



### Key Features

- 64CH, 32MP resolution
- SATA 16 HDD Bays (up to 160TB)
- Up to 520Mbps recording / transmission bandwidth
- Easy Channel/Event/Alarm configuration
- Virtual Channel View
- Dynamic layout
- Built-in Support for Web Management (up to 100)
- Compatible with Wisenet Viewer, Wisenet mobile
- NDAA compliant and TPM integrated
- Manual event support

## Specifications

|                        |                                                                                                                                                                                                |                                                                                                                                                                                             |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Network camera         | Inputs                                                                                                                                                                                         | Max. 64CH                                                                                                                                                                                   |
|                        | Resolution                                                                                                                                                                                     | 32MP ~ CIF                                                                                                                                                                                  |
|                        | Protocols                                                                                                                                                                                      | SUNAPI, ONVIF                                                                                                                                                                               |
| Decoding               | Local Display                                                                                                                                                                                  | [Dual Display]<br>HDMI 1: 3840 x 2160 (30Hz)<br>HDMI 2: 1920x1080 (60Hz)                                                                                                                    |
|                        | Multi Screen Display                                                                                                                                                                           | [Local Monitor]<br>- Dynamic layout, Virtual channel view<br>- Clone Mode : Up to 64 Division<br>- Expand Mode : HDMI1 up to 36 Div. HDMI2 up to 32 Div.<br>[Web] 1/ 2H/ 2V/ 3V/ 4/ 6/ 8/ 9 |
|                        | Resolution                                                                                                                                                                                     | 32M(15fps, H.265 Only), 12M(30fps, H.265 Only),<br>8.3M(4ch@30fps), 1080p(16ch@30fps),<br>720P(32ch@30fps), D1(64ch@30fps)                                                                  |
| Performance            |                                                                                                                                                                                                |                                                                                                                                                                                             |
| Operating System       | Embedded                                                                                                                                                                                       | Linux                                                                                                                                                                                       |
|                        | Compression                                                                                                                                                                                    | H.265, H.264, MJPEG                                                                                                                                                                         |
|                        | Recording Bandwidth                                                                                                                                                                            | Distributed mode : Up to 520 Mbps<br>Normal mode : Up to 300 Mbps<br>{RAID mode}<br>Normal : Up to 520 Mbps<br>Degrade/ Rebuild : Up to 520 Mbps                                            |
| Record                 | Resolution                                                                                                                                                                                     | 32MP ~ CIF                                                                                                                                                                                  |
|                        | Mode                                                                                                                                                                                           | Normal, Dual Stream, Schedule(Continuous/Event), Event (Pre/Post), Bookmark                                                                                                                 |
|                        | Event Trigger                                                                                                                                                                                  | Alarm Input, Video Loss, Camera Event(Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event                                                                               |
|                        | Event Action                                                                                                                                                                                   | e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown                                                                                               |
|                        | Playback Bandwidth                                                                                                                                                                             | Up to 200Mbps(64CH simultaneously)                                                                                                                                                          |
|                        | User                                                                                                                                                                                           | Max. 4 Users (Local 1, Remote 3)                                                                                                                                                            |
| Search & Play          | Simultaneous playback                                                                                                                                                                          | Max. 112CH(Local 64CH, Remote 16CH per user)                                                                                                                                                |
|                        | Fisheye Dewarping                                                                                                                                                                              | Support (Local 1CH), CMS                                                                                                                                                                    |
|                        | Mode                                                                                                                                                                                           | Time/ Event/ Text/ ARB/ Bookmark/ Smart search                                                                                                                                              |
|                        | Resolution                                                                                                                                                                                     | CIF ~ 32MP (Up to H.264 9MP, H.265 32MP)                                                                                                                                                    |
|                        | Playback Control                                                                                                                                                                               | Fast/Slow Forward / Backward, Move one step Up / Down                                                                                                                                       |
|                        | Supported HDD                                                                                                                                                                                  | Up to 10TB                                                                                                                                                                                  |
| Storage                | HDD Slot                                                                                                                                                                                       | SATA 16ea(Max. 160TB, Non-RAID mode), Hot swap                                                                                                                                              |
|                        | External                                                                                                                                                                                       | iSCSI storage                                                                                                                                                                               |
|                        | RAID                                                                                                                                                                                           | RAID-5/6(Array Size : 8 HDDs x 2 Array)                                                                                                                                                     |
| Backup                 | File backup                                                                                                                                                                                    | Recorder/SEC/AVI/JPG(Local), AVI/PNG(Network)                                                                                                                                               |
|                        | Function                                                                                                                                                                                       | Multi channel(Up to 16CH) Play, Date-Time/Title display                                                                                                                                     |
| Network                |                                                                                                                                                                                                |                                                                                                                                                                                             |
| Protocol               | IPv4, IPv6, TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, RTCP, 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. 520Mbps                                                                                                                                                                                   |                                                                                                                                                                                             |
| Audio                  | Input/Output                                                                                                                                                                                   | 64 CH(network)                                                                                                                                                                              |
|                        | Compression                                                                                                                                                                                    | G.711, G.726, AAC(16/48KHz)                                                                                                                                                                 |
|                        | Audio Communication                                                                                                                                                                            | 2-Way                                                                                                                                                                                       |
| Max Remote Users       | Search(3), Live Unicast(10), Multicast(20)                                                                                                                                                     |                                                                                                                                                                                             |
| Security               | IP address filtering, User access Log, 802.1x, TLS, Encryption<br>Device certificate(Hanwha Techwin Root CA), Signed firmware, TPM support                                                     |                                                                                                                                                                                             |
| Web viewer             | Supported OS                                                                                                                                                                                   | Windows10 or higher, macOS 13.5.2 or higher                                                                                                                                                 |
|                        | Supported browser                                                                                                                                                                              | Google Chrome, Microsoft Edge, Mac Safari                                                                                                                                                   |
| Viewer Software        | SSM, Webviewer, Wisenet Viewer, Wisenet mobile<br>Support CGI(SUNAPI) for integration to 3'rd party VMS                                                                                        |                                                                                                                                                                                             |

