



# QARN-1630S

16CH NVR



## Key Features

- Up to 16CH, 8MP camera supported
- H.265, H.264, MJPEG codec
- 128Mbps network camera recording
- Plug & play by 16 PoE(LAN, 10/100), 1PoE(WAN, 1Gbps)
- SATA 2ea(up to 20TB)
- ARB supported
- P2P service (QR code connect) supported

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## Specifications

### Display

Network camera	<b>Inputs</b>	Max. 16CH
	<b>Resolution</b>	8MP ~ CIF
	<b>Protocols</b>	SUNAPI, ONVIF
Decoding	<b>Local Display</b>	HDMI1: 3840x2160(30Hz), HDMI2: 1920x1080(60Hz)
	<b>Multi Screen Display</b>	Clone Mode : Dynamic layout Expand Mode : HDMI1 Dynamic layout. HDMI2 up to 16 Div. [Web] 1/ 2H/ 2V/ 3V/ 4/ 6/ 8/ 9
	<b>Resolution</b>	[Local Monitor] 8M(60fps), 1080p(240fps), 720P(480fps), D1(960fps)

### Performance

Operating System	Embedded	Linux
Record	<b>Compression</b>	H.265, H.264, MJPEG
	<b>Recording Bandwidth</b>	Max. 128Mbps
	<b>Resolution</b>	8MP ~ CIF
	<b>Mode</b>	Normal, Dual Stream, Schedule(Continuous/Event), Event (Pre/Post), Bookmark
	<b>Event Trigger</b>	Alarm Input, Video Loss, Camera Event(Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event
	<b>Event Action</b>	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown
Search & Play	<b>Playback Bandwidth</b>	Max. 32Mbps
	<b>User</b>	Max. 4 Users (Local 1, Remote 3)
	<b>Simultaneous playback</b>	Max. 40CH(Local 16CH, Remote 8CH per user)
	<b>Fisheye Dewarping</b>	CMS
	<b>Mode</b>	Date & Time(Calendar), Event list, Text Search, Smart Search
	<b>Resolution</b>	CIF ~ 8MP
	<b>Playback Control</b>	Fast/Slow Forward / Backward, Move one step Up / Down
Storage	<b>Supported HDD</b>	Up to 10TB
	<b>HDD Slot</b>	SATA 2ea(Max. 20TB)
Backup	<b>File backup</b>	BU/Exe/AVI(GUI), JPG/AVI(Network)
	<b>Function</b>	Multi channel(Up to 8CH) Play, Date-Time/Title display

### Network

Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server, Client), SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S), SUNAPI(Server, Client)	
DDNS	Hanwha DDNS	
Transmission Bandwidth	Max. 128Mbps	
Audio	<b>Input/Output</b>	16 CH(network)
	<b>Compression</b>	G.711, G.726, AAC(16/48KHz)
	<b>Audio Communication</b>	2-Way
Max Remote Users	Search(3), Live Unicast(10), Multicast(20)	
Security	IP address filtering, User access Log, 802.1x, Encryption Device certificate(Hanwha Techwin Root CA), Signed firmware	
Web viewer	<b>Supported OS</b>	Windows 10, macOS 11
	<b>Supported browser</b>	Google Chrome, Microsoft Edge, Mac Safari

<b>Viewer Software</b>	WAVE, SSM, Webviewer, Smart Viewer, Wisenet Viewer, Wisenet mobile Support CGI(SUNAPI) for integration to 3'rd party VMS
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## Functions

<b>Camera Setup</b>	<b>Register</b>	Auto, Manual
	<b>Item</b>	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast, Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage
<b>PTZ</b>	<b>Control</b>	Via GUI, Webviewer
	<b>Preset</b>	300 Presets
<b>Smart phone</b>	<b>Support Model</b>	iOS, Android
	<b>Protocol Support</b>	RTP, RTSP, HTTP, CGI(SUNAPI)
	<b>Control</b>	Live: Multi-Profile Support, Multi Channel Playback
	<b>Max. Remote Users</b>	Search(3), Live Unicast(10)
<b>Redundancy</b>	<b>Failover</b>	N+1
	<b>ARB</b>	Support
<b>Easy configuration</b>		P2P(QR code)

## Interface

<b>Front</b>	<b>Indicator</b>	Power, Record, Network
<b>Storage</b>		OK
<b>HDMI</b>		2EA
<b>Audio</b>		Out 1EA (RCA output)
<b>Ethernet</b>		PoE RJ-45 16EA (LAN, 10/100), RJ-45 1ea (LAN/WAN 1Gbps)
<b>Alarm</b>		In 4EA, Out 2EA
<b>USB</b>		2EA(Front 2 x USB 2.0)
<b>Power inlet</b>		AC 1EA

## System

<b>Log</b>	<b>Log List</b>	Max. 100,000 (System Log, Event Log each)
<b>System Control</b>		Mouse, Keyboard, Web
<b>Language</b>		English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese, Japanese, Thai, Vietnamese

## Environmental

<b>Operating Temperature</b>	0°C to +40°C(32°F to 104°F)
<b>Operating Humidity</b>	20% ~ 85% RH

## Electrical

<b>Power Input</b>	100 ~ 240 VAC ±10%; 50/60 Hz
<b>Power Consumption</b>	Max. 200W(682 BTU with 2HDD, PoE ON)
<b>PoE Budget</b>	130W

## Mechanical

<b>Color / Material</b>	Black / Metal
<b>Dimension (WxHxD)</b>	370.0 x 50.7 x 320 mm (14.6 x 2.0 x 12.6 inch)
<b>Weight</b>	2.87Kg (6.33 lb)

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CAD

Unit: mm [inch]

