



## TC-R31680 Spec:E/B/R/N/V4.0

16HDD 80ch NVR

Pro Series



### KEY FEATURES

- Up to 80-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

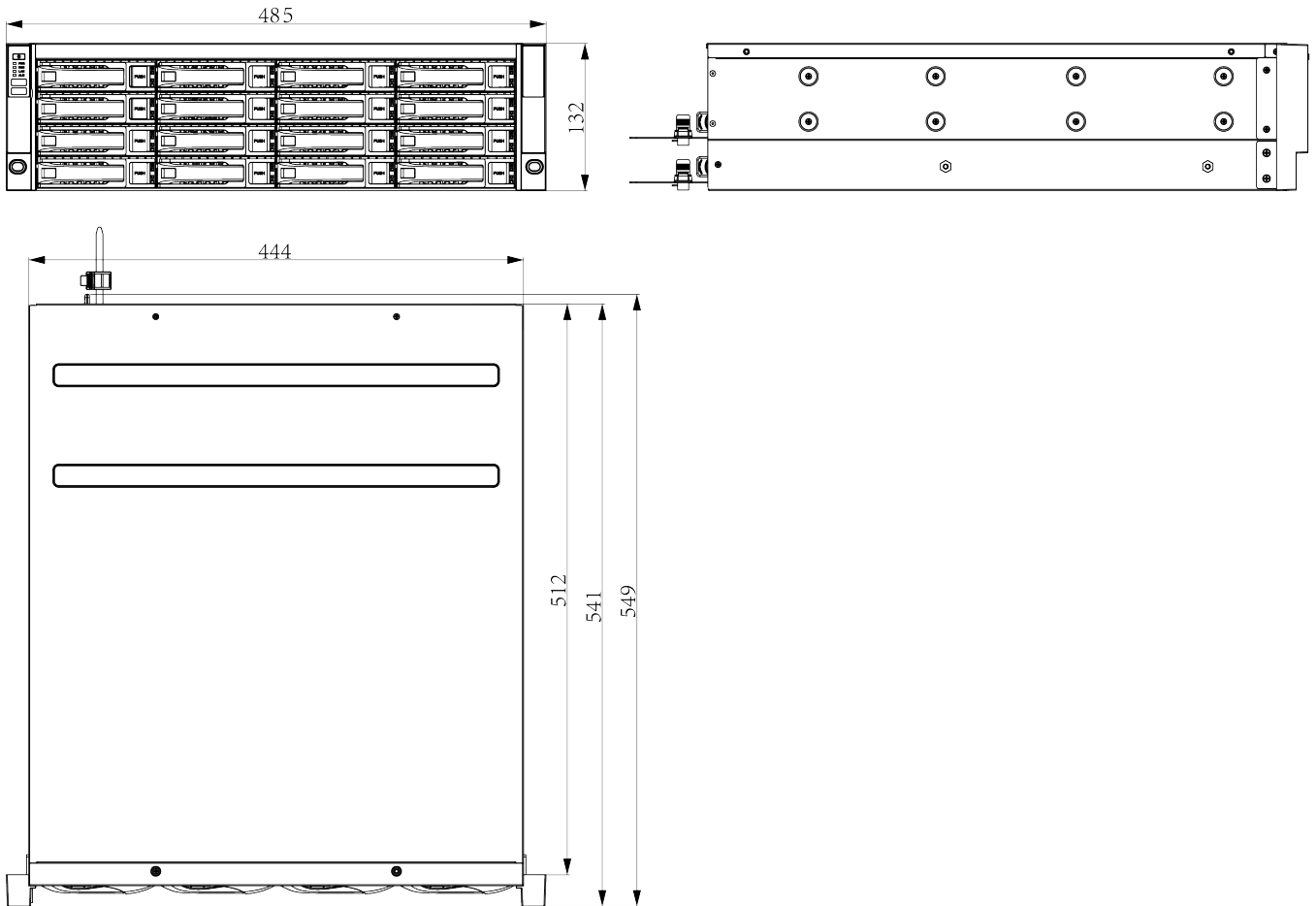
## SPECIFICATIONS

Video and Audio	
Access Channel	80
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: HDMI1/VGA1: 1/2/3/4/5/6/7/8/9/10/12/13/16/20A/20B/25/32/36/40/64/80 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
Dual Stream Record	Yes
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
<b>Intelligent Analytics</b>	
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
<b>Face Detection</b>	
Face Attributes	Gender; Age; Glasses; Face Mask; Body Temp.
<b>Face Recognition</b>	
Face Picture Library	Up to 300 face libraries Up to 100000 base images
Face Picture Comparison	Face Picture Comparison (Cooperate with facial recognition IPC)
<b>Storage</b>	
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
<b>External Port</b>	
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
<b>General</b>	
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

