

# CS-N440 P16H-AI 4HDD 40ch PSE AI NVR

Intelligent Series



## KEY FEATURES

- Up to 40-ch IP camera accesses
- Incoming/Outgoing bandwidth: 400Mbps(AI on: 200Mbps)/400Mbps(AI on: 200Mbps)
- S+265, H.265, S+264, H.264 video formats
- Max. decoding capability: 16MP(30fps) × 3 or 1080P(30fps) × 28
- Up to 16 channels-ch synchronous playback
- Up to 10 TB capacity for each HDD
- Independent HDMI and VGA outputs
- HDMI output at up to 4K resolution
- 1 × RJ-45, 10/100/1000 Mbps self-adaptive Ethernet port
- PoE interface, 16 × RJ45, 10/100 Mbps self-adaptive Ethernet port
- S+ 265 compression effectively reduces the storage space by up to 75%
- Support cloud upgrade



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## SPECIFICATIONS

| Video and Audio              |  |
|------------------------------|--|
| Access Channel               | 40   |
| Incoming Bandwidth           | 400Mbps(AI on: 200Mbps)  |
| Outgoing Bandwidth           | 400Mbps(AI on: 200Mbps)  |
| Resolution                   | 16MP/12MP/8MP/6MP/5MP/4MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF  |
| Preview Decoding Capability  | 16MP(30fps)×3, 12MP(30fps)×4, 8MP(30fps)×7, 6MP(30fps)×9, 5MP(30fps)×11, 4MP(30fps)×14, 3MP(30fps)×18, 1080P(30fps)×28, 720P(30fps)×40, 4CIF(30fps)×40<br>(AI on: 16MP(30fps)×2, 12MP(30fps)×3, 8MP(30fps)×5, 6MP(30fps)×6, 5MP(30fps)×8, 4MP(30fps)×10, 3MP(30fps)×13, 1080P(30fps)×20, 720P(30fps)×40) |
| Playback Decoding Capability | 16MP(30fps)×3, 12MP(30fps)×4, 8MP(30fps)×7, 6MP(30fps)×9, 5MP(30fps)×11, 4MP(30fps)×14, 3MP(30fps)×16, 1080P(30fps)×16, 720P(30fps)×16, 4CIF(30fps)×16<br>(AI on: 16MP(30fps)×2, 12MP(30fps)×3, 8MP(30fps)×5, 6MP(30fps)×6, 5MP(30fps)×8, 4MP(30fps)×10, 3MP(30fps)×13, 1080P(30fps)×16, 720P(30fps)×16) |
| Third-party Camera Access    | ONVIF(Profile S/T); RTSP   |
| HDMI Output                  | HDMI: 800×600(60Hz), 1024×768(60Hz), 1280×720(50Hz/60Hz), 1280×800(60Hz), 1366×768(60Hz), 1440×900(60Hz), 1920×1080(50Hz/60Hz), 2560×1440(30Hz/60Hz), 2560×1600(60Hz), (4K)3840×2160(30Hz/60Hz)  |
| VGA Output                   | VGA: 800×600(60Hz), 1024×768(60Hz), 1280×720(50Hz/60Hz), 1280×800(60Hz), 1366×768(60Hz), 1440×900(60Hz), 1920×1080(50Hz/60Hz)  |
| Multi-screen Display         | Independent Output:<br>HDMI: 1/2/3/4/5/6/7/8/9/10/12/13/16/20A/20B/25/32/36/40<br>VGA: 1/2/3/4/5/6/7/8/9/10/12/13/16/20A/20B/25/32/36/40   |
| Audio Input                  | 1-ch, 3.5mm  |
| Audio Output                 | 1-ch, RCA (Linear, 1 KΩ)   |
| Two-Way Audio                | 1-ch, 3.5mm, using the audio input   |
| Compression Standard         |  |
| Video                        | S+265; H.265; S+264; H.264   |
| Audio                        | G711A; G711U; AAC; ADPCM_DIV4  |
| Stream Type                  | Video; Video & Audio   |
| Network                      |  |
| Network Protocol             | 802.1X; ARP; DDNS; DHCP; DNS; Easy DDNS; FTP; HTTP; HTTPS; ICMP; IGMP; IPv4; IPv6; Multicast; NFS; NTP; PPPoE; QoS; RTCP; RTP; RTSP; SMB/CIFS; SMTP; SNMP v1/v2/v3; SRTP; SSH; SSL; TLSv1.2; TCP; UDP; Unicast; UPnP   |
| Mobile Phone Access          | Android; iOS; P2P  |
| System Compatibility         | ONVIF(Profile S/T/G); RTSP; CGI; SDK; P2P  |
| Browser                      | IE10+; Firefox52+; Edge89+; Safari11+; Chrome57+   |
| Recording Playback           |  |
| Multi-channel Playback       | Up to 16 channels  |
| Record Mode                  | Manual Recording; Alarm Recording; Schedule Recording  |
| Storage Method               | Local HDD  |
| Backup                       | USB storage device, Network  |

