

Penta-brid 1080p Mini DVR

4/8/16-Channel Penta-brid 1080p-Lite Mini 1U Digital Video Recorder



- Embedded Processor
- Smart H.264+ / H.264 Dual-stream Video Compression
- Offers 720p (real-time) and 1080p (15 fps) Resolutions
- 4, 8, or 16 HDCVI/AHD/TVI/CVBS Channels
- 4 + 2, 8 + 4, or 16 + 8 IP Channels, up to 5 MP per Channel
- Max. 24/48/96 Mbps Incoming Bandwidth
- Built-in Smart Search



System Overview

Dahua, a global leader in security systems, introduces XVR technology - the perfect affordable solution to upgrade existing video surveillance systems while leveraging existing networks, cabling, and cameras. XVR technology utilizes Penta-brid access technology to seamlessly record video from HDCVI, AHD, TVI, CVBS, and IP sources simultaneously.

The XVR offers advanced options such as built-in motion detection algorithms, alarm triggers, and customized recording modes. XVR technology is the ideal solution for actively monitoring and recording video feeds in wide range of applications including public venues, retail stores, transportation hubs and access ways, personal property and homes, and educational institutions.

Camera Connections

Record and monitor video from analog/CVI camera inputs and IP camera inputs simultaneously. The X21A series supports a maximum of 24 channels, with up to 16 channels of HDCVI/AHD/TVI/CVBS inputs and up to an additional 8 channels of IP inputs. The flexibility of the XVR allows all 24 channels to record input from IP cameras, or from a combination of input from analog and IP sources (not to exceed the maximum number of analog cameras allowed per XVR). In addition, the XVR supports a maximum of 16 local live-view channels and 16 playback channels.

Functions

Smart H.264+

The Smart H.264+ video compression standard can reduce bit rate and storage requirements by up to 70% without having to invest in new cameras.

HDCVI/AHD/TVI/CVBS Auto-detect

The XVR automatically recognizes the incoming signals of each attached analog camera without any setup, making installation easy and operation convenient.

5 MP Resolution

The XVR supports 5 MP resolution (2560 x 1920) on IP camera inputs for recording and live viewing.

Flexible Recording

The XVR offers a variety of configurable recording options and schedules that saves HDD space and active monitoring time. The XVR monitors incoming video and can be programmed to record if motion is detected or if an alarm is triggered. The XVR can also be programmed to record on a schedule or at different intervals. The recording options and schedules can be set for each individual camera or copied to all cameras.

Smart Search

Smart Search allows an operator to specify a region in the playback video to search for a motion detection event, saving time and manpower.



Lite Series | X21A1E/X21A2E/X21A3E

Technical Specification

System			
Main Processor	Embedded Processor		
Operating System	Embedded LINUX		
Display			
Interface	One (1) HDMI One (1) VGA		
Resolution	1920 × 1080, 1280 × 1024, 1280 × 720, 1024 × 768		
Multi-screen Display	X21A1E	X21A2E	X21A3E
	1/4/6	1/4/8/9/16	1/4/8/9/16/25
On-screen Display Options	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, and Recording		
Video Detection and Alar	m		
Trigger Events	Recording, PTZ, Tour, Alarm Out, 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	X21A1E	X21A2E	X21A3E
	8	8	16
Relay Output		Three (3)	
Playback and Backup			
Playback	X21A1E	X21A2E	X21A3E
Search Mode	Time / Date, Alarm		ion, and Exact
Playback Function	Play, Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, and Digital Zoom		
Backup Mode		USB Device Network	
Storage			
Internal HDD	One (1) SATA Port, up to 6 TB capacity		
HDD Mode	Single		
Auxiliary Interface			
	X21A1E	X21A2E	X21A3E
USB	Two (2) USB 2.0 Ports	. ,	ISB 2.0 Port ISB 3.0 Port
RS485	One (1)	Port, for PTZ Cor	ntrol
Third-party Support			
Third-party Support	Dahua, Arecont Visic Canon, CP Plus, Dyna Pelco, Samsung, San and others	acolor, Honeywe	II, Panasonic,

