



# PRN-1600B2

16CH AI NVR



## Key Features

- Up to 8K (32MP) Resolution
- AI search (BestShot, Attribute)
- Object detection and classification, License Plate Recognition (LPR)
- SATA 8ea (Up to 80TB)
- Easy Channel/Event/Alarm configuration
- Video preview support
- Dynamic Event support
- Bookmark management (Up to 100 set)
- Simple connection with mobile phone through QR code

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## Specifications

### Display

|                |                      |                                                                                                                                                                                             |
|----------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Network camera | Inputs               | Max. 16CH                                                                                                                                                                                   |
|                | 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 16 Division<br>- Expand Mode : HDMI1 up to 16 Div. HDMI2 up to 16 Div.<br>[Web] 1/ 2H/ 2V/ 3V/ 4/ 6/ 8/ 9 |
|                | Resolution           | 32M(15fps, H.265 Only), 12M(30fps, H.265 Only), 8.3M(120fps), 1080p(480fps), 720P(960fps), D1(1920fps)                                                                                      |

### Performance

|                  |                       |                                                                                                               |
|------------------|-----------------------|---------------------------------------------------------------------------------------------------------------|
| Operating System | Embedded              | Linux                                                                                                         |
| Record           | Compression           | H.265, H.264, MJPEG                                                                                           |
|                  | Recording Bandwidth   | Distributed mode : Up to 250 Mbps<br>Normal mode : Up to 150 Mbps<br>RAID mode : Up to 250 Mbps               |
|                  | 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                 |
| Search & Play    | Playback Bandwidth    | RAID Mode : Max. 64Mbps<br>Non-RAID Mode : Max. 32Mbps                                                        |
|                  | User                  | Max. 4 Users (Local 1, Remote 3)                                                                              |
|                  | Simultaneous playback | Max. 64CH(Local 16CH, Remote 16CH per user)                                                                   |
|                  | Fisheye Dewarping     | Support (Local 1CH), CMS                                                                                      |
|                  | Mode                  | Date & Time(Calendar), Event list, Text Search, Smart Search                                                  |
|                  | Resolution            | CIF ~ 32MP (Up to H.264 9MP, H.265 32MP)                                                                      |
|                  | Playback Control      | Fast/Slow Forward / Backward, Move one step Up / Down                                                         |
|                  |                       |                                                                                                               |
| Storage          | Supported HDD         | Up to 10TB                                                                                                    |
|                  | HDD Slot              | SATA 8ea(Max. 80TB, Non-RAID mode)                                                                            |
|                  | External              | iSCSI storage                                                                                                 |
|                  | RAID                  | RAID-5/6(Single, 1 Array)                                                                                     |
| Backup           | File backup           | BU/Exe/AVI(GUI), JPG/AVI(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, 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. 250Mbps                                                                                                                                                                             |                             |
| Audio                  | GUI                                                                                                                                                                                      | 16 CH(network)              |
|                        | Web                                                                                                                                                                                      | G.711, G.726, AAC(16/48KHz) |

|                            |                          |                                                                                                                          |
|----------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Audio Communication</b> |                          | 2-Way                                                                                                                    |
| <b>Max Remote Users</b>    |                          | Search(3), Live Unicast(10), Multicast(20)                                                                               |
| <b>Security</b>            |                          | IP address filtering, User access Log, 802.1x, Encryption<br>Device certificate(Hanwha Techwin Root CA), Signed firmware |
| <b>Web viewer</b>          | <b>Supported OS</b>      | Windows 10, macOS 10.13                                                                                                  |
|                            | <b>Supported browser</b> | Google Chrome, Microsoft Edge, Mac Safari                                                                                |
| <b>Viewer Software</b>     |                          | WAVE, SSM, Webviewer, Smart Viewer, Wisenet mobile<br>Support CGI(SUNAPI) for integration to 3'rd party VMS              |

