## **KBVISION**

#### KX-FDA320R24ZST

24-bay Embedded Video Storage



- 64-bit high-performance multi-core processor.
- Max 320-ch IP camera inputs.
- Max 800 Mbps incoming/recording/forwarding bandwidth.
- 24 bays, SATA, Hot-Swap.
- Supports RAID 0/1/5/6/10/50/60,Hot spare.
- Supports video stream direct storage mode and IPSAN storage mode.
- Supports N+M cluster.
- Supports Automatic Network Replenishment (ANR).
- Modular and drawer-like design.
- 1+1 redundant 80PLUS platinum power supply.

Man Rossavi44.bit Rejermance multi-core processorOperating interfFederation interfOperating interfFederation interfOperating interfSingle corructionOperating interfSingle corructionOperating interfSingle corructionOperating interfSingle corructionOperating interfSingle corructionOperating interfSingle corructionOperationSingle corruction <th>System</th> <th></th>	System		
Default interface     Web (PGAP)       Controller     Single controller       Controller     Single controller       Cache     Single controller       Application     Frace-costing fair moving trapping and intruction, wide metadata human, whole, moving optime, and intruction, wide human, setting, and calling       Controller     Works with camera for fina alam, temperature alam, temperature alam, human part, cald spet, moving and calling       People Cauring     Works with camera for fina alam, temperature alam, temperature alam, being optic cauting and puse people cauting.       Single Soveral Task     Works with camera for fina alam, temperature alam, temperature alam, being optic cauting and task part and spet faith spet f	Main Processor	64-bit high-performance multi-core processor	
Chronier     Single controller       Cache     B CB by default testendable to 64 GD       Applications     Controller of Company Control of Company Control of Contr	Operating System	Embedded Linux OS	
Cachina 8 GB by default (existendable to 64 GB)   AI Applications Face detection, face recognition, NS fabandoned object, missing object, loitering, crowd gathering, parking, from crossing, figure and intrusion, widen metadas duman, vehicle, non-motor whicle, which crecognition, people counting (metage or packamets maining gatesticin), crowd gathering, parking, figure crossing, trapper required/Lace & body detaction, crowd distribution, smart thermal (call detection, visible channel- smaking gatesticin), thermal   Concerc Compatibility Work with camera for fire alarm, temperature alference alarm, hot spot, cold spot, smoking and calling.   People Courting Work with camera for tripping properiod counting, regional people counting and queue people counting.   Bible-PI2 Smart Track Work with camera for fire yalarm, temperature difference alarm, hot spot, cold spot, smoking and calling.   Bible-PI2 Smart Track Work with camera for fire yalarm, temperature difference alarm, hot spot, cold spot, smoking and calling.   Cluster Cluster   Cluster Cluster   Cluster Supports dewarping for fisheye cameras.   Cluster M M   Addio and Wideo Smart H.265+; H.265; Smart H.265+; H.265; MPEG   Audio and Wideo Smart H.255+; H.265; Smart H.265+; H.265; MPEG   Audio Compression G.711A: G.7114; PCD; G.726   Network Formacia Jü5; Android   Interoperability ONrif Ornifs, RTSP; Dorp, SMTP; NTP; DHCP; DMS; DDMS; DDMS; P2P   Mobile Phone Access	Operating Interface	Web (PCAPP)	
A Applications     Face detection, face recognition, VS (abandoned object, missing object, lottering, crowd gathering, parking, face accounting (fishaye or people counting, fishaye or people counting, crowd required (block on the data al human, vehicle, non-moor vehicle), vehicle recognition, people counting (fishaye or people counting, crowd required (block on the data al human, vehicle, non-moor vehicle), vehicle recognition, people counting (fishaye or people counting, crowd datahuman, vehicle, non-moor vehicle), vehicle recognition, people counting detection, face and the data human, vehicle, non-moor vehicle), vehicle recognition, people counting detection, face and the data human, vehicle, non-moor vehicle), vehicle recognition, people counting detection, face and the data human, vehicle, non-moor vehicle), vehicle, vehicle recognition, people counting and prove counting, and tracking, auto tracking, autot tracking, auto trac	Controller	Single controller	
Al by Camera     Face detertions face recognition, MS (bibardmet object, missing adject, full-tring, round gpt-fring, adject, non-matical, while recognition, people counting (they or people counting (they or indeple), while recognition, people counting (they or people counting (they or indeple), while recognition getter (ton), visible channel-smaking detection, v	Cache	8 GB by default (extendable to 64 GB)	
