

8 Channel Penta-brid 1080N/720P Compact 1U Digital Video Recorder



- H.265+/H.265 dual-stream video compression
- Supports Full-channel AI-Coding
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 10 channels IP camera inputs, each channel up to 6MP; Max 32 Mbps incoming bandwidth
- Up to 8 channels video stream (analog channel) SMD Plus



Launched by WATASHI Technology, WATASHI AI is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on WATASHI's advanced technologies, WATASHI AI provides intelligent, simple and inclusive products and solutions.

Series Overview

WATASHI Technology, a world-leading video-centric smart IoT solution and service provider, debuted its new XVR series, WVR024X-I Series featuring SMD Plus to benefit customers from AI upgrade. The series are designated to reduce false-alarm rates and human surveillance costs, thus bringing great value to customers in search of products with accurate human/vehicle alarm to raise the security level of various indoor and outdoor facilities.

Functions

SMD Plus

With intelligent algorithm, WATASHI Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

AI Coding

Compared with H.265/H.264, AI coding can reduce more than 50% bit rate and storage requirements while have no loss of decoding compatibility, providing clear human and vehicle details.

Smart Codec

With advanced scene-adaptive rate control algorithm, WATASHI smart codec technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

HDCVI/AHD/TVI/CVBS Auto-detect

The XVR can auto recognize the signal of front-camera without any setting. It makes operation more friendly and convenient.

High Definition Camera Input

The XVR supports up to 2MP HDCVI camera and 6MP IP camera input.

Coaxial Audio/Upgrade/Alarm

The integrated design can reduce wiring troubles which makes it much more cost-effective and convenient for installation.

Long Distance Transmission

The HDCVI system supports long distance transmission over coaxial cable and UTP, max. 800 m for 1080p and 1200 m for 720p.



Technical Specification

System

Main Processor	Embedded processor
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Operating System	Embedded linux
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SMD Plus

Performance	8 channels
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AI Search	Search by target classification (Human, Vehicle)
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Video and Audio

Analog Camera Input	8 channels, BNC
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HDCVI Camera Input	1080p@ 25/30 fps, 720p@ 25/30 fps
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AHD Camera Input	1080p@ 25/30 fps, 720p@ 25/30 fps
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TVI Camera Input	1080p@25/30 fps, 720p@25/30 fps
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CVBS Camera Input	PAL/NTSC
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IP Camera Input	8+2 channels, each channel up to 6MP
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Audio In/Out	1/1, RCA
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Two-way Talk	Reuse audio in/out, RCA
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Recording

Compression	AI Coding/H.265+/H.265/H.264+/H.264
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Resolution	1080N; 720p; 960H; D1; HD1; BCIF; CIF
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Record Rate	Main Stream: 8-channel: the 1st channel 1080N/720p(1 fps–25/30 fps), others 1080N/720p(1 fps–15 fps); 960H/D1/CIF/(1 fps–25/30 fps) Sub stream: 8-channel: CIF (1 fps–7 fps)
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Bit Rate	32 kbps–6144 kbps per channel
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Record Mode	Manual; Schedule (General, Continuous); MD (Video detection: Motion Detection, Video Loss, Tampering); Alarm; Stop
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Record Interval	1 min–60 min (default: 60 min), Pre-record: 1 s–30 s, Post-record: 10 s–300 s
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Audio Compression	G.711A; G.711U; PCM
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Audio Sample Rate	8 KHz, 16 bit per channel
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Audio Bit Rate	64 kbps per channel
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Display

Interface	1 HDMI; 1 VGA
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Resolution	1920 × 1080, 1280 × 1024, 1280 × 720
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Multi-screen Display	When IP extension mode not enabled: 1/4/8/9 When IP extension mode enabled: 1/4/8/9/16
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OSD	Camera title; Time; Video loss; Camera lock; Motion detection; Recording
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Network

