

# 1080p Penta-brid HDCVI DVR

16-Channel 1U Digital Video Recorder with Analytics+





WizSense Series devices combine Dahua's powerful Analytics+ with an intuitive and easy to use interface. WizSense devices offer Smart Motion Detection and Perimeter Protection functions that focus on human and vehicular images and ignore irrelevant images to capture important video while reducing false alarms. WizSense Series devices provide powerful general surveillance for small to medium size businesses at a sensible price.

#### **System Overview**

The X52B Series HDCVI DVR offers high-definition recording on each HDCVI channel and a host of advanced features and functions. The X52B takes advantage of HDCVI technology for easy integration into existing video surveillance systems while leveraging existing networks, cabling, and cameras. Penta-brid access technology seamlessly records video from HDCVI, AHD, TVI, CVBS, and IP sources simultaneously. This recorder is the ideal solution for actively monitoring public venues, retail stores, transportation hubs and access ways, personal property and homes, and educational institutions.

#### **Functions**

#### Perimeter Protection

Dahua Analytics+ includes Tripwire and Intrusion functions that offer custom tripwires based on object type for automation in limited access areas. Perimeter Protection requires less pixels to detect an object to deliver improved accuracy and decreased false alarms due to lights, weather, trees, or animals.

#### **Smart Motion Detection**

The Smart Motion Detection, a component of Dahua's Analytics+ technology, improves alarm accuracy and decreases the number of false alarms. The advanced SMD algorithm analyzes a scene for human or vehicle motion, while filtering out other motion due to trees, leaves, animals, weather, and triggers an alarm when detected.

- 5M-N/1080p Recording Resolution on All HDCVI Channels
- Available with a 4 TB, 6 TB, 8 TB, or 10 TB Pre-installed Hard Drive
- Dual-stream Video Recording
- Al Coding Technology for High-quality Human/Vehicle Video
- Auto-detection and Auto-configuration of Video Inputs
- 16 + 8 IP Camera Channels, each channel up to 6 MP
- Maximum 128 Mbps Incoming Bandwidth
- Perimeter Protection and Smart Motion Detection (SMD)
- Long-distance Video Transmission
- Five-year Warranty\*













#### Al Coding

The AI Coding function puts recording emphasis on human or vehicular objects in the video scene. This technology, based on constant bit rate (CBR), dynamically allocates increased bit rate to the target object while reducing the bit rate allocated to background objects. AI Coding reduces bit rate and storage requirements by up to 50% when compared to the H.265 video compression standard.

#### Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 90% when compared to the H.264 video compression standard.

#### HDCVI/AHD/TVI/CVBS Auto-detect

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

#### Long Distance Transmission

HDCVI technology guarantees real-time transmission over long distances without loss of video quality. HDCVI devices provide the same resolution as most IP network camera systems using existing RG-59, RG-6, or CAT 6 UTP cabling.

## Pro Series | X52B3A Series

Technical Specification		
System		
Main Processor	Embedded Processor	
Operating System	Embedded LINUX	
Analytics+ Perimeter P	rotection <sup>1</sup>	
Performance	Human and Vehicle object classification Decreased false alarms from leaves, lights, animals Configure function on two (2) channels, or configure function on one (1) channel to use seven (7) channels for SMD Tripwire/Intrusion rules per channel	
Live View	Configure Rule and Object Inspection area     Display object classification, event types, trigger time, image snapshot, and object types     Export event playback 10 seconds prior to or after event	
Playback	Search by channel, time, event type, and target type     Search event playback 10 seconds prior to or after event     Snapshot capacity: 500,000	
Analytics+ Smart Motio	on Detection¹	
Performance	Detect motion based on object classification (human or vehicle)  Decreased false alarms from leaves, lights, animals  Configure functions on 16 channels, or configure functions on seven (7) channels to use one (1) channel of Perimeter Protection	
Preview	Configure and inspect detection area	
Playback	Search by channel, time, event type, and target type     Search event playback 10 seconds prior to or after event	