Audio and Video

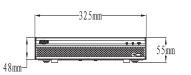
Audio allu viueo					
	Model	Analog Inputs		IP Inputs	
Camora Inputs	X21A1E	4		4 + 2	
Camera Inputs	X21A2E	8		8 + 4	
	X21A3E	16		16 + 8	
Resolution		1080p at 15 fps per channel		Up to 5 MP per channel	
	Model	Audio IN		Audio OUT	
	X21A1E	4		1	
Audio Connections	X21A2E	8		1	
	X21A3E	16		1	
Two-way Talk	Reuse Audio In (channel 1)/ out, RCA				
Recording					
C	Creart II				
Compression	Smart H.264+ / H.264				
Resolution	1080p, 720p, 960H, D1, HD1, BCIF, CIF, QCIF				
Record Rate					
Main Stream	1080p at 1 to 15 fps or 1080N, 720p, 960H, D1, HD1, BCIF, CIF, QCIF at 1 to 30 fps				
Sub Stream	D1, CIF, (QCIF at 1 to 30 fps			
Bit Rate	1 Kbps to	6144 Kbps per chann	el		
Record Mode	Manual, Schedule (Regular, Continuous), Motion Detection (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop				
Record Interval	1 to 60 minutes (default: 60 minutes) Pre-record: 1 s to 30 s Post-record: 10 s to 300 s				
Network					
Interface	X21/	A1E / X21A2E		X21A3E	
	One (1) f	RJ-45 Port (100 M)	One (1) R	J-45 Port (1000 M)	
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE,DDNS, FTP, Alarm Server, P2P,IP Search (Supports Dahua IP cameras, DVRs, NVS)				
Max. User Access	128 user	S			
Mobile Operating System	IOS and A	Android			
Interoperability	ONVIF 2.	4.1, CGI Conformant			
Electrical					
Power Supply	DC12V, 2	DC12V, 2 A			
Power Consumption		without HDD)			
Environmental					
Operating Conditions	-10° C to	+55° C (+14 °F to +13	1 °F) 86	to 106 kpa	
Storage Conditions		50° C (+32 °F to +122 °			
Construction			,, 0 10 1		
Dimensions	Mini 1U, 325.0 mm × 255.10 mm × 55.0 mm (12.80 in. x 10.0 in. x 2.20 in.)				
Net Weight	1.50 kg (3.30 lbs), without HDD				
Gross Weight	2.0 kg (4.40 lbs)				
Installation	Desktop installation				
Certifications					
Safety	Conforms to UL Standard				
,	FCC Part 15 Subpart B				
Electromagnetic Compatibility (EMC)	ANSI C63.4 – 2014 ICES 003				

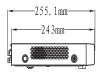
Lite Series | X21A1E/X21A2E/X21A3E

Ordering Information

	Part Number	Description
	X21A1E	4 Analog/CVI Inputs, 4 + 2 IP Inputs, 0 TB 8 Alarm Inputs, 3 Alarm Outputs
	X21A1E1	4 Analog/CVI Inputs, 4 + 2 IP Inputs, 1 TB 8 Alarm Inputs, 3 Alarm Outputs
	X21A1E2	4 Analog/CVI Inputs, 4 + 2 IP Inputs, 2 TB 8 Alarm Inputs, 3 Alarm Outputs
	X21A1E3	4 Analog/CVI Inputs, 4 + 2 IP Inputs, 3 TB 8 Alarm Inputs, 3 Alarm Outputs
	X21A1E4	4 Analog/CVI Inputs, 4 + 2 IP Inputs, 4 TB 8 Alarm Inputs, 3 Alarm Outputs
	X21A1E6	4 Analog/CVI Inputs, 4 + 2 IP Inputs, 6 TB 8 Alarm Inputs, 3 Alarm Outputs
	X21A2E	8 Analog/CVI Inputs, 8 + 4 IP Inputs, 0 TB 8 Alarm Inputs, 3 Alarm Outputs
	X21A2E1	8 Analog/CVI Inputs, 8 + 4 IP Inputs, 1 TB 8 Alarm Inputs, 3 Alarm Outputs
	X21A2E2	8 Analog/CVI Inputs, 8 + 4 IP Inputs, 2 TB 8 Alarm Inputs, 3 Alarm Outputs
	X21A2E3	8 Analog/CVI Inputs, 8 + 4 IP Inputs, 3 TB 8 Alarm Inputs, 3 Alarm Outputs
	X21A2E4	8 Analog/CVI Inputs, 8 + 4 IP Inputs, 4 TB 8 Alarm Inputs, 3 Alarm Outputs
	X21A2E6	8 Analog/CVI Inputs, 8 + 4 IP Inputs, 6 TB 8 Alarm Inputs, 3 Alarm Outputs
	X21A3E	16 Analog/CVI Inputs, 16 + 8 IP Inputs, 0 TB 16 Alarm Inputs, 3 Alarm Outputs
	X21A3E1	16 Analog/CVI Inputs, 16 + 8 IP Inputs, 1 TB 16 Alarm Inputs, 3 Alarm Outputs
	X21A3E2	16 Analog/CVI Inputs, 16 + 8 IP Inputs, 2 TB 16 Alarm Inputs, 3 Alarm Outputs
	X21A3E3	16 Analog/CVI Inputs, 16 + 8 IP Inputs, 3 TB 16 Alarm Inputs, 3 Alarm Outputs
	X21A3E4	16 Analog/CVI Inputs, 16 + 8 IP Inputs, 4 TB 16 Alarm Inputs, 3 Alarm Outputs
	X21A3E6	16 Analog/CVI Inputs, 16 + 8 IP Inputs, 6 TB 16 Alarm Inputs, 3 Alarm Outputs

Dimensions (mm)











Rev: 001.005 2016 Dahua All rights reserved. Design and specifications are subject to change without notice.