



DNVR4KWS1604-16P-Ai



Key Features



- Smart H.265+, H.265, Smart H.264+, H.264, MJPEG decoding format.
- Access, storage or forwarding at 256Mbps(180Mbps when Ai function is enabled).
- Max. decoding capability: 16 × 1080p@30fps. Supports adaptive decoding.
- Ai by NVR: 1-Channel face detection & recognition, 2-Channel perimeter protection, up to 10 face databases & 20,000 face images, 4-Channel SMD Plus.
- Ai by Camera: Face detection & recognition, perimeter protection, SMD Plus, ANPR, people counting, stereo analysis, heat map.
- Connected to the third-party network cameras.
- Security baseline 2.3.



Specifications

Camera		DNVR4KWS1604-16P-Ai
Main Processor	Industrial-grade processor	
Operating System	Embedded Linux	
Operating Interface	Web, Local, GUI	
Ai		
Ai by Recorder	Face detection, face recognition, perimeter protection & SMD Plus	
Ai by Camera	Face detection, face recognition, perimeter protection, SMD Plus, ANPR, people counting, stereo analysis & heat map	
Perimeter Protection		
Perimeter Performance Ai by Recorder (Number of Channels)	2-Channels, 10 IVS rules for each channel	
Perimeter Protection of Ai by Camera (Number of Channels)	8-Channels	
Face Detection		
Face Attributes	Gender, age group, glasses, expressions, face mask & beard	
Face Detection Performance of Ai by Recorder (Number of Channels)	1-Channel (up to 12 face images each channel)	
Face Detection Performance of Ai by Recorder (Number of Channels)	8-Channels	
Face Recognition		
Face Database Capacity	Up to 10 face databases with 200,000 images with a total capacity of 2.5G. Name, gender, birthday, address, credential type, credential no., countries & regions & state can be added to each face image	
Face Recognition Performance of Ai by Recorder (Number of Channels)	8-Channel FD (by camera) + FR (by recorder), image stream: 12 face images 1-Channel FD (by recorder) + FR (by recorder), video stream: 12 face images	
Face Recognition Performance of Ai by Camera (Number of Channels)	8-Channels	

**SMD Plus**

SMD Plus by Recorder	4-Channels: Secondary filtering for human & motor vehicle, reducing false alarms caused by leaves, rain & lighting condition change
SMD Plus by Camera	8-Channels

Vehicle License Plate Comparison

ANPR by Camera (Number of Channels)	4-Channels
License Plate Database Capacity	1. Create up to 20,000 plate numbers 2. Blocklist & allowlist

Audio & Video

Access Channel	16-Channels
Network Bandwidth	Ai disabled: 256 Mbps incoming, 256 Mbps recording & 256 Mbps outgoing Ai enabled: 180 Mbps incoming, 180 Mbps recording & 180 Mbps outgoing
Resolution	16MP, 12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080p, 960p, 720p, D1 & CIF
Decoding Capability	Ai disabled: 2-Channel 16MP@30fps, 2-Channel 12MP@30fps, 4-Channel 8MP@30fps, 6-Channel 5MP@30fps, 8-Channel 4MP@30fps, 16-Channel 1080p@30fps Ai enabled: 1-Channel 16MP@30fps, 2-Channel 12MP@30fps, 3-Channel 8MP@30fps, 4-Channel 5MP@30fps, 6-Channel 4MP@30fps, 12-Channel 1080p@30fps
Video Output	1 HDMI, 1 VGA HDMI: 3840 x 2160, 1920 x 1080, 1280 x 1024, 1280 x 720 VGA: 1920 x 1080, 1280 x 1024, 1280 x 720 *Simultaneous/heterogeneous video source output for VGA & HDMI is configurable*
Multi-Screen Display	1st Screen: 1, 4, 8, 9, 16 2nd Screen: 1, 4, 8, 9, 16
Third-Party Camera Access	Panasonic, Sony, Samsung, Axis, Pelco, Arecont, ONVIF & Canon

Compression Standard

Video Compression	Smart H.265+, H.265, Smart H.264+, H.264, MJPEG
Audio Compression	G.711A, G.711U, PCM, G726

Network

Network Protocol	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, SNMP, UDP, SMTP, NTP, DHCP, DNS, IP filter, PPPoE, DDNS, FTP, Alarm Server, IP search, P2P & auto register
Mobile Phone Access	iOS & Android



