



## TC-R316160 Spec:E/B/N/R/V4.0

16HDD 160ch NVR

Pro Series



### KEY FEATURES

- Up to 160-ch IP camera accesses
- Incoming/Outgoing bandwidth: 640Mbps/320Mbps
- S+265, H.265, S+264, H.264 video formats
- Max. decoding capability: 16MP(30fps) × 3 or 1080P(30fps) × 24
- 16-ch synchronous playback
- Up to 24 TB capacity for each HDD
- Simultaneous HDMI1 and VGA1 outputs; Simultaneous HDMI2 and VGA2 outputs
- HDMI output at up to 4K resolution
- 2 × RJ-45, 10/100/1000 Mbps self-adaptive Ethernet port
- S+ 265 compression effectively reduces the storage space by up to 75%
- Support cloud upgrade

SPECIFICATIONS

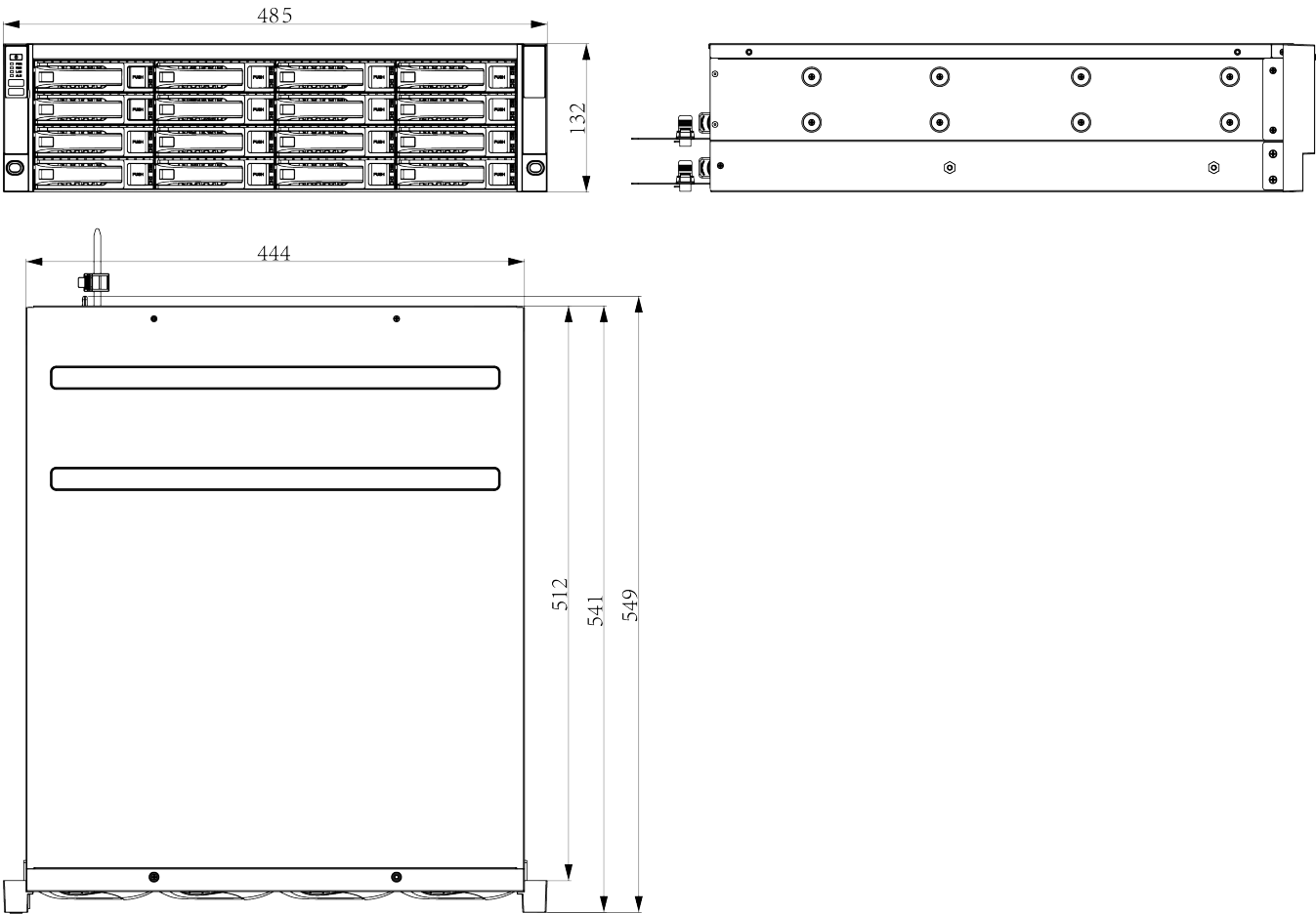
| Video and Audio              |                                                                                                                                                                                                      |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Access Channel               | 160                                                                                                                                                                                                  |
| Incoming Bandwidth           | 640Mbps                                                                                                                                                                                              |
| Outgoing Bandwidth           | 320Mbps                                                                                                                                                                                              |
| 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)×6, 6MP(30fps)×8, 5MP(30fps)×9, 4MP(30fps)×12, 3MP(30fps)×16, 1080P(30fps)×24, 720P(30fps)×48, 4CIF(30fps)×80                                                |
| Playback Decoding Capability | 16MP(30fps)×3, 12MP(30fps)×4, 8MP(30fps)×6, 6MP(30fps)×8, 5MP(30fps)×9, 4MP(30fps)×12, 3MP(30fps)×16, 1080P(30fps)×16, 720P(30fps)×16                                                                |
| Third-party Camera Access    | ONVIF; 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>HDMI1/VGA1: 1/2/3/4/5/6/7/8/9/10/12/13/16/20A/20B/25/32/36/40/64/80<br>HDMI2/VGA2: 1/2/3/4/5/6/7/8/9/10/12/13/16/20A/20B/25/32/36/40/64/80                                    |
| Audio Input                  | 1-ch, 3.5mm                                                                                                                                                                                          |
| Audio Output                 | 1-ch, 3.5mm; BNC                                                                                                                                                                                     |
| Two-Way Audio                | 1-ch, 3.5mm, using the audio input                                                                                                                                                                   |
| Compression                  |                                                                                                                                                                                                      |
| Video                        | S+265; H.265; S+264; H.264                                                                                                                                                                           |
| Audio                        | G711A; G711U; AAC; ADPCM_DIV4                                                                                                                                                                        |
| Stream Type                  | Video; Video & Audio                                                                                                                                                                                 |
| Network                      |                                                                                                                                                                                                      |
| Network Protocol             | ARP; DDNS; DHCP; DNS; Easy DDNS; FTP; HTTP; HTTPS; ICMP; IGMP; IPv4; IPv6; Multicast; NFS; NTP; PPPoE; RTCP; RTP; RTSP; SMB/CIFS; SMTP; SNMP v1; SRTP; SSH; SSL; TLSv1.2; TCP/IP; UDP; Unicast; UPnP |
| Mobile Phone Access          | Android; iOS; P2P                                                                                                                                                                                    |
| System Compatibility         | ONVIF(Profile S/T/G); RTSP; CGI; SDK                                                                                                                                                                 |
| Web                          | IE10+; Firefox52+; Edge89+; Safari11+; Chrome57+                                                                                                                                                     |
| Record Playback              |                                                                                                                                                                                                      |
| Multi-channel Playback       | 16                                                                                                                                                                                                   |
| Record Mode                  | Manual Recording; Alarm Recording; Schedule Recording                                                                                                                                                |
| Storage Method               | Local HDD, eSATA                                                                                                                                                                                     |
| Backup                       | USB storage device, eSATA, Network                                                                                                                                                                   |
| Playback Function            | Play/Pause/Stop/Slow/Speed/Backwards 30s/Forwards 30s/Full Screen/Backup (Video Editing)/Step/ Digital Zoom                                                                                          |
| Alarm                        |                                                                                                                                                                                                      |
| General Alarm                | Motion Detection; Mask Alarm; Alarm Input(IPC); Alarm Input(NVR); Manual Alarm                                                                                                                       |



