AI People & Vehicle Detection
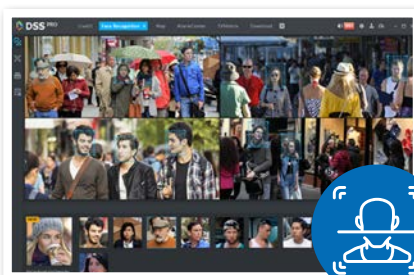Gen. 2

AI Quick Search
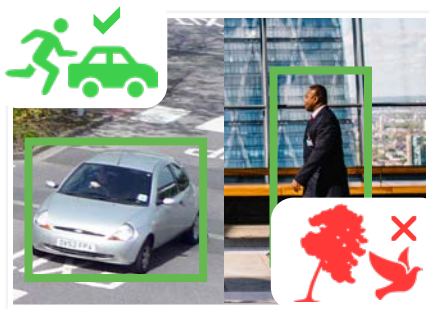
AI-enhanced CCTV upgrades.

Compact Series: NVRs available in 4, 8 and 16 channels with PoE

The Watchguard™ Compact AI Series brings the best of AI surveillance features in an affordable package. Bring AI face recognition or AI person/vehicle detection to your CCTV installations, guaranteeing that important events are detected and can be acted upon. This NVR is perfect for new systems or replacement of existing NVRs to upgrade to AI capable surveillance.

- Records up to 16.0 megapixel (4920 x 3264)
- Up to 256Mbps incoming bandwidth; H.265 support
- Perimeter protection with up to 10 IVS rules per
- AI tripwire/intrusion rule by NVR up to 2 channels, or;
- AI face recognition up to 1 channel by NVR, or;
- AI motion detection by NVR up to 4 channels

- Support for ANPR up to 4 channels
- Up to 2 x SATA bay with support for up to 16TB capacity
- Up to 16 built-in port PoE switch HDDs per bay
- HDMI and VGA simultaneous video output
- Backup footage via external USB device or local network
- Decoding up to 16CH@1080P/25fps (AI disabled)

AI Powered Facial Recognition

Smart Person & Vehicle Detection

Intelligent Footage Searching

Specifications	4 Channel NVR	8 Channel NVR	16 Channel NVR
Ordering Information	NVR323	NVR324	NVR341
Main Processor / OS	Industrial-grade processor, Embedded Linux		
Video Input	4 channel	8 channel	16 channel
Interoperability	ONVIF 21.12(Profile T; Profile S; Profile G); CGI; SDK		
Video Output	1 x HDMI, 1 x VGA		
Display Resolution	Configurable from 3840 x 2160 to 1280 x 720		
Display Split	1st screen - 1/4, 2nd screen - 1/4	1st screen - 1/4/8/9, 2nd screen - 1/4/8/9	1st screen - 1/4/8/9/16, 2nd screen - 1/4/8/9/16
Recording Resolution	Configurable from 16.0MP (4920 x 3264) to CIF (352 x 288)	Configurable from: 16.0MP (4920 x 3264) to D1 (704 x 480)	Configurable from 16.0MP (4920 x 3264) to CIF (352 x 288)
Incoming Bandwidth (AI Disabled)	80Mbps Mbps incoming (recording/outgoing)	256Mbps Mbps incoming (recording/outgoing)	256Mbps Mbps incoming (recording/outgoing)
Incoming Bandwidth (AI Enabled)	80Mbps Mbps incoming (recording/outgoing)	180Mbps Mbps incoming (recording/outgoing)	180Mbps Mbps incoming (recording/outgoing)
Decoding Capacity (AI Disabled)	4 channel: 8.0MP (25fps)	8 channel 4.0MP (25fps)	16 channel 1080p (25fps)
Decoding Capacity (AI Enabled)	4 channel: 5.0MP (25fps)	8 channel: 1080p (25fps)	12 channel 1080p (25fps)
Video Compression	Smart H.265+ / H.265 / H.264 / H.264+ / MJPEG		
Record Modes	General / motion detection / intelligent / alarm		
AI Functions by Recorder	Face detection, face recognition, AI Tripwire/Intrusion and AI Human/Vehicle Detection		
AI Functions by Cameras	Face detection, ANPR, People Counting, Heatmap, AI Tripwire/Intrusion and AI Human/Vehicle Detection		
Face Detection (Recorder)	1 channel		
Face Detection (Cameras)	4 channels	8 channels	8 channels
Face Detection Features	Whitelist, Blacklist, Stranger Mode		
Face Detection Performance	Up to 10 face databases with 200,000 face images		
Face Recognition (Recorder)	1 channel (with Ultimate AI cameras)		
Face Recognition (Cameras)	4 channels	8 channels	8 channels
Face Recognition Performance	12 face images/s		
Tripwire/Intrusion (Recorder)	2 channels, 10 IVS rules for each channel		
Tripwire/Intrusion (Cameras)	4 channels	8 channels	8 channels
Motion Detection (Recorder)	4 channels		
Motion Detection (Cameras)	4 channels	8 channels	8 channels
Alarm Input / Output	N/A	N/A	4 channels / 2 channels
Trigger Events	Record, snapshot, IPC external alarm output, audio, buzzer, log, preset, email		
Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback (face and motion detection)		
Backup Modes	USB device and network		
Ethernet	1 x RJ-45 port (10/100Mbps)	1 x RJ-45 port (10/100/1000Mbps)	1 x RJ-45 port (10/100/1000Mbps)
Power over Ethernet	4 ports, 10/100 Mbps, IEEE 802.3 af/at	8 ports, 10/100 Mbps, IEEE 802.3 af/at	16 ports, 10/100 Mbps, IEEE 802.3 af/at
Network Functions	HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, Alarm Server, IP Search, Easy4ip		
Remote View	iOS (iPhone, iPad) / Android devices		
Internal HDD	1 x SATA III Ports up to 16TB	1 x SATA III Ports up to 16TB	2 x SATA III Ports up to 16TB
USB Interface	2 USB ports: 1 x Rear USB 2.0 / 1 x Front USB 2.0		
Power Supply	53VDC / 1.226A	53VDC / 1.812A	100~240VAC / 47/63 Hz
Power Consumption	<10W (without HDD) / PoE: Max 25.5W for single port, 36W total	<10W (without HDD) / PoE: Max 25.5W for single port, 72W total	<10W (without HDD) / PoE: Max 25.5W for single port, 130W total
Operating Environment	-10°C ~ +55°C / 10 ~ 93%RH		
Dimensions / Rack Units	260mm x 233mm x 48mm / 1U	260mm x 233mm x 48mm / 1U	375mm x 328mm x 53mm / 1U
Weight	0.86kg (without HDD)	0.92kg (without HDD)	2.60kg (without HDD)

Product Diagrams

	NVR323		NVR324		NVR341	
1	Power Input	2	PoE Ports	1	VGA Port	2	RS-232 Port
3	Network Port	4	VGA Port	3	AUDIO OUT, RCA Connector	4	Power Input
5	AUDIO OUT, RCA Connector	6	AUDIO IN, RCA Connector	5	Power Switch	6	PoE Ports
7	HDMI Port	8	USB Port	7	Alarm In/Out	8	HDMI Port
9	Ground			9	USB Port	10	Network Port
				11	AUDIO IN, RCA Connector	12	Ground

NVR323, NVR324 legend:
1 Power Input / 2 PoE Ports / 3 Network Port / 4 VGA Port / 5 AUDIO OUT, RCA Connector / 6 AUDIO IN, RCA Connector / 7 HDMI Port / 8 USB Port / 9 Ground

Above: **NVR323, NVR324, NVR341**