Alb y Camera     Enc crossing fast moving, trytwyer and intrusion, video medada futunan, which, on mind or videol, which er conginiton, people counting gamera required); advised metada futunan, which, on mind or videol, which and er fire samera required); advised metada futunan, semera lead indiced, advised futunan, advised futunan, advised futunan, advised futunan, semera lead indiced, advised futunan, semera lead indiced, advised futunan, advised f	AI Applications		
Thermal     Works with camera for fire alarm, temperature alarm, temperature difference alarm, hot spot, cold spot, smoking and calling       People Counting     Works with camera for tripwire people counting, regional people counting and queue people counting.       Buille-TZ Smart Track     Works with camera for manual tracking, auto tracking, click postioning and select postioning.       Fisheye Dewarp     Supports dewarping for fisheye cameras       Cluster     N=M       Audio and Video     Tripd anyt Camera Access       Onvil, Onvils, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision     Compression       Audio Compression     Smart H 265+; H 265, Smart H 264+; H 264, MJPEG       Audio Compression     Smart H 265+; H 265, Smart H 264+; H 264, MJPEG       Network     Network       Network     Compression       Notic forvils, RTSP, Diny, Phyt, RTSP, Diny, Diny, DINY, DINCP, DNS, DDNS, P2P       Mobile Phone Access     IOS, Android       Interopability     ONVE Findle SJ: CGS DNK       Record Mode     Auto Controm, EXAPPP, IEG on higher, Fine/ox       Nucli channel Playback     Max, 16.channel playback       Record Mode     Autor cort, manual record; seach video detection; IO alarm; thermal imaging: intelligent event; all record file       Sorage Method	Al by Camera	fence-crossing, fast moving, tripwire and intrusion), video metadata (human, vehicle, non-motor vehicle), vehicle recognition, people counting (fisheye or people counting camera required), face & body detection, crowd distribution, smart thermal (call detection, visible channel- smoking detection, thermal	
People Counting     Works with camera for tripwire people counting, regional people counting and queue people counting       Bulle-PZ Smart Track     Works with camera for manual tracking, auto tracking, click positioning and select positioning       Fishep Dewarp     Supported dewarping for fishepe cameras       Cluster     N+M       Audio ad Video     Trind-party Camera Access       Ontif, Omvif, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision     Compression       Compression     Smart H.265:; H.265; Smart H.264:; H.264; MJPEG       Audio Compression     G.714, G.7114, PCM; G726       Network     Network       Network     Notif Omvif, PCM; DP, Spr, Spr, Panasonic, Axis, Arecont, Pelco, Sto DNS; P2P       Mobile Phone Access     IOS; Android       Interoperability     OVNF (Proville S): CG: SDK       Recording Playback     Max: 16-channel playback       Multi-channel Playback     Max: 16-channel playback       Record Mode     Interonal KDO and network disk       Backup Method     Incoming: 320-channel (bandwidth: 800 Mpps; Recording: 320-channel (bandwidth: 800 Mpps; Outgoing: 320-channel (bandwidth: 800 Mpps; Outgoing: 320-channel (bandwidth: 800 Mpps; Playback: 800 Mpps; Outgoing: 320-channel (bandwidth: 800 Mpps; Playback: 800 Mpps; Outgoing: 320-channel (bandwidth: 800 Mpps; Playback: 800 Mpps; Outgoing: 320-channe	Camera Compatibility		
Bullet-PT2 Smirt Track     Works with camera for manual tracking, auto tracking, click positioning and select positioning       Fisheye Dewarp     Supports dewarping for fisheye cameras       Cluster     N=M       Audio and Video     Track-party Camera Access     Om/f, Om/fis, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision       Compression Standard     Smart H.265+; H.265+; Smart H.264+; H.264+; MJPEG       Audio compression     G.711k, G.711U, PCM, G/26       Network     Network       Network Protocol     HTTP; HTTP; TCP/IP; IP44; RTSP, UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P       Mobio Phone Access     IOS; Android       Interoperability     ON/HF (Profile S); CG; SDK       Browser     Chrome; PCAPP; IE9 or higher; Firefox       Network Mode     NC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etc       Record Mode     Auto record; search video detection; IO alarm; thermal imaging; intelligent event; all record file       Storage Method     HDD, pripheral UBB storage device       Video Direct Storage (Private Protocol)     Incoming 320-hannel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Paybakci: 32-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Protocing: 320-	Thermal	Works with camera for fire alarm, temperature alarm, temperature difference alarm, hot spot, cold spot, smoking and calling	