Interface	1 RJ-45 Port (100 Mbps)
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Network Protocol	HTTP; HTTPS; TCP/IP; IPv4/IPv6; Wi-Fi; 3G/4G; SNMP; UPnP; RTSP; UDP; SMTP; NTP; DHCP; DNS; IP Filter; PPPoE; DDNS; FTP; Alarm Server; P2P; IP Search (Supports Dahua IP camera, DVR, NVS, etc.)
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Max. User Access	128 users
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Smart Phone	iPhone; iPad; Android
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Interoperability	ONVIF 16.12, CGI Conformant
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Video Detection and Alarm

Trigger Events	Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
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Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Diagnosis
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Alarm input	N/A
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Relay Output	N/A
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Playback and Backup

Playback	1/4/9
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Search Mode	Time/Date; Alarm; MD and Exact Search (accurate to second)
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Playback Function	Play; Pause; Stop; Rewind; Fast play; Slow Play; Next File; Previous File; Next Camera; Previous Camera; Full Screen; Repeat; Shuffle; Backup Selection; Digital Zoom
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Backup Mode	USB Device/Network
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Storage

Internal HDD	1 SATA port, up to 6 TB capacity
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eSATA	N/A
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Auxiliary Interface

USB	2 USB ports (USB 2.0)
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RS485	1 Port, for PTZ Control
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RS232	N/A
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Electrical

Power Supply	DC 12V/1.5A
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Power Consumption (Without HDD)	< 7W
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Construction

Dimensions	Compact 1U, 260.0 mm × 237.9 mm × 47.6 mm (10.24" × 9.37" × 1.87")
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Net Weight (without HDD)	0.89 kg (1.96 lb)
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Gross Weight	1.40 kg (3.09 lb)
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Installation	Desktop installation
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Environmental

Operating Conditions	-10°C to +45°C (+14°F to +113°F), 0%–90% (RH)
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Storage Conditions	-20°C to +70°C (-4°F to +158°F), 0%–90% (RH)
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Third-party Support

Third-party Support	Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, Vivotek, and more
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Certifications

Certifications	FCC: Part 15 Subpart B
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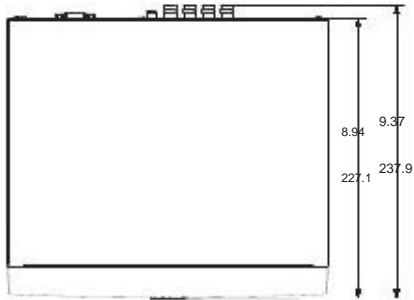
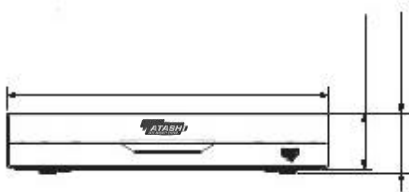
Certifications	CE: CE-LVD: EN 60950-1/IEC 60950-1 CE-EMC: EN 61000-3-2; EN 61000-3-3; EN 55032; EN 50130; EN 55024
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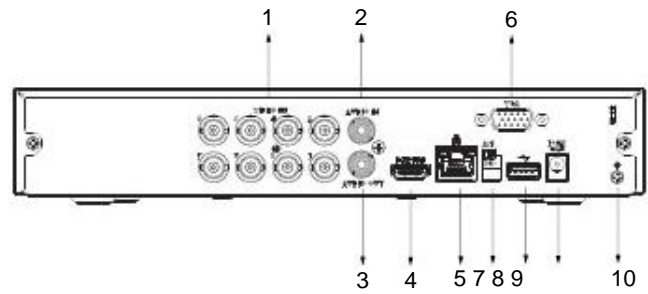
Ordering Information

Type	Model	Description
8 Channel AI XVR	WVR024X-I	Compact 1U AI Digital Video Recorder

Dimensions (mm[inch])



Panels



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|----------------------|-------------|
| 1 Video In | 2 Audio In |
| 3 Audio Out | 4 HDMI Port |
| 5 Network Port | 6 VGA Port |
| 7 RS-485 Port | 8 USB Port |
| 9 DC 12V Power Input | 10 Ground |