|                                      |  |
|--------------------------------------|--|
| Playback Function                    | Play/Pause/Stop/Slow/Speed/Backwards 30s/Forwards 30s/Full Screen/Backup (Video Editing)/Step/Digital Zoom   |
| Dual Stream Record                   | Yes  |
| <b>Alarm</b>                         |  |
| General Alarm                        | Motion Detection; Mask Alarm; Alarm Input(IPC); Alarm Input(NVR)   |
| Exceptions Alarm                     | Video Loss; Network Disconnected; No Disk; Illegal Access; Disk group space alert; Disk Full; Disk R/W Error; Recording Abnormal; Abnormal found in smart of disk; Abnormal temperature of the disk; Array Exception; PoE Overload; Voltage Alarm(IPC); RTC Failure; IP Address Conflict; MAC Address Conflict   |
| <b>Intelligent Analytics</b>         |  |
| AI by Camera                         | Tripwire; Double Tripwire; Perimeter; Object Abandon; Object Missing; Running; Parking; Heatmap; Loitering; Video Abnormal; Audio Abnormal; License Plate Recognition; On Duty Detection; Crowd Detection; Parking Guard; Safety Helmet Detection; Electric Bicycle Detection; People Counting; Link to Tracking; Smoke and Fire Detection; Environmental Temperature Measurement; Face Detection; Human Body Temperature Measurement; Smart Alarm; Face Recognition; Human/Vehicle Classification |
| AI by NVR                            | Face Detection; Face Recognition; Video Structuralization(excludes vehicle detection); Tripwire; Double Tripwire; Perimeter; Object Abandon; Object Missing; Running; Parking; Heatmap; Sleeping on Duty Detection; On Duty Detection; Smart Motion Detection; Loitering   |
| VCA Search                           | Heatmap; Early-warning Search; Behavior Search; License Plate Search; Safety Helmet Search; Thermographic Retrieval; Duty Search; Electric Bicycle Retrieval; Face Search  |
| <b>Face Detection</b>                |  |
| Face Attributes                      | Gender; Age; Glasses; Face Mask; Body Temp.  |
| <b>Face Recognition</b>              |  |
| Face Recognition Performance         | 8-ch video streams; 32-ch image streams  |
| Face Picture Library                 | Up to 20 face libraries<br>Up to 100000 base images  |
| Face Picture Comparison              | Yes  |
| <b>AI Performance(AI by NVR)</b>     |  |
| Video Structuralization Performance  | 8-ch(1080P)  |
| Perimeter/Tripwire Performance       | 24-ch  |
| Object Abandon/Missing Performance   | 8-ch(1080P)  |
| Sleeping on Duty/On Duty Performance | 8-ch(1080P)  |
| Loitering/Running Performance        | 8-ch(1080P)  |
| Parking Performance                  | 8-ch(1080P)  |
| Heatmap Performance                  | 8-ch(1080P)  |
| Smart Motion Dection Performance     | 32-ch  |
| <b>Storage</b>                       |  |
| HDD Capacity                         | Up to 10 TB capacity for each HDD  |
| Disk Group                           | 4 Disk Group   |

