

CS-N220 P16-H-AI

2HDD 20ch PSE AI NVR

Sharp Series



KEY FEATURES

- Up to 20-ch IP camera accesses
- Incoming/Outgoing bandwidth: 160Mbps(AI on: 120Mbps)/80Mbps
- S+265, H.265, S+264, H.264 video formats
- Max. decoding capability: 16MP(30fps) × 1 or 1080P(30fps) × 10
- 16-ch synchronous playback
- Up to 10 TB capacity for each HDD
- Simultaneous 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



Email: sales@canadasecurity.com
Website: canadasecurity.com

US : +1 301 900 1000
CA : +1 289 800 9000

SPECIFICATIONS

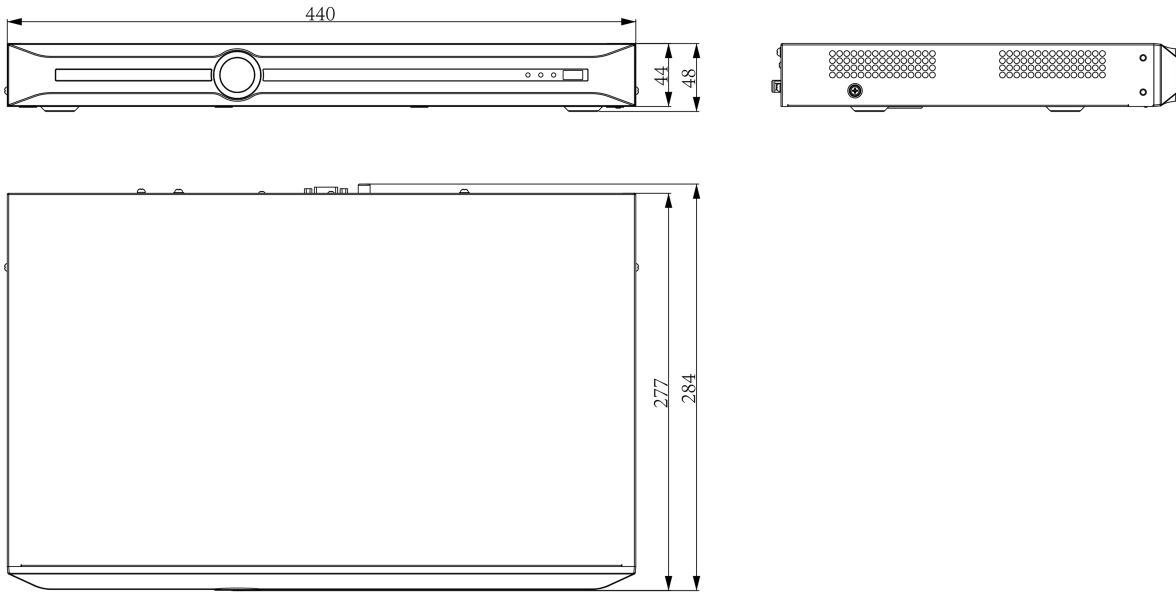
Video and Audio	
Access Channel	20
Incoming Bandwidth	160Mbps(AI on: 120Mbps)
Outgoing Bandwidth	80Mbps
Resolution	16MP/12MP/8MP/6MP/5MP/4MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF
Preview Decoding Capability	16MP(30fps) × 1,8MP(30fps) × 2, 6MP(30fps) × 3, 5MP(30fps) × 4, 4MP(30fps) × 5, 3MP(30fps) × 6, 1080P(30fps) × 10, 720P(30fps) × 20, 4CIF(30fps) × 20 (AI on: 16MP(30fps) × 1,8MP(30fps) × 2, 6MP(30fps) × 2, 5MP(30fps) × 3, 4MP(30fps) × 4, 3MP(30fps) × 5, 1080P(30fps) × 8, 720P(30fps) × 16, 4CIF(30fps) × 20)
Playback Decoding Capability	16MP(30fps) × 1,8MP(30fps) × 2, 6MP(30fps) × 3, 5MP(30fps) × 4, 4MP(30fps) × 5, 3MP(30fps) × 6, 1080P(30fps) × 10, 720P(30fps) × 16, 4CIF(30fps) × 16 (AI on: 16MP(30fps) × 1,8MP(30fps) × 2, 6MP(30fps) × 2, 5MP(30fps) × 3, 4MP(30fps) × 4, 3MP(30fps) × 5, 1080P(30fps) × 8, 720P(30fps) × 16)
Third-party Camera Access	ONVIF(Profile S/T); RTSP
HDMI Output	HDMI: 1024 × 768(60Hz), (720P)1280 × 720(50Hz/60Hz), 1280 × 800(60Hz), 1280 × 1024(60Hz), 1440 × 900(60Hz), (1080P)1920 × 1080(50Hz/60Hz), (2K)2560 × 1440(30Hz), (4K)3840 × 2160(30Hz)
VGA Output	VGA: 1024 × 768(60Hz), (720P)1280 × 720(50Hz/60Hz), 1280 × 800(60Hz), 1280 × 1024(60Hz), 1440 × 900(60Hz), (1080P)1920 × 1080(50Hz/60Hz)
Multi-screen Display	Simultaneous Output: VGA: 1/2A/2B/3/4/5/6/7/8/9/10/12/13/16/20A/20B/20C/20D/25 HDMI: 1/2A/2B/3/4/5/6/7/8/9/10/12/13/16/20A/20B/20C/20D/25
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 Compression	S+265; H.265; S+264; H.264
Audio Compression	G.711A; G.711U; AAC; ADPCM_D
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 Client	VideoSight (Android, iOS)
System Compatibility	ONVIF(Profile S/T/G); RTSP; CGI; SDK; P2P
Web	IE10+; Firefox52+; Edge89+; Safari11+; Chrome57+
Recording Playback	
Multi-channel Playback	16
Record Mode	Manual Recording; Alarm Recording; Schedule Recording
Storage Method	Local HDD
Backup	USB storage device, Network