Releye Dewarp     Supports dewarping for fisheye cameras       Cluster     N+M       Audia and Videa     Tinic'party Camera Access     Orwif, Orwifs, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision       Compression Standard     Orwif, Orwifs, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision       Compression Standard     Smart H.265+; H.265; Smart H.264+; H.264, MJPEG       Video Compression     Smart H.265+; H.265; Smart H.264+; H.264, MJPEG       Audio Compression     G.711+; C.7111, P.CM, G726       Network     Network       Network Forocol     HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P       Mobile Phone Access     IoS; Android       Interoperability     ONME (Profile S1; CG1; SDK       Brower     Chrome; PCAPP; IEG or higher; Firefox       Multi-channel Playback     Max: 16-channel playback       Record Mode     Ator ecord; manual record; search wideo detection; IO alarn; thermal imaging; intelligent event; all record file       Storage Method     Internal HDD and network disk       Backup Method     Internal HDD and network disk backward, reverse play, frame by aback: 32-channel (bandwidth: 60 Mbps); Recording: 320-chann	People Counting	Works with camera for tripwire people counting, regional people counting and queue people counting	
Cluster     N+M       Audia Video     Intro-party Camera Access     Orwlf, Onwlfs, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision       Compression Standard     Smart H.265+; H.265; Smart H.264+; H.264; MJPEG     Audia Compression       Audia Compression G, 27114; G, 27111; PCM; G726     Method     Method       Network     Intro-party Camera Access     IOS; Android       Interoperability     Orwlf, Orwlfs, RTSP, CDMP; INV4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P       Mobile Phone Access     IOS; Android       Interoperability     Orwlf, Profile SJ; CG; SDK       Browser     Chrome; PCAPP; IE9 or higher; Firefox       Network Node     Natio angueta sun sulpile-address mode, load balance, fault-tolerance, link aggregation, etc       Recording Playback     Matio Facoradi, manual record; search video detection; IO alarm; thermal imaging: intelligent event; all record file       Storage Method     Interone; Subp, fast Groward, fast badkward, reverse play, frame by frame       Playback Function     Interone; Subp, fast Groward, fast badward; reverse play, frame by frame       Video Direct Storage (Private Protocol)     Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 600 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbps); Protoging: 320-channel (bandwidth: 600 Mbps);       Video Direct Storage	Bullet-PTZ Smart Track	Works with camera for manual tracking, auto tracking, click positioning and select positioning	
Cluster     N+M       Audio and Videe     Norlf, Convifs, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision       Compression Standard     Smart PL265+, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision       Compression Standard     Smart PL265+, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision       Compression Compressin Compressi	Fisheye Dewarp	Supports dewarping for fisheye cameras	
Addia and Video       Third-party Camera Access     Onvid, Onvids, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision       Compression Standard     Smart H.265:; H.265; Smart H.264:; H.264; MJPEG       Audio Compression     Smart H.265:; H.265; Smart H.264; HJPEG       Audio Compression     G.7114; C.7114; PCM; G726       Network     Network Protocol       Network Protocol     HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P       Mobile Phone Access     IOS; Android       Interoperability     ONYlf (Profile S); CG; SDK       Rework Mode     NC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etc       Network Mode     NC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etc       RecordIng Playback     Max. 16-channel playback       Record Mode     Ause record; manual record; search video detection; IO alarn; thermal imaging: intelligent event; all record file       Storage Method     HDD, pripheral USB storage device       Playback Function     1.Play, pause, stop, fast Groward, fast backward; reverse play, frame by frame       Video Direct Storage (Private f     Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Pecording: 320-channel (bandwid	Cluster		