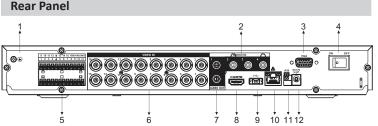
Analog Camera Input  16 Channels, BNC  5 MP, 4 MP, 1080p, 720p at 30 fps, 720p at 30 fps, 720p at 60 fps  AHD  5 MP, 4 MP, 1080p, 720p at 30 fps, 720p at 30 fps  TVI  5 MP, 4 MP, 3 MP, 1080p at 30 fps, 720p at 30 fps  CVBS  NTSC  IP Camera Input  16+8 Channels, each channel up to 6 MP  Audio  Input: Four (4) Channels, RCA Output: One (1) Channel, RCA  Two-way Talk  Audio Input Channel 1 In/ Audio Output, RCA  Recording  Compression  Al Coding, Smart H.265+, H.265, Smart H.264+, H.264  Recording Resolution  Main Stream  Main Stream  Record Rate  Main Stream  Pool at 15 fps 1080N, 720p, 960H, D1, CIF at 30 fps  Max. Incoming Bandwidth  128 Mbps  Bit Rate  32 Kbps to 6144 Kbps per Channel  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate  Audio Bit Rate  64 Kbps per Channel	Interface			
AHD  AHD  5 MP, 4 MP, 3 MP, 1080p at 30 fps, 720p at 30 fps  TVI  5 MP, 4 MP, 3 MP, 1080p at 30 fps, 720p at 30 fps  TVI  CVBS  IP Camera Input  16+8 Channels, each channel up to 6 MP  Audio  Input: Four (4) Channels, RCA Output: One (1) Channel, RCA  Two-way Talk  Audio Input Channel 1 In/ Audio Output, RCA  Recording  Compression  Al Coding, Smart H.265+, H.265, Smart H.264+, H.264  Recording Resolution  Main Stream  Al Coding, Smart H.265+, H.265, Smart H.264+, H.264  Record Rate  Main Stream  Al Coding, Smart H.265+, H.265, Smart H.264+, H.264  Record Rate  Main Stream  Political SM-N, 1080p, 1080N, 720p, 960H, D1, CIF  Main Stream  Political SM-N, 1080p at 15 fps 1080N, 720p, 960H, D1, CIF at 30 fps  Max. Incoming Bandwidth  128 Mbps  Max. Incoming Bandwidth  128 Mbps  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate  8 KHz, 16 bits per Channel	Analog Camera Input		16 Channels, BNC	
TVI 5 MP, 4 MP, 3 MP, 1080p at 30 fps, 720p at 30 fps  CVBS NTSC  IP Camera Input 16+8 Channels, each channel up to 6 MP  Audio Input: Four (4) Channels, RCA Output: One (1) Channel, RCA  Two-way Talk Audio Input Channel 1 In/ Audio Output, RCA  Recording  Compression Al Coding, Smart H.265+, H.265, Smart H.264+, H.264  Recording Resolution 5M-N, 4M-N, 1080p, 1080N, 720p, 960H, D1, CIF  SM-N at 10 fps 4M-N, 1080p at 15 fps 1080N, 720p, 960H, D1, CIF at 30 fps  Main Stream 960H at 15 fps; D1, CIF at 30 fps  Max. Incoming Bandwidth 128 Mbps  Bit Rate 32 Kbps to 6144 Kbps per Channel  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate 8 KHz, 16 bits per Channel	HDCVI			
CVBS  IP Camera Input  16+8 Channels, each channel up to 6 MP  Audio  Input: Four (4) Channels, RCA Output: One (1) Channel, RCA  Two-way Talk  Audio Input Channel 1 In/ Audio Output, RCA  Recording  Compression  Al Coding, Smart H.265+, H.265, Smart H.264+, H.264  Recording Resolution  SM-N, 4M-N, 1080p, 1080N, 720p, 960H, D1, CIF  SM-N at 10 fps 4M-N, 1080p at 15 fps 1080N, 720p, 960H, D1, CIF at 30 fps  Sub Stream  960H at 15 fps; D1, CIF at 30 fps  Max. Incoming Bandwidth  128 Mbps  Bit Rate  32 Kbps to 6144 Kbps per Channel  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate  8 KHz, 16 bits per Channel	AHD		5 MP, 4 MP, 3 MP, 1080p at 30 fps, 720p at 30 fps	
IP Camera Input  16+8 Channels, each channel up to 6 MP  Audio  Input: Four (4) Channels, RCA Output: One (1) Channel, RCA  Two-way Talk  Audio Input Channel 1 In/ Audio Output, RCA  Recording  Compression  Al Coding, Smart H.265+, H.265, Smart H.264+, H.264  Recording Resolution  Main Stream  Record Rate  Main Stream  Sub Stream  Pack of the transport of the t	TVI		5 MP, 4 MP, 3 MP, 1080p at 30 fps, 720p at 30 fps	
Audio Input: Four (4) Channels, RCA Output: One (1) Channel, RCA Two-way Talk Audio Input Channel 1 In/ Audio Output, RCA Recording Compression Al Coding, Smart H.265+, H.265, Smart H.264+, H.264 Recording Resolution  SM-N, 4M-N, 1080p, 1080N, 720p, 960H, D1, CIF  Main Stream Al Sub Stream Sub Stream P60H at 15 fps; D1, CIF at 30 fps  Max. Incoming Bandwidth 128 Mbps  Bit Rate 32 Kbps to 6144 Kbps per Channel  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  Record Interval  Record Interval Audio Compression AAC (first channel only), G.711a, G.711u, PCM Audio Sample Rate A Udio Sample Rate A Udio Compression ARIGHMENT AND STATE AND	CVBS		NTSC	