|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Exceptions Alarm        | Video Loss; IP Conflict; MAC Conflict; 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; Hot-spare Exception; Array Exception; Voltage Alarm(IPC); RTC Failure                                                                                                                                                                                            |
| Intelligent Analytics   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| AI by Camera            | Tripwire; Double Tripwire; Perimeter; Object Abandon; Object Missing; Loiter; Running; Parking; Heatmap; 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 Motion; Face Recognition; Human/Vehicle Classification |
| VCA Search              | Heatmap; Early-warning Search; Behavior Search; License Plate Search; Safety Helmet Search; Thermographic Retrieval; Duty Search; Electric Bicycle Retrieval; Face Search                                                                                                                                                                                                                                                                                                                        |
| Face Detection          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Face Attributes         | Gender; Age; Glasses; Face Mask; Body Temp.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Face Recognition        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Face Picture Library    | Up to 300 face libraries<br>Up to 100000 base images                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Face Picture Comparison | Face Picture Comparison (Cooperate with facial recognition IPC)                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Storage                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| HDD Capacity            | Up to 24 TB capacity for each HDD                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Disk Group              | 8 Disk Group                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| RAID                    | JBOD, RAID0, RAID1, RAID5, RAID6, RAID10                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Hot Swapping            | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| External Port           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| eSATA                   | 1×eSATA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| USB                     | 2×USB2.0; 1×USB3.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| HDMI                    | 2×HDMI(supports up to 4K resolution output)                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| VGA                     | 2×VGA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Network Interface       | 2×RJ-45, 10/100/1000 Mbps self-adaptive Ethernet port                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| SATA                    | 16×SATA interface                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| RS232                   | 1×RS232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| RS485                   | 2×RS485                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Alarm I/O               | 16-ch, TTL inputs, 3mA, 3.3VDC; 4-ch, relay outputs, 1A, 24VDC                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| General                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| UI Language             | Simple Chinese; Traditional Chinese; English; Spanish; Korean; Italian; Turkish; Russian; Thai; French; Polish; Dutch; Hebrew; Arabic; Vietnamese; German; Ukrainian; Portuguese; Albanian                                                                                                                                                                                                                                                                                                       |
| Power Supply            | 100~240V AC; Redundant Power Supply                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Power Consumption       | <25W(HDD not included, idling)                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| NetWeight               | 18Kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| GrossWeight             | 20Kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Boundary Dimensions     | 540(L)484(W)132(H)mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Package Dimensions      | 666(L)575(W)249(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; Screw Pack; Mouse; European Standard Power Cord |

DIMENSIONS (Unit: mm)



Physical Interfaces