|      |  |
|------|--|
| RAID | JBOD, RAID0, RAID1, RAID5, RAID6, RAID10 (To enable RAID, please use surveillance-grade AI disks or enterprise-class disks.) |
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### External Port

|                   |  |
|-------------------|--|
| USB               | 2×USB2.0; 1×USB3.0   |
| HDMI              | 1×HDMI(supports up to 4K resolution output)                    |
| VGA               | 1×VGA  |
| Network Interface | 1×RJ-45, 10/100/1000 Mbps self-adaptive Ethernet port          |
| SATA              | 4×SATA interface   |
| RS485             | 1×RS485  |
| Alarm I/O         | 16-ch, TTL inputs, 3mA, 3.3VDC; 4-ch, relay outputs, 1A, 24VDC |

### PoE

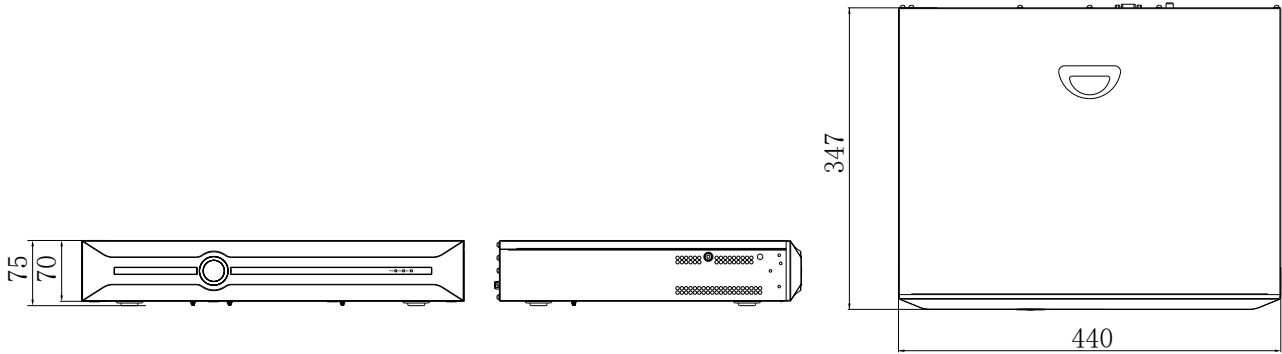
|                    |  |
|--------------------|--|
| PoE Interface      | 16×RJ45, 10/100 Mbps self-adaptive Ethernet port |
| PoE Budget         | 200W   |
| Power per PoE Port | 30W  |
| Standard           | IEEE 802.3 af/at                                 |

### General

|                       |  |
|-----------------------|--|
| UI Language           | English; Spanish; Korean; Italian; Turkish; Russian; Thai; French; Polish; Dutch; Hebrew; Arabic; Vietnamese; German; Ukrainian; Portuguese; Albanian; Indonesian; Greek   |
| Power Supply          | 100~240V AC  |
| Power Consumption     | <10W(without HDD&without PoE)  |
| NetWeight             | 4.8Kg  |
| GrossWeight           | 5.95Kg   |
| Boundary Dimensions   | 440(L)347(W)75(H)mm  |
| Package Dimensions    | 540(L)175(W)455(H)mm   |
| Operating Temperature | -10°C~+55°C (+14°F~+131°F)   |
| Operating Humidity    | 10%~90%RH (non-condensing)   |
| Storage Temperature   | -20°C~+60°C (-4°F~+140°F)  |
| Package Kit           | Network Video Recorder×1; Screw Pack×1; Mouse×1; European Standard Power Cord×1; Ear Plate×2; SATA Hard Disk Data Cable×4; SATA Power Cord×2; Instructions×1; Parts List×1 |

**AVAILABLE MODEL**  
**CS-N440 P16H-AI**

**DIMENSIONS (Unit: mm)**



**Physical Interfaces**

