

# QRN-1610S

16Ch Network Video Recorder with built-in PoE Switch

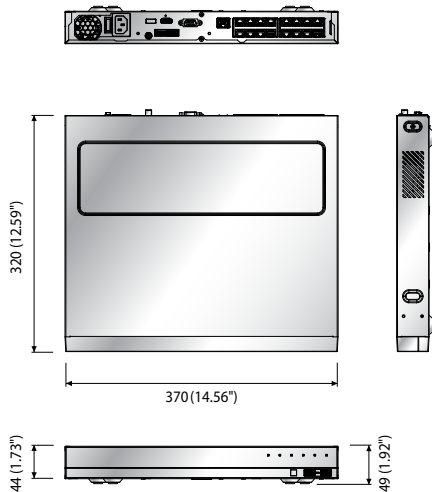


## Key Features

- 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

|                                  |                       |   |
|----------------------------------|-----------------------|---|
| <b>DISPLAY</b>                   |                       |   |
| Network Camera                   | Inputs                | Max. 16ch   |
|                                  | Resolution            | CIF ~ 8MP   |
| Live                             | Protocols             | Wisenet, ONVIF (Profile-S)  |
|                                  | Local Display         | 1xHDMI / 1xVGA  |
|                                  | Multi-Channel Display | [Local Monitor] 1 / 2H / 2V / 3V / 4 / 6 / 8 / 9 / 13 / 16 / Auto Sequence<br>[Web] 1 / 4 / 9 / 16 / Auto Sequence  |
|                                  | Performance           | [Local Monitor] 8MP (60fps)<br>SMP (90fps), 3MP (120fps), 2MP (240fps), 720p (480fps), D1 (480fps)  |
| <b>PERFORMANCE</b>               |                       |   |
| Operating System                 | Embedded              | Linux   |
| Record                           | Compression           | H.265, H.264, MJPEG   |
|                                  | Recording Bandwidth   | Max. 128Mbps  |
|                                  | Resolution            | CIF ~ 8MP   |
| Search & Play                    | 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)  |
| Storage                          | 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   |
| Backup                           | Fish-Eye Dewarping    | N/A (processed on Web / CMS)  |
|                                  | Playback Control      | Fast / Slow Forward / Backward, Move one step Up / Down   |
| Sensor                           | Default Built-In      | 0 ~ 6TB   |
| Audio                            | Internal              | 2 (Max. 12TB)   |
|                                  | File backup Function  | BU / Exe (USB), JPG / AVI (Web, CMS)  |
| Sensor                           | Input                 | Multi channel (Up to 16ch) Play, Date-Time / Title display  |
|                                  | Compression           | 4 / 2 (NO 1EA, NO / NC 1EA)   |
| Audio                            | Input                 | 16 ch (network)   |
|                                  | Compression           | G.711, G.726, AAC (16 / 48KHz)  |
|                                  | Audio Communication   | 2-Way   |
| <b>NETWORK</b>                   |                       |   |
| 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)   |
| IP Version                       |                       | 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<br>Plug-in Webviewer : MS Explorer 9, Apple Safari 9 (Mac OS X only)   |
| Viewer Software                  | Type                  | SSM, Webviewer, Smart Viewer, Wisenet Mobile  |
|                                  | CMS Support           | Support SDK / CGI (SUNAPI)  |
| <b>FUNCTIONS</b>                 |                       |   |
| 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, SDDR, 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 Configuration               |                       | Setup Wizard (Date / Time, Network, Auto Camera Configuration), P2P (QR code)   |
| ARB                              |                       | Yes   |
| Smart phone                      | Control               | Via GUI, Webviewer, 255 preset  |
|                                  | 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)   |
|                                  |                       | Mouse, Web, IR Remote control   |
| <b>SYSTEM CONTROL</b>            |                       |   |
| <b>INDICATOR / INTERFACE</b>     |                       |   |
| Front                            | Indicator             | LED (Status indicator) : 6ea<br>HDD action 1, Alarm 1, Power 1, Record 1, Backup 1, Network 1   |
|                                  | VGA                   | 1EA (1920x1080, 1280x720)   |
|                                  | HDMI                  | 1EA (3840 x 2160, 1920x1080, 1280x720)  |
|                                  | Audio                 | Out (1EA, RCA, Line)  |
| Connectors                       | Ethernet              | 16EA (PoE, 100Mbps)<br>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                | N/A   |
|                                  | Reset                 | Switch (1EA)  |
|                                  | Power Cord            | Included  |
| <b>SYSTEM</b>                    |                       |   |
| Log                              | Log List              | Max. 20000 (System Log, Event Log each)   |
| <b>ENVIRONMENTAL</b>             |                       |   |
| Operating Temperature / Humidity |                       | +0°C to +40°C (+32°F to +104°F)   |
| Humidity                         |                       | 20% ~ 85% RH  |
| <b>ELECTRICAL</b>                |                       |   |
| 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   |
| <b>MECHANICAL</b>                |                       |   |
| 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](http://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.