Thirdy-party Camera Access     Owtf, Onvifs, RTSP, Sony, Panasonic, Akis, Arecont, Pelco, Canon, Samsung, Hikvision       Compression Standard     Smart H.265+; H.265; Smart H.264+; H.264; MJPEG       Video Compression     Smart H.265+; H.265; Smart H.264+; H.264; MJPEG       Audio Compression     Smart H.265+; H.265; Smart H.264+; H.264; MJPEG       Network     Temperature       Network Protocol     HTTP; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P       Network Protocol     ONS; Android       Interoperability     ONVF (Profile S); CGI; SDK       Record Mode     NC binding mode such as multiple address mode, load balance, fault-tolerance, link aggregation, etc       Multi-channel Playback     Max. 16-channel playback     Aast 16-channel playback       Record Mode     Auto record; manual record; search video detection; IO alarm; thermal imaging: intelligent event; all record file     Stange       Storage Method     Internal HDD and network disk     Backup Method     Internal HDD and network disk       Storage     Independent UBB storage device     Storage device     Storage       Video Direct Storage (Private)     Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Pacerding: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); R	Cluster	N+M	
Compression Standard       Video Compression     Smart H.265+; H.265; Smart H.264+; H.264, MJPEG       Audio Compression     G.711A; G.711U; PCM; G726       Network     Network Protocol       MTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P       Mobile Phone Access     IOS; Android       Interoperability     ONVIF (Profile S); CGI; SDK       Browser     Chrome; PCAPP; IE9 or higher; Firefox       Network Mode     NIC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etc       Recording Playback     Max. 16-channel playback       Record Mode     Auto record; manual record; search video detection; IO alarm; thermal imaging: intelligent event; all record file       Storage Method     Internal HDD and network disk       Backup Method     HDD, peripheral USB storage device       Playback Function     1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2, Tull screeer, backup (clip; file), snapshot, digital zoom, audio on; off       Storage     Video Direct Storage (Private Private Playback; Storage device)       Video Direct Storage (Private Playback; 32-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Private)       Video Direct Storage (Private Playback; 32-channel (bandwidth: 600 Mbps); Recor	Audio and Video		
Video CompressionSmart H.265; Smart H.264; H.264; MJPEGAudio CompressionG.711A; G.711U; PCM; G726NetworkNetwork ProtocolHTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DDCP; DNS; DDNS; P2PMobie Phone AccessIOS; AndroidInteroperabilityONVF (Profile S); CG; SDKBrowserChrome; PCAPP; IE9 or higher; FirefoxNetwork ModeNIC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etcRecording PlaybackMax. 16-channel playbackRecording PlaybackMax. 16-channel playbackNetwork ModeNIC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etcRecording PlaybackMax. 16-channel playbackRecording PlaybackMax. 16-channel playbackRecording PlaybackMax. 16-channel playbackPlayback FunctionInternal HDD and network diskBackup MethodHDD, peripheral USB storage devicePlayback FunctionI.Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. full-screent, backup (Clip; file), snapshot, digital zoom, audio on; offStorageVideo Direct Storage (Private Protocol)Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbps);Video Direct Storage (Private)Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 600 Mbps); Percording: 320-channel (bandwidth: 600 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbps); Percording: 320-channel (bandwidth: 600 Mbps); Percording: 320-channel (bandwidth: 600 Mbps); Percording: 320-channel (bandwidth: 6	Third-party Camera Access	Onvif, Onvifs, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision	