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|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Functions             |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                     |
|                       | Register                                                                                                                                                                                                              | Auto, Manual                                                                                                                                                                                                                                                                        |
| Camera Setup          | Item                                                                                                                                                                                                                  | IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon)<br>Camera video setup (Simple focus, Brightness/Contrast, Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage |
| PTZ                   | Control                                                                                                                                                                                                               | Via GUI, Webviewer, SPC-2000/2001                                                                                                                                                                                                                                                   |
|                       | Preset                                                                                                                                                                                                                | 300 Presets                                                                                                                                                                                                                                                                         |
| Smart phone           | Support Model                                                                                                                                                                                                         | iOS, Android                                                                                                                                                                                                                                                                        |
|                       | Protocol Support                                                                                                                                                                                                      | RTP, RTSP, HTTP, CGI(SUNAPI)                                                                                                                                                                                                                                                        |
|                       | Control                                                                                                                                                                                                               | Live 16CH(Multi-Profile Support), Playback 4CH                                                                                                                                                                                                                                      |
|                       | Max. Remote Users                                                                                                                                                                                                     | Search(3), Live Unicast(10)                                                                                                                                                                                                                                                         |
| Redundancy            | Failover                                                                                                                                                                                                              | N+1                                                                                                                                                                                                                                                                                 |
|                       | ARB                                                                                                                                                                                                                   | Support                                                                                                                                                                                                                                                                             |
| Easy configuration    | P2P(QR code)                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                     |
| Interface             |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                     |
| Front                 | Indicator                                                                                                                                                                                                             | HDD, Alarm, Power, Record, Backup, Network, RAID                                                                                                                                                                                                                                    |
| Storage               | Yes                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                     |
| Reset                 | Power button                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                     |
| HDD Key Lock          | Yes                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                     |
| HDMI                  | 2EA ( Playback/Setup → HDMI1)<br>HDMI1 : 3840x2160 30Hz<br>HDMI2 : 1920x1080 60Hz                                                                                                                                     |                                                                                                                                                                                                                                                                                     |
| Audio                 | Out 1EA (3.5mm Audio Jack)                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                     |
| Ethernet              | RJ-45 3EA (LAN/WAN, 1Gbps)                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                     |
| Alarm                 | In 8EA, Out 4EA                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                     |
| USB                   | 4EA(Front 2 x USB 2.0, Rear 2 x USB 3.0)                                                                                                                                                                              |                                                                                                                                                                                                                                                                                     |
| Power inlet           | AC 2EA                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                     |
| System                |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                     |
| Log                   | Log List                                                                                                                                                                                                              | Max. 100,000 (System Log, Event Log each)                                                                                                                                                                                                                                           |
| System Control        | Mouse(include wireless), Keyboard(include wireless), Web, Controller (SPC-2000/2001)                                                                                                                                  |                                                                                                                                                                                                                                                                                     |
| Language              | 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         |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                     |
| Operating Temperature | 0°C to +40°C(32°F to 104°F)                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                     |
| Operating Humidity    | 20% ~ 85% RH                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                     |
| Electrical            |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                     |
| Power Input           | 100 ~ 240 VAC ±10%; 50/60 Hz, 2.7A (Dual SMPS)                                                                                                                                                                        |                                                                                                                                                                                                                                                                                     |
| Power Consumption     | Max. 265W (904.2 BTU with HDD 16ea)                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                     |
| Mechanical            |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                     |
| Color / Material      | Black / Metal                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                     |
| Dimension (WxHxD)     | 440.0 x 132.0 x 571.1mm                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                     |
| Weight                | Approx. 15.1Kg(33.3 lb, HDD not included)                                                                                                                                                                             |                                                                                                                                                                                                                                                                                     |
| Intelligent Analysis  |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                     |
| AI Search             | Object Attribute                                                                                                                                                                                                      | Compatible with Hanwha AI Cameras                                                                                                                                                                                                                                                   |