## 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)<br>Camera video setup (Simple focus, Brightness/Contrast, Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye<br>Dewarping Mode, Hallway View Setup, Camera Webpage |
| <b>PTZ</b>                | <b>Control</b>           | Via GUI, Webviewer, SPC-2000                                                                                                                                                                                                                                                           |
|                           | <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 16CH(Multi-Profile Support), Playback 4CH                                                                                                                                                                                                                                         |
|                           | <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> | HDD, Alarm, Power, Record, Backup, Network, RAID                                  |
| <b>Storage</b>      |                  | OK                                                                                |
| <b>Reset</b>        |                  | OK                                                                                |
| <b>HDD Key Lock</b> |                  | OK                                                                                |
| <b>HDMI</b>         |                  | 2EA ( Playback/Setup → HDMI1)<br>HDMI1 : 3840x2160 30Hz<br>HDMI2 : 1920x1080 60Hz |
| <b>Audio</b>        |                  | Out 1EA (3.5mm Audio Jack)                                                        |
| <b>Ethernet</b>     |                  | RJ-45 3EA (LAN/WAN, 1Gbps)                                                        |
| <b>Alarm</b>        |                  | In 8EA, Out 4EA                                                                   |
| <b>USB</b>          |                  | 4EA(Front 2 x USB 2.0, Rear 2 x USB 3.0)                                          |
| <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, Controller (SPC-2000)                                                                                                                                                                              |
| <b>Language</b>       |                 | English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Czech, Portuguese, Danish, Rumanian, Serbian,<br>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, 2.1A |
| <b>Power Consumption</b> | Max. 205W (With 10TB HDDs 8EA)     |

## Mechanical

|                          |                                           |
|--------------------------|-------------------------------------------|
| <b>Color / Material</b>  | Black / Metal                             |
| <b>Dimension (WxHxD)</b> | 438 x 86 x 434.9 mm                       |
| <b>Weight</b>            | Approx. 9.1Kg (20.1 lb, HDD not included) |

## Intelligent Analysis

|           |                  |                                          |
|-----------|------------------|------------------------------------------|
| AI Search | Object Attribute | Human, Face, Vehicle, Liscence plate     |
|           | LPR              | English, Number (Wisenet AI, P/X Camera) |

# PRN-1600B2

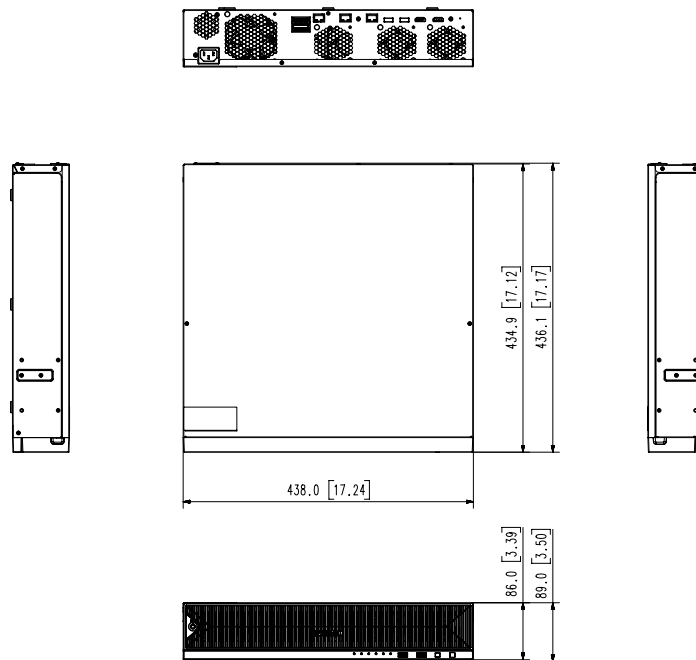
16CH AI NVR



**CAD**

**Unit:** mm [inch]

This parts should not contain any substances which are specified in AH60-0033K



Appearance Drawing  
 PRN-3210B2, 3205B2, 3200B2, 1610B2, 1605B2, 1600B2  
 XRN-6410RB2, 3210RB2  
 Unit : mm [inches]