Audio Output: One (1) Channel, RCA  Two-way Talk  Recording  Compression  Al Coding, Smart H.265+, H.265, Smart H.264+, H.264  Recording Resolution  SM-N, 4M-N, 1080p, 1080N, 720p, 960H, D1, CIF  Main Stream  Record Rate  Main Stream  Sub Stream  960H at 15 fps; D1, CIF at 30 fps  Max. Incoming Bandwidth  128 Mbps  Bit Rate  32 Kbps to 6144 Kbps per Channel  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate  All Coding, Smart H.265+, H.265, Smart H.264+, H.264  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM	IP Camera Input	t	16+8 Channels, each channel up to 6 MP	
Recording  Compression  Al Coding, Smart H.265+, H.265, Smart H.264+, H.264  Recording Resolution  SM-N, 4M-N, 1080p, 1080N, 720p, 960H, D1, CIF  Main Stream  Record Rate  Main Stream  Pecord Rate  Sub Stream  960H at 15 fps; D1, CIF at 30 fps  Max. Incoming Bandwidth  128 Mbps  Bit Rate  32 Kbps to 6144 Kbps per Channel  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate  AI Coding, Smart H.265+, H.265, Smart H.264+, H.264  MA-N, 1080p, 1080N, 720p, 960H, D1, CIF  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM	Audio			
Compression  Al Coding, Smart H.265+, H.265, Smart H.264+, H.264  Recording Resolution  5M-N, 4M-N, 1080p, 1080N, 720p, 960H, D1, CIF  5M-N at 10 fps 4M-N, 1080p at 15 fps 1080N, 720p, 960H, D1, CIF at 30 fps  960H at 15 fps; D1, CIF at 30 fps  Max. Incoming Bandwidth  128 Mbps  Bit Rate  32 Kbps to 6144 Kbps per Channel  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate  8 KHz, 16 bits per Channel	Two-way Talk		Audio Input Channel 1 In/ Audio Output, RCA	
Recording Resolution  5M-N, 4M-N, 1080p, 1080N, 720p, 960H, D1, CIF  5M-N at 10 fps 4M-N, 1080p at 15 fps 1080N, 720p, 960H, D1, CIF at 30 fps  960H at 15 fps; D1, CIF at 30 fps  Max. Incoming Bandwidth  128 Mbps  Bit Rate  32 Kbps to 6144 Kbps per Channel  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate  8 KHz, 16 bits per Channel	Recording			
Record Rate  Main Stream  Sub Stream  Sub Stream  Max. Incoming Bandwidth  Bit Rate  Manual, Schedule (Regular, Continuous), MD (Video Detection, Video Loss, Tampering), Alarm, Stop  Record Interval  Record Interval  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate  Sub Stream  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate	Compression		Al Coding, Smart H.265+, H.265, Smart H.264+, H.264	
Record Rate  Main Stream 4M-N, 1080p at 15 fps 1080N, 720p, 960H, D1, CIF at 30 fps  960H at 15 fps; D1, CIF at 30 fps  Max. Incoming Bandwidth 128 Mbps  Bit Rate 32 Kbps to 6144 Kbps per Channel  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  Record Interval Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate 8 KHz, 16 bits per Channel	Recording Resolution		5M-N, 4M-N, 1080p, 1080N, 720p, 960H, D1, CIF	
Sub Stream D1, CIF at 30 fps  Max. Incoming Bandwidth  128 Mbps  Bit Rate  32 Kbps to 6144 Kbps per Channel  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate  8 KHz, 16 bits per Channel			4M-N, 1080p at 15 fps	
Bit Rate  32 Kbps to 6144 Kbps per Channel  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate  8 KHz, 16 bits per Channel		Sub Stream		
Record Mode  Manual, Schedule (Regular, Continuous), MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  8 KHz, 16 bits per Channel	Max. Incoming Bandwidth		128 Mbps	
Record Mode  MD (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop  1 to 60 minutes (default: 60 minutes), Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression  AAC (first channel only), G.711a, G.711u, PCM  8 KHz, 16 bits per Channel	Bit Rate		32 Kbps to 6144 Kbps per Channel	
Record Interval Pre-record: 1 s to 30 s, Post-record: 10 s to 300 s  Audio Compression AAC (first channel only), G.711a, G.711u, PCM  Audio Sample Rate  8 KHz, 16 bits per Channel	Record Mode		MD (Video Detection: Motion Detection, Video Loss,	
Audio Sample Rate 8 KHz, 16 bits per Channel	Record Interval		Pre-record: 1 s to 30 s,	
, ,	Audio Compression		AAC (first channel only), G.711a, G.711u, PCM	
Audio Bit Rate 64 Kbps per Channel	Audio Sample Rate		8 KHz, 16 bits per Channel	
	Audio Bit Rate		64 Kbps per Channel	

