XVR502A-16-4KL-I2

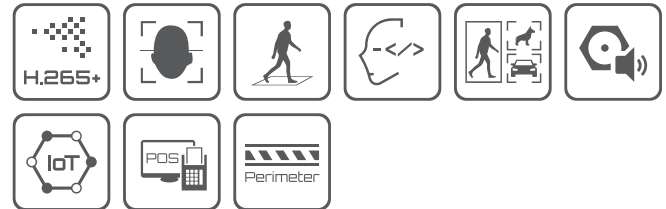## 16 Channel Penta-brid 4K 1U Digital Video Recorder

4K ULTRA HD

ENS Diamond Series XVR501H-16-4KL-I2 features a full-channel SMD Plus to benefit customers with an AI upgrade. The XVR series is designed to reduce false alarms and standard surveillance systems costs, providing great value to customers in search of products with accurate human/vehicle alarm to raise the security level of various indoor and outdoor facilities.

H.265+

IoT | POS | Perimeter

MODEL(S) AVAILABLE

XVR502A-16-4KL-I2

KEY FEATURES

▸ H.265+/H.265 dual-stream video compression
▸ Supports HDCVI/AHD/TVI/CVBS/IP video inputs
▸ Max. 32 channel IP camera inputs, each channel up to 8MP; Max. 128 Mbps incoming bandwidth
▸ Perimeter Protection and SMD Plus
▸ Up to 2 channels video stream (analog channel) with face recognition
▸ IoT & POS functionalities

Product Specifications

System

Main Processor	Embedded Processor
Operating System	Embedded LINUX

Perimeter Protection

Performance	2 Channels, 10 IVS for each channel
Object Classification	Human or Vehicle
	Secondary recognition for Tripwire and Intrusion
AI Search	Search by object classification (human or vehicle)

Face Recognition

Performance	Max. 12 face pictures/sec processing
	2 channels video stream face recognition, only support analog camera
Stranger Mode	Detect strangers' faces (not in device's face database)
	Similarity threshold set manually
AI Search	Up to 8 target face images search at same time, similarity threshold can be set for each target face image.
Database Management	10 face databases
	20,000 total face images
	Name, gender, birthday, address, certificate type, cerificate No., countries, regions, and state can be added to each face picture.
Database Application	Each database can be applied to video channels independently.
Trigger Events	Buzzer, Voice Prompts, Email, Snapshot, Recording, Alarm Out, PTZ Activation, etc.

SMD+

Performance	16 channels
AI Search	Search by target classification (Human, Vehicle)

Video and Audio

Analog Camera Input	16 channels, BNC
HDCVI Camera Input	4K/6MP/5MP/4MP/1080P @ 25/30 fps
	720P @ 50/60 fps, 720P @ 25/30 fps
AHD Camera Input	4K/5MP/4MP/3MP/1080P @ 25/30 fps
	720P @ 25/30 fps
TVI Camera Input	4K/5MP/4MP/3MP/1080P @ 25/30 fps
	720P @ 25/30 fps
CVBS Camera Input	PAL / NTSC
IP Camera Input	16 + 16 channels, each channel up to 8MP
Audio In/Out	4/1, RCA
Two-Way Talk	Reuse audio in/out, RCA

Recording

Compression	AI Coding / H.265+ / H.265 / H.264+ / H.264
Resolution	4K / 6MP / 5MP / 4K-N / 4MP / 3MP / 4M-N / 1080P / 720P / 960H / D1 / CIF
Record Interval	1 ~ 60 min (Default: 60 min)
	Pre-record: 1 s ~ 30 s / Post-record: 10 s ~ 300 s

Record Rate	Main stream: All channel 4K @ 7 fps; 6MP @ 10 fps; 5MP @ 12 fps; 4K-N, 4MP/3MP @ 15 fps; 4M-N/1080P/720P/960H/D1/CIF @ 25/30fps
	Sub steram: 960H @ 15 fps; D1/CIF @ 25/30 fps
Bit Rate	32 Kbps ~ 6144 Kbps per channel
Recorder Mode	Manual, Schedule (General, Continuous), MD (Video detection: Motion Detection, Video Loss, Tampering), Alarm, Stop
Audio Compression	AAC (only for the 1st channel), G.711A, G.711U, PCM
Audio Sample Rate	8 KHz, 16 bit per channel
Audio Bit Rate	64 Kbps per channel