Interoperability	ONVIF 22.06 (Profile T, Profile S, Profile G), CGI & SDK
Browser	Chrome IE9 & later Firefox
Recording Playback	
Multi-Channel Playback	Up to 16-Channels
Record Mode	General, motion detection, intelligent & alarm
Backup Method	USB device & network
Playback Mode	Instant playback, general playback, event playback, tag playback & smart playback
Storage	
Disk Group	Yes
Alarm	
General Alarm	Motion detection, privacy masking, video loss, scene changing, PIR alarm & IPC external alarm
Anomaly Alarm	Camera disconnection, storage error, disk full, IP conflict, MAC conflict, login locked & cybersecurity exception
Intelligent Alarm	Face detection, face recognition, perimeter protection, SMD Plus, people counting, stereo analysis & heat map
Alarm Linkage	Record, snapshot, IPC external alarm output, audio, buzzer, log, preset & email
Port	
Audio Input	1-Channel RCA
Audio Output	1-Channel RCA
Alarm Input	16-Channels
Alarm Output	4-Channels
HDD Interface	4 SATA ports, up to 16TB. The max. HDD capacity varies with environment temperature
RS-232	1
RS-485	1
USB	2 (1 front USB 2.0 port, 1 rear USB 3.0 port)
HDMI	1

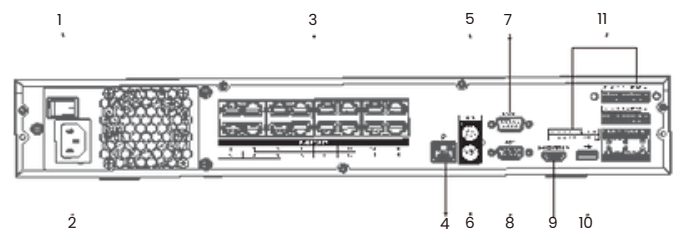
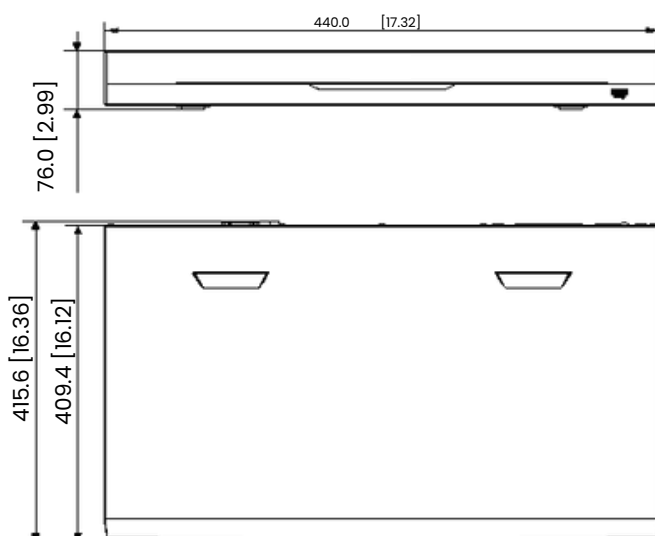


VGA	1
Network Port	1 (10/100/1000 Mbps ethernet port, RJ-45)
PoE Port	16 ports, 10/100Mbps, IEEE 802.3 af/at

General

Power Supply	100-240 VAC, 50-60 Hz
Power Consumption	Total output of NVR is <10W (without HDD) Total output power of PoE is 150W, the max. output power of a single port is 25.5W
Net Weight	4.82 Kg (10.63lb)
Gross Weight	6.78 kg (14.95lb)
Product Dimensions	440.0mm x 415.6mm x 76.0mm (17.32" x 16.36" x 2.99") (W x D x H)
Packaging Dimensions	529.0mm x 499.0mm x 211.0mm (20.83" x 19.65" x 8.31") (W x D x H)
Operating Temperature	-10 °C to +55 °C (14 °F to +131 °F)
Storage Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Operating Humidity	10% - 93% (RH)
Installation	Rack or Desktop
Certifications	FCC: 47 CFR FCC Part 15, SubpartB, Class A CE-EMC: EN55032: 2015+A1: 2020, EN IEC 61000-3-2, 2019+A1: 2021, EN 61000-3-3: 2013+A1: 2019+A2: 2021, EN 55035: 2017+A11:2020, EN 50130-4: 2011+A1: 2014 CE-LVD: EN 62368-1:2014

Dimensions



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|------------------------|---------------------|
| 1. Power Switch | 2. Power Input |
| 3. PoE Ports | 4. Network Port |
| 5. MIC OUT, RCA | 6. MIC IN, RCA |
| Connector 7RS-232 Port | Connector 8VGA Port |
| 9. HDMI Port | 10. USB Port |
| 11. Alarm In/Out | |