	splay		Electrical			
Native Output	errace	· · · · · · · · · · · · · · · · · · ·	Power Supply 1	12 VDC, 4 A		
Native Output Resolution   Aban   A			Power Consumption <	< 12 W, without HDD		
Native Output   Resolution   VGA   1280 x 1024, 1280 x 720   Dimensions			Construction			
Maximum Playback   16 Channels of 4 M-N at 15 fps   16 Channels of 1080p at 1080p   10 Channels   10 Channe	ive Output		Dimensions			
Maximum Playback   16 Channels of 1080p at 15 fps   Eljeht (8) Channels of 1080p at 30 fps   Four (4) Channels of 4 M-N at 30 fps   Power (4) Channels of 4 M-N at 30 fps   Power (4) Channels of 4 M-N at 30 fps   Power (4) Channels of 4 M-N at 30 fps   Power (4) Channels of 4 M-N at 30 fps   Power (4) Channels of 4 M-N at 30 fps   Net Weight   1.80 kg (4.0 lb)		VGA 1920 x 1080, 1280 x 1024, 1280 x 720	HDCVLDVR			
Four (4) Channels of 4 M-N at 30 fps  Multi-screen Display  IP extension mode disabled: 1/4/8/9 IP extension mode enabled: 1/4/8/9 IP extension mode enabled: 1/4/8/9/16  Fisheye Dewarp  Supported via Web Interface  On-screen Display  Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording  Network  Interface  One (1) RI-45 (1000 Mbps) Port  HTTP, TCP/IP, IPV-4/IPV6, UPP.P, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DONS, FTP, Alarm Server, P2P, IP Search (Supports Dahua IP cameras, DVRs, NVS)  Maximum User Access  Mobile Operating System  Interoperability  ONVIF 16.12, CGI Conformant  Video Detection and Alarm  Trigger Events  Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips  Video Detection  Motion Detection, MD Zones: 396 (22 x 18), Video Loss, Tampering, and Diagnosis  Alarm Input  Relay Output  Three (3) Channels  Net Weight  3.10 kg (6.80 lb)  Installation  Desktop or Rack-mount  Video Transmission Distance  720p: 800 m (2624.67 ft) 1080p: 500 m (1640.42 ft) 4K/4MP: 700 m (295.59 ft)  CAT 6 UTP (balu nrequired) 4K/4MP: 700 m (295.59 ft)  Environmental  Operating Conditions  -10° C to +55° C (+14° F to +131° F), 0% to 90% RH  Third-party Support  Third-party Supp	ximum Playback	rback 16 Channels of 1080p at 15 fps				
Multi-screen Display    Pextension mode enabled: 1/4/8/9/16   Installation   Desktop or Rack-mount	· ·		Net Weight 1	Net Weight 1.80 kg (4.0 lb)		
Fisheye Dewarp  Supported via Web Interface  On-screen Display  Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording  Network  Interface  One (1) RJ-45 (1000 Mbps) Port  Network Function  DHCP, DNS, IP Filter, PPDE, DDNS, FTP, Alarm Server, P2P, IP Search (Supports Dahua IP cameras, DVRS, NVS)  Maximum User Access  Mobile Operating System  Interoperability  ONVIF 16.12, CGI Conformant  Video Detection  Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering, and Diagnosis  Alarm Input  Relay Output  Three (3) Channels  Supported via Web Interface  Video Date Camera Title, Time, Video Loss, Camera Lock, Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering, and Diagnosis  Video Detection  Supported via Web Interface  Video Transmission Distance  Video Transmission Distance  Video Transmission Distance  Video Transmission Distance  720p: 800 m (2624.67 ft) 4K/4MP: 500 m (1640.42 ft) 1080p: 900 m (1640.42 ft) 1080p: 800 m (2624.67 ft) 1080p: 800 m (264.67 ft			Gross Weight 3	3.10 kg (6.80 lb)		
On-screen Display  Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording  Network  Interface  One (1) RJ-45 (1000 Mbps) Port  HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPP0E, DNS, FTP, Alarm Server, P2P, IP Search (Supports Dahua IP cameras, DVRs, NVS)  Maximum User Access  Mobile Operating System  Interoperability  ONVIF 16.12, CGI Conformant  Video Detection and Alarm  Trigger Events  Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips  Video Detection  Alarm Input  16 Channels  Relay Output  Three (3) Channels  Relay Output  Triges Resording PTZ, Tour, Sideo Loss, Tampering, and Diagnosis  P20p: 800 m (2624.67 ft) 1080p: 500 m (1640.42 ft) 1080p: 800 m (2624.67 ft) 1080p: 800 m (26		ir extension mode enabled. 1/4/6/3/10	Installation	Desktop or Rack-mount		
Network  Interface One (1) RJ-45 (1000 Mbps) Port  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)  Maximum User Access Mobile Operating System Interoperability Video Detection and Alarm  Trigger Events 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  Network Function Relay Output Three (3) Channels  Relay Output  Recording	ieye Dewarp	p Supported via Web Interface	Video Transmission Di	istance		
Interface  One (1) RJ-45 (1000 Mbps) Port  RG-6/U Coax  R	-screen Display	nav	RG-59/U Coax	1080p: 500 m (1640.42 ft)		