Addo Compression     G.7114; G.711U; PCM; G726       Network     Compression     G.7114; G.711U; PCM; G726       Network Protocol     HTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P       Mobile Phone Access     IOS; Android       Interoperability     ONVIF (Profile S); CGI; SDK       Browser     Chrome; PCAPP; IE9 on higher; Firefox       Network Mode     Nt: binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etc       Recording Playback     Max. 16-channel playback       Multi-channel Playback     Max. 16-channel playback       Record Mode     Internal HDD and network disk       Backup Method     Internal HDD and network disk       Backup Method     Internal HDD and network disk       Backup Method     Internal HDD and network disk       Storage     Internal HDD and network disk       Backup Method     Internal HDD, periperal USB storage device       Video Direct Storage (Private)     Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Payosac: 32-channel (bandwidth: 64 Mbps)       Video Direct Storage (Onvin)     Incoming: 320-channel (bandwidth: 64 Mbps)     Payback: 32-channel (bandwidth: 64 Mbps)       Video Direct Storage (International <td colspan="2">Compression Standard</td>	Compression Standard		
Network       Network Protocol     HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DLPC; DNS; DDNS; P2P       Mobile Phone Access     IOS; Android       Interoperability     ONVIF (Profile S); CG; SDK       Browser     Chrome; PCAPP; IE9 or higher; Firefox       Network Mode     NIC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etc       Recording Playback     Max. 16-channel playback       Muti-channel Playback     Max. 16-channel playback       Record Mode     Auto record; manual record; search video detection; IO alarm; thermal imaging; intelligent event; all record file       Storage Method     Internal HDD and network disk       Backup Method     HDD, peripheral USB storage device       Playback Function     1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Full-screen, backup (clip; file), snapshot, digital zoom, audio or; off       Storage     Video Direct Storage (Private Protocol)     Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Pecording: 320-channel (bandwidth: 800 Mbps); Pe	Video Compression	Smart H.265+; H.265; Smart H.264+; H.264; MJPEG	
Network ProtocolHTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2PMobile Phone AccessIOS; AndroidInteroperabilityONVIF (Profile S); CG; SDKBrowserChrome; PCAPP; IE9 or higher; FirefoxNetwork ModeNIC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etcRecording PlaybackMax. 16-channel playbackMuti-channel PlaybackMax. 16-channel playbackRecord ModeAuto record; manual record; search video detection; IO alarm; thermal imaging; intelligent event; all record fileStorage MethodInternal HDD and network diskBackup MethodHDD, peripheral USB storage devicePlayback Function1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Full-screen, backup (clip; file), snapshot, digital zoom, audio on; offStorageVideo Direct Storage (PrivateProtocol)Incoming; 320-channel (bandwidth: 800 Mbps); Recording; 320-channel (bandwidth: 800 Mbps); Outgoing; 320-channel (bandwidth: 800 Mbps);Video Direct Storage (Aor Registe)Incoming; 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Aor Registe)Incoming; 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Aor Registe)Incoming; 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Internation)Incoming; 320-channel (bandwidth: 64 Mbps)<	Audio Compression	G.711A; G.711U; PCM; G726	
Mobile Phone AccessIOS; AndroidInteroperabilityOKVIF (Profile S); CGI; SDKBrowserChrome; PCAPP; IE9 or higher; FirefoxNetwork ModeNIC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etcRecording PlaybackMax. 16-channel playbackMulti-channel PlaybackMax. 16-channel playbackRecord ModeAuto record; manual record; search video detection; IO alarm; thermal imaging; intelligent event; all record fileStorage MethodInternal HDD and network diskBackup MethodHDD, peripheral USB storage devicePlayback Function1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Full-screen, backup (Clip; file), snapshot, digital zoom, audio on; offStorageVideo Direct Storage (Private Playback: 32-channel (bandwidth: 60 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Playback: 32-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto RegistryIncoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto RegistryIncoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto RegistryIncoming: 320-channel (bandwidth: 60 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Playback: 32-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto RegistryIncoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 60 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Playback: 32-channel (bandwidth: 64 Mbps)Video Direct Storage (	Network		
