/Auto Sequence Multi-Channel Display | Web|1/4/AutoSequence |Local Monitor| 8MP (60fps) | 5MP (90fps), 3MP (120fps), 2MP (120fps), 720p (120fps), D1 (120fps) Live Performance PERFORMANCE Operating System Embedded Linux H.265, H<u>.264, MJPEG</u> Compression Recording Bandwidth Max. 40Mbps Resolution TF~8MP Record Manual, Schedule (Continuous / Event), Event (Pre / Post) Type Video Loss, Camera event (Sensor, MD, Video analytics, Defocus) e-Mail, PTZ Preset, Buzzer, Monitor Out Event Trigger Event Action Playback Bandwidth erwain, 17 a riesec, buzzer, mornitor out 32Mbps (4ch simultaneously) Max 3 Users (Local 1, Remote 3) Date & Time (Calendar) / Event Log list / Text Search (POS) / ARB Search / Smart Performance Mode bearch (Virtual Line w/direction, Enter/Exit) Search & Play Max. 4ch (Local, Network)
CIF ~ 8MP Simultaneous playback Resolution
Fish-Eye Dewarping
Playback Control
Default Built-In N/A (processed on Web / CMS) ast/Slow Forward / Backward, Move one step Up / Down Storage Internal BU / Exe (USB), JPG / AVI (Web, CMS) File backup Backup Multi channel (Upto 4ch) Play, Date-Time / Title display Function Sensor Input Compression G.711, G.726, AAC (16 / 48KHz) Audio **Audio Communication 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), SUNAPI (Server, Client) Protocol DDNS Hanwha Security DDNS Transmission Bandwidth Max Remote Users 50Mbps Search (3), Live Unicast (10), Multicast (20) **IP Version** | Pv4/|Pv6 |
| User access Log, | P Filtering, 802.1x, Encryption |
| 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 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 Windows 7, 8, 10, Mac OS X 109. 10.10.10.11
| 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 |
| Support SDK/CGI (SUNAP) Security GUI Language Web OS Web Browser Viewer Software Type CMS Support Support SDK / CGI (SUNAPI) **FUNCTIONS** Register PnP, Manual FILE, Mailtoid 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 Setup Setup Items amera Webpage Lamera Webpage
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) Camera Control PoE Easy Configuration ARB PTZ Control Via GUI, Webviewer, 255 preset via Guj, Webviewer, 25 preset iPhone, Android RTP, RTSP, HTTP, CGI (SUNAPI) Live (4ch): Multi-Profile Support, Playback (4ch), Event push Search (3), Live Unicast (10), Multicast (20) Mouse, Web Support Model Protocol Support Smart phone Control Max. Remote Users System Control INDICATOR/INTERFACE LED (Status indicator) : 3ea Power Status 1, LAN 1, Record 1 Indicator 1 EA (3840 x 2160, 1920x1080, 1280x720) N/A 4EA (PoE, 100Mbps) 1EA (WAN, 100Mbps) - WAN: Uplink to CMS Audio Ethernet Alarm Connectors Front 1EA (USB2.0), Rear 1 (USB3.0) N/A USB Ext. Storage Serial Switch (1EA) Reset Power Cord SYSTEM Log List Max. 20000 (System Log, Event Log each) ENVIRONMENTAL +0°C to +40°C (+32°F to +104°F) Operating Temperature / Humidity Humidity **ELECTRICAL**

ORN-410S

Power Input Power Consumption

PoE Budget MECHANICAL

Color / Materia Dimension (WxHxD) Max. 47W (1HDD, PoE on), Max. 7.4W (1HDD, PoE off)

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

^{0.99}Kg (2.18 lb) (without HDD) *The lastest product information / specification can be found at hanwha-security.com

^{*} Design and specifications are subject to change without notice.
* Wisenet is the proprietary brand of Hanwha Techwin, formerly known as Samsung Techwin.