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)  Maximum User Access  128 Users  Mobile Operating System  IOS, Android  Interoperability  ONVIF 16.12, CGI Conformant  Video Detection and Alarm  Trigger Events  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  Relay Output  Three (3) Channels  TAIT  CAT 6 UTP (balun required)  720p: 450 m (1476.38 ft) 1080p: 300 m (984.25 ft) 4K/4MP: 300 m (984.25 ft) 4K/4MP: 300 m (984.25 ft) 4K/4MP: 300 m (984.25 ft) 20prating Conditions -10° C to +55° C (+14° F to +131° F), 0% to 90% RH  Third-party Support  Third-party Support  Third-party Support  Third-party Support  Certifications  Certifications  Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsun, Sanyo, Sony, Videotec, Vivotek, and others  Certifications  Play Nacola Packup		One (1) RJ-45 (1000 Mbps) Port	RG-6/U Coax	1080p: 800 m (2624.67 ft)		
Maximum User Access  128 Users  Environmental  Operating System  IOS, Android  Operating Conditions  -10° C to +55° C (+14° F to +131° F), 0% to 90% RH  Storage Conditions  -20° C to +70° C (-4° F to +158° F), 0% to 90% RH  Trigger Events  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 Channels  Relay Output  Three (3) Channels  Safety  Environmental  Operating Conditions  -10° C to +55° C (+14° F to +131° F), 0% to 90% RH  Storage Conditions  -20° C to +70° C (-4° F to +158° F), 0% to 90% RH  Third-party Support  Third-party Support  Certifications  UL 60950 EN 60950-1	work Function	DHCP, DNS, IP Filter, PPPoE,DDNS, FTP, Alarm Server,	CAT 6 UTP	720p: 450 m (1476.38 ft) 1080p: 300 m (984.25 ft)		
Mobile Operating System  Interoperability  ONVIF 16.12, CGI Conformant  Video Detection and Alarm  Trigger Events  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  Relay Output  Three (3) Channels  Operating Conditions  -10° C to +55° C (+14° F to +131° F), 0% to 90% RH  Storage Conditions  -20° C to +70° C (-4° F to +158° F), 0% to 90% RH  Third-party Support  Third-party Support  Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsun, Sanyo, Sony, Videotec, Vivotek, and others  Certifications  UL 60950  EN 60950-1	ximum User Access	r Access 128 Users		4K/4MP: 300 m (984.25 π)		
Interoperability  ONVIF 16.12, CGI Conformant  Storage Conditions  -20° C to +70° C (-4°F to +158° F), 0% to 90% RH  Trigger Events  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 Channels  Relay Output  Three (3) Channels  Storage Conditions  -20° C to +70° C (-4°F to +158° F), 0% to 90% RH  Third-party Support  Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsun, Sanyo, Sony, Videotec, Vivotek, and others  Certifications  UL 60950  EN 60950-1	bile Operating System	ing System IOS, Android	Environmental			
Video Detection and Alarm  Trigger Events  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 Channels  Relay Output  Three (3) Channels  Storage Conditions  —20° C to +70° C (-4°F to +158° F), 0% to 90% RH  Third-party Support  Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsun, Sanyo, Sony, Videotec, Vivotek, and others  Certifications  UL 60950  EN 60950-1	eroperability	v ONVIF 16.12. CGI Conformant	Operating Conditions –	–10° C to +55° C (+14° F to +131° F), 0% to 90% RH		
Trigger Events  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 Channels  Relay Output  Third-party Support  Third-party Support  Third-party Support  Third-party Support  Certifications  Certifications  UL 60950  EN 60950-1			Storage Conditions –	-20° C to +70° C (-4°F to +158° F), 0% to 90% RH		
Buzzer and Screen Tips  Wideo Detection  Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering, and Diagnosis  Alarm Input  16 Channels  Relay Output  Three (3) Channels  Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsun, Sanyo, Sony, Videotec, Vivotek, and others  Certifications  UL 60950  EN 60950-1			Third-party Support			
Alarm Input  16 Channels  Relay Output  Three (3) Channels  Dlayback and Packup  Safety  Safety  Dlayback and Packup	ger Events	Buzzer and Screen Tips  Motion Detection MD Zones: 396 (22 x 18)	Third-party Support P	Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung,		
Relay Output Three (3) Channels UL 60950  Safety EN 60950-1		Video Loss, Tampering, and Diagnosis		sanyo, Sony, Videotec, Vivotek, and others		
Playback and Packup Safety EN 60950-1						
	, ,		Safety	EN 60950-1		
Playback <sup>3</sup> 1/4/9/16 FCC CFR 47 Part 15 Subpart B	/back³	1/4/9/16	F	FCC CFR 47 Part 15 Subpart B		
Search Mode  Time/Date, Alarm, MD and Exact Search (accurate to 1 second)  Electromagnetic Compatibility (EMC)  EN 61000-3-2 EN 61000-3-3 EN 55032			Electromagnetic E	EN 61000-3-3		
Play, Pause, Stop, Rewind, Fast Play, Slow Play, Next File, Playback Function Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, and Digital Zoom	back Function	Previous File, Next Camera, Previous Camera, Full Screen,	E	EN 50130		
Backup Mode USB Device/Network	kup Mode	USB Device/Network				
Storage	orage					
Internal HDD Two (2) SATA Ports, up to 10 TB capacity for each disk	ernal HDD	Two (2) SATA Ports, up to 10 TB capacity for each disk				
Auxiliary Interface	xiliary Interface	terface				
USB One (1) USB 2.0 Port and One (1) USB 3.0 Port	3	One (1) USB 2.0 Port and One (1) USB 3.0 Port				
RS485 One (1) Port for PTZ Control	85	One (1) Port for PTZ Control				