InteroperabilityONVIF (Profile S); CGI; SDKBrowserChrome; PCAPP; IE9 or higher; FirefoxNetwork ModeNIC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etcRecording PlaybackMax. 16-channel playbackMulti-channel PlaybackMax. 16-channel playbackRecord ModeAuto record; manual record; search video detection; IO alarm; thermal imaging; intelligent event; all record fileStorage MethodInternal HDD and network diskBackup MethodHDD, peripheral USB storage devicePlayback Function1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Luli-screen, backup (clip; file), snapshot, digital zoom, audio on; offStorageUtiong; 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 600 Mbps); Outgoing: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Anuto Register)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Internation)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Sto	Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P	
BrowserChrome; PCAPP; IE 9 on higher; FirefoxNetwork ModeNIC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etcRecording PlaybackNax. 16-channel playbackMulti-channel PlaybackMax. 16-channel playbackRecord ModeAuto record; manual record; search video detection; IO alarm; thermal imaging; intelligent event; all record fileStorage MethodInternal HDD and network diskBackup MethodHDD, peripheral USB storage devicePlayback Function1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Full-screen, backup (clip; file), snapshot, digital zoom, audio on; offStorageVideo Direct Storage (Private Protocol)Nicoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbps)Video Direct Storage (Onvif)Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps)Video Direct Storage (Auto Register)Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbps)Video Direct Storage (Internation)Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbps)Video Direct Storage (Internation)Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbps)Video Direct Storage (Internation)Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbp	Mobile Phone Access	IOS; Android	
Network Mode     NIC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etc       Recording Playback     Max. 16-channel playback       Multi-channel Playback     Max. 16-channel playback       Record Mode     Auto record; manual record; search video detection; IO alarm; thermal imaging; intelligent event; all record file       Storage Method     Internal HDD and network disk       Backup Method     HDD, peripheral USB storage device       Playback Function     1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Full-screen, backup (clip; file), snapshot, digital zoom, audio on; off       Storage     Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps)       Video Direct Storage (Onvir)     Incoming: 320-channel (bandwidth: 64 Mbps)       Video Direct Storage (Auto Register)     Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 64 Mbps)       Video Direct Storage (International     Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 64 Mbps)       Video Direct Storage (International     Inco	Interoperability	ONVIF (Profile S); CGI; SDK	
Recording Playback     Max. 16-channel playback       Multi-channel Playback     Max. 16-channel playback       Record Mode     Auto record; manual record; search video detection; IO alarm; thermal imaging; intelligent event; all record file       Storage Method     Internal HDD and network disk       Backup Method     HDD, peripheral USB storage device       Playback Function     1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Full-screen, backup (clip; file), snapshot, digital zoom, audio on; off       Storage     Video Direct Storage (Private Protocol)     Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 64 Mbps)       Video Direct Storage (Auto Register)     Incoming: 320-channel (bandwidth: 64 Mbps)       Video Direct Storage (Auto Register)     Incoming: 320-channel (bandwidth: 64 Mbps)       Video Direct Storage (Auto Register)     Incoming: 320-channel (bandwidth: 64 Mbps)       Video Direct Storage (Auto Register)     Incoming: 320-channel (bandwidth: 64 Mbps)       Video Direct Storage (International     Incoming: 320-channel (bandwidth: 60 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 64 Mbps)       Video Direct Storage (Auto Register)     Incoming: 320-channel (bandwidth: 64 Mbps)	Browser	Chrome; PCAPP; IE9 or higher; Firefox	