Playback Function	Play/Pause/Stop/Reverse/Slow/Speed/Backwards 30s/Forwards 30s/Full Screen/Backup (Video Editing)/Step/Digital Zoom/Instant Replay
Dual Stream Record	Yes
Alarm	
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; PoE Overload; Voltage Alarm(IPC); RTC Failure; IP Address Conflict; MAC Address Conflict; Disk Overload
Intelligent Analytics	
AI by Camera	Tripwire; Double Tripwire; Perimeter; Object Abandon; Object Missing; Running; Parking; Heatmap; Loitering; Video Abnormal; Audio Abnormal; On Duty Detection; Crowd Detection; 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; Tripwire; Double Tripwire; Perimeter; Smart Motion Detection
VCA Search	Early-warning Search; Behavior Search; Safety Helmet Search; Thermographic Retrieval; Duty Search; Electric Bicycle Retrieval; Face Search(Search by face attributes); Smart Motion Detection
VCA Report	Heatmap; People Counting; Face Statistics
Face Detection	
Face Attributes Detection	Gender; Age; Glasses; Face Mask
Face Attributes Search	Gender; Age; Glasses; Face Mask; Body Temp.
Face Recognition	
Face Recognition Performance	1-ch(1080P) video streams or 4-ch image streams
Face Picture Library	Up to 10 face libraries, up to 20000 base images
Face Picture Comparison	Yes
AI Performance(AI by NVR)	
Perimeter/Tripwire Performance	4-ch
Smart Motion Dection Performance	4-ch
Storage	
HDD Capacity	Up to 10 TB capacity for each HDD
Disk Group	2 Disk Group
External Port	
USB	2×USB2.0
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	2×SATA interface
Alarm I/O	4-ch, TTL inputs, 3mA, 3.3VDC; 1-ch, relay output, 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	3.1kg
GrossWeight	4.45kg
Boundary Dimensions	440(L)284(W)48(H)mm
Package Dimensions	510(L)150(W)385(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*2; Mouse*1; European Standard Power Cord*1; Ear Plate*2; SATA Hard Disk Data Cable*2; SATA Power Cord*1; Instructions*1; Parts List*1

DIMENSIONS (Unit: mm)



Physical Interfaces