The Analytics+ functions are disabled when the additional IP channels are active.
 The output resolution for HDMI reduces to 1920 x 1080, 1280 x 1024, 1280 x 720 when the SMD function is enabled.
 The Playback split reduces to 1/4/9 when the SMD function is enabled.

### Pro Series | X52B3A Series

Ordering Information					
Туре	Part Number	Description			
	X52B3A4	16-Channel Penta-brid 1080p 1U, 4 TB Digital Video Recorder			
1080p HDCVI DVR with Analytics+	X52B3A6	16-Channel Penta-brid 1080p 1U, 6 TB Digital Video Recorder			
	X52B3A8	16-Channel Penta-brid 1080p 1U, 8 TB Digital Video Recorder			
	X52B3A10	16-Channel Penta-brid 1080p 1U, 10 TB Digital Video Recorder			
Accessory, optional	PFH101	Rack Mount Tray 482.60 mm x 281.20 mm x 43.7 mm (19.0 in. x 11.07 in. x 1.72 in.)			
Rear Panel					



1	Ground	7	Audio Output (x1 RCA)
2	Audio Input (x4 RCA)	8	HDMI Output
3	VGA Output	9	USB Port
4	Power Switch	10	RJ-45 Ethernet Port (1000 Mbps)
5	Alarm Input (x16) Alarm Output (x3)	11	Power Input
6	Video Input (x16 BNC)	12	RS485 Port