Multi-channel PlaybackMax. 16-channel playbackRecord ModeAuto record; manual record; search video detection; IO alarm; thermal imaging; intelligent event; all record fileStorage MethodInternal HDD and network diskBackup MethodHDD, peripheral USB storage devicePlayback Function1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Full-screen, backup (clip; file), snapshot, digital zoom, audio on; offStorageVideo Direct Storage (Private Protocol)Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Playback: 32-channel (bandwidth: 64 Mbps)Video Direct Storage (Onvif)Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Playback: 32-channel (bandwidth: 64 Mbps)Video Direct Storage (Onvif)Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Playback: 32-channel (bandwidth: 64 Mbps)Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Playback: 32-channel (bandwidth: 64 Mbps)Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps); Playback: 32-channel (bandwidth: 64 Mbps)Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (International	Network Mode	NIC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etc	
Record ModeAuto record; manual record; search video detection; IO alarm; thermal imaging; intelligent event; all record fileStorage MethodInternal HDD and network diskBackup MethodHDD, peripheral USB storage devicePlayback Function1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Full-screen, backup (clip; file), snapshot, digital zoom, audio on; offStorageVideo Direct Storage (Private Protocol)Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps)Video Direct Storage (Onvif)Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps)Video Direct Storage (Auto Register)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto Register)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto Register)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto Register)Incoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps);Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbps)Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbps)	Recording Playback		
Storage MethodInternal HDD and network diskBackup MethodHDD, peripheral USB storage devicePlayback Function1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Full-screen, backup (clip; file), snapshot, digital zoom, audio on; offStorageVideo Direct Storage (Private Protocol)Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps)Video Direct Storage (Onvif)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto Register)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto Register)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto Register)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (International)Incoming: 320-channel (bandwidth: 64 Mbps) <td>Multi-channel Playback</td> <td>Max. 16-channel playback</td>	Multi-channel Playback	Max. 16-channel playback	
Backup MethodHDD, peripheral USB storage devicePlayback Function1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Full-screen, backup (clip; file), snapshot, digital zoom, audio on; offStorageVideo Direct Storage (Private Protocol)Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Cutgoing: 320-channel (bandwidth: 800 Mbps); Playback: 32-channel (bandwidth: 64 Mbps)Video Direct Storage (Onvif)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto Register)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (International)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Sto	Record Mode	Auto record; manual record; search video detection; IO alarm; thermal imaging; intelligent event; all record file	
Playback Function1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Full-screen, backup (clip; file), snapshot, digital zoom, audio on; offStorageVideo Direct Storage (Private Protocol)Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Onvif)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Onvif)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto Register)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto Register)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (Auto Register)Incoming: 320-channel (bandwidth: 64 Mbps)Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 600 Mbps)Video Direct Storage (InternationalIncoming: 320-channel (bandwidth: 600 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps)	Storage Method	Internal HDD and network disk	
Playback Function   2. Full-screen, backup (clip; file), snapshot, digital zoom, audio on; off     Storage   Video Direct Storage (Private Protocol)   Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps)     Video Direct Storage (Onvif)   Incoming: 320-channel (bandwidth: 64 Mbps)     Video Direct Storage (Auto Register)   Incoming: 320-channel (bandwidth: 64 Mbps)     Video Direct Storage (Auto Register)   Incoming: 320-channel (bandwidth: 64 Mbps)     Video Direct Storage (International   Incoming: 320-channel (bandwidth: 64 Mbps)     Video Direct Storage (International   Incoming: 320-channel (bandwidth: 64 Mbps)     Video Direct Storage (International   Incoming: 320-channel (bandwidth: 64 Mbps)     Video Direct Storage (International   Incoming: 320-channel (bandwidth: 64 Mbps)     Video Direct Storage (International   Incoming: 320-channel (bandwidth: 64 Mbps)	Backup Method	HDD, peripheral USB storage device	