Display

Interface	1 HDMI ,1 VGA
Resolution	HDMI: 3840×2160, 1920×1080, 1280×1024, 1280×720
	VGA: 1920 × 1080, 1280 × 1024, 1280 × 720
Multi-screen Display	When IP extension mode not enabled: 1/4/8/9/16
	When IP extension mode enabled: 1/4/8/9/16/25/36
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

Network and Interface

Interface	1 RJ-45 port (10/100/1000 Mbps)
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 ENS Diamond Series IP camera, DVR, NVS, etc.)
Network Max. Users	128
Mobile	IOS, Android
Network Interoperability	ONVIF 16.12, CGI Conformant
USB	1 × USB 2.0 port, 1 × USB 3.0 port
RS232	N/A
RS485	1 port for PTZ control
Internal HDD	2 SATA ports, up to 10 TB capacity for each disk
eSATA	N/A

Video Detection and Alarm

Trigger Event	Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Diagnosis
Alarm Input	16
Relay Outputs	3

Playback and Backup

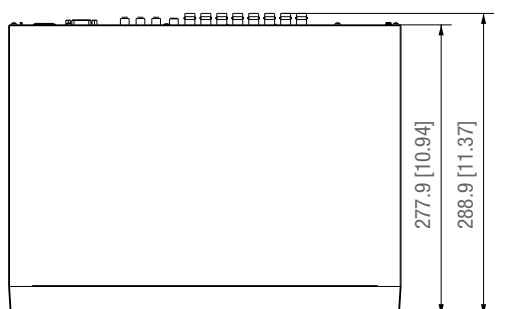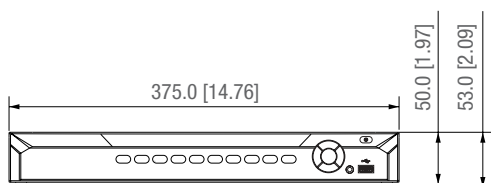|	
Sync Playback	1/4/9/16
Search Mode	Time and Date, Alarm, Motion Detection, and Exact Search (accurate to 1 s)

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
Backup Mode	USB device / Network

General

Power Supply	12 V DC / 5 A
Power Consumption, NVR	< 15 W, without HDD
Operating Conditions	-10°C ~ 55°C (14°F ~ 131°F) / Less than 90% RH
Storage Conditions	-20°C ~ 70°C (-4°F ~ 158°F) / Less than 90% RH
Dimensions	Mini 1U, 325.0 mm × 257.0 mm × 55.0 mm (12.80" × 10.11" × 2.17")
Net Weight	1200 g (2.7 lb), without HDD
Gross Weight	1900 g (4.2 lb)
Installation	Desktop installation

General

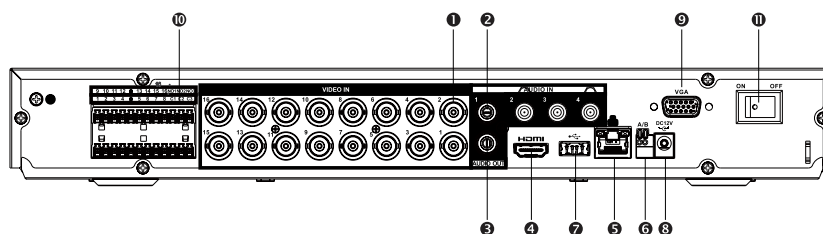| Thrid-Party Support	Arecont Vision, AXIS, Canon, Dynacolor, Panasonic, Pelco, Samsung, Sanyo, Sony, plus more

Certifications

Certifications	FCC: Part 15 Subpart B 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

Product Dimensions (mm [inch])

Rear Panel

❶	Video in	❼	USB interface
❷	Audio in, RCA connector	❽	DC 12 V power input
❸	Audio out, RCA connector	❾	VGA interface
❹	HDMI interface	❿	Alarm in/out
❺	Network interface	⓫	Power switch
❻	RS485 port		