Video Direct Storage (Private Protocol)   Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps)     Video Direct Storage (Onvif)   Incoming: 320-channel (bandwidth: 64 Mbps)     Video Direct Storage (Onvif)   Incoming: 320-channel (bandwidth: 64 Mbps)     Video Direct Storage (Auto Register)   Incoming: 320-channel (bandwidth: 64 Mbps)     Video Direct Storage (International   Incoming: 320-channel (bandwidth: 64 Mbps)     Video Direct Storage (International   Incoming: 320-channel (bandwidth: 64 Mbps)	Playback Function		
Protocol)     Playback: 32-channel (bandwidth: 64 Mbps)       Video Direct Storage (Onvif)     Incoming: 320-channel (bandwidth: 60 Mbps); Recording: 320-channel (bandwidth: 800 Mbps); Outgoing: 320-channel (bandwidth: 800 Mbps)       Video Direct Storage (Auto Register)     Incoming: 320-channel (bandwidth: 64 Mbps)       Video Direct Storage (International     Incoming: 320-channel (bandwidth: 64 Mbps)       Video Direct Storage (International     Incoming: 320-channel (bandwidth: 64 Mbps)	Storage		
Video Direct Storage (Onvir) Playback: 32-channel (bandwidth: 64 Mbps)   Video Direct Storage (Auto Register) Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps)   Video Direct Storage (International) Incoming: 320-channel (bandwidth: 64 Mbps)	0		
Video Direct Storage (Auto Register)   Playback: 32-channel (bandwidth: 64 Mbps)     Video Direct Storage (International   Incoming: 320-channel (bandwidth: 800 Mbps); Recording: 320-channel (bandwidth: 800 Mbps)	Video Direct Storage (Onvif)		
	Video Direct Storage (Auto Register)		
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# **KBVISION**

### KX-FDA320R24ZST

#### 24-bay Embedded Video Storage

Picture Direct Storage	Incoming: 120-channel (550 KB/picture); Recording: 120-channel (550 KB/picture); Outgoing: 120-channel (550 KB/picture) Playback: 32-channel (550 KB/picture)	
Disk Group	Yes	
iSCSI	Supports client and Server	
Network Disk	Supports client	
RAID	RAID 0/1/5/6/10/50/60 (with enterprise-grade HDD)	
Record Management	Supports record control (continuous, event-based, scheduled, scheduled & event-based).	
Storage Pool	Yes	
IPSAN		
IPSAN Performance	280-channel × 2 Mbps video stream writing and 24-channel × 2 Mbps video playback (I/O size of VMS is 64 KB) 400-channel × 2 Mbps video stream writing and 24-channel × 2 Mbps video playback (I/O size of VMS is 512 KB)	
Alarm		
General Alarm	Motion detect; tampering; IPC external alarm	
Anomaly Alarm	IPC offline alarm; storage error; HDD full; video frame loss; SSD exception; IP conflict; MAC conflict; login lock; fan malfunction; no HDD; network security exception; power exception; disk health exception; RAID exception; storage pool exception; temperature alarm; share service	
Alarm Linkage	Record; snapshot (full image); alarm uploading; remote device alarm output; camera audio; buzzer; log; preset; email, smart tracking and warning light. Disarming alarm linkage action by period or one-click sync disarm config with channels	
Port		
HDD Interface	24 slots, SATA, Max.18 T/HDD hot swapping; CMR; support enterprise-grade HDD	
eSATA	1 port	
RS-232	1 port, for debug or COM data transmission	
USB	4 ports. 2 USB2.0 ports at the front panel and 2 USB3.0 ports at the rear panel	
HDMI	1 port, only for debug	
Network Port	4 RJ-45 10/100/1000 Mbps self-adaptive Ethernet ports. (gigabit electrica port); 1 RJ-45 10/100 Mbps self-adaptive Ethernet ports. (100 Mbps electrical port)	
Power	1+1 redundant power	
Network Port Extension	4 × 1-GbE LAN ports (optional); 2 × 10-GbE optical fiber ports (optional)	
General		
Power Supply	100-240 VAC 50-60 Hz	
Power Consumption	<100 W (without HDD, idling); <400 W (all HDDs connected)	
Fan	Intelligent speed regulation fan	
Net Weight	25.3 kg (55.78 lb)	
Gross Weight	42.4 kg (93.48 lb)	
Packaging Dimensions	With packaging: 687 mm × 962 mm × 576 mm (27.04" × 37.87" × 22.68") (W × L × H)	
Operating Temperature	0 °C to 45 °C (+32 °F to +113 °F)	
Operating Humidity	10%–80% (RH), non-condensing	
Operating Altitude	5000 m (16404.20 ft)	
Installation	Standard 19 inch rack	
Product Dimensions	Chassis: 446 mm × 175mm × 736.5 mm (17.56" × 6.89" × 29.00") (W × L × H) Max. size: 482.6 mm (with hanger) × 175 mm × 736.5 mm (19.00" × 6.89" × 29.00") (W × L × H)	



