

# KX-F320R24ST-H

## 24-bay 4U Embedded Video Storage

Design and specifications are subject to change without notice. Pictures in the document are for reference only, and the actual product shall prevail.



- 64-bit high-performance multi-core processor.
- Max 320-ch IP camera inputs.
- Max 800 Mbps incoming/recording/forwarding bandwidth.
- 24 HDDs, 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.

| System                    |  |
|---------------------------|--|
| Main Processor            | 64-bit high-performance multi-core processor   |
| Operating System          | Embedded Linux OS  |
| Operating Interface       | Web (PCAPP)  |
| Controller                | Single controller  |
| Cache                     | 8 GB by default (extendable to 64 GB)  |
| AI Applications           |  |
| AI by Camera              | Face detection, face recognition, IVS (abandoned object, missing object, loitering, crowd gathering, parking, 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 channel-smoking detection) |
| Camera Compatibility      |  |
| 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   |
| Bullet-PTZ Smart Track    | Works with camera for manual tracking, auto tracking, click positioning and select positioning   |
| Fisheye Dewarp            | Supports dewarping for fisheye cameras   |
| Cluster                   |  |
| Cluster                   | N+M  |
| Audio and Video           |  |
| Third-party Camera Access | Onvif, Onvifs, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision  |
| 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                              | HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P; GAT1400; iSCSI; FTP; SMB; NFS  |
|---|---|
| Mobile Phone Access                           | DMSS  |
| Interoperability                              | ONVIF (Profile S, T and G); 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                            |   |
| 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<br>2. Full-screen, backup (clip; file), snapshot, digital zoom, audio on; off                           |
| Storage                                       |   |
| Video Direct Storage (Private Protocol)       | Incoming: 320-channel (bandwidth: 800 Mbps)<br>Recording: 320-channel (bandwidth: 800 Mbps)<br>Outgoing: 320-channel (bandwidth: 800 Mbps)<br>Playback: 32-channel (bandwidth: 64 Mbps) |
| Video Direct Storage (Onvif)                  | Incoming: 320-channel (bandwidth: 800 Mbps)<br>Recording: 320-channel (bandwidth: 800 Mbps)<br>Outgoing: 320-channel (bandwidth: 800 Mbps)<br>Playback: 32-channel (bandwidth: 64 Mbps) |
| Video Direct Storage (Auto Register)          | Incoming: 320-channel (bandwidth: 800 Mbps)<br>Recording: 320-channel (bandwidth: 800 Mbps)<br>Outgoing: 320-channel (bandwidth: 800 Mbps)<br>Playback: 32-channel (bandwidth: 64 Mbps) |
| Video Direct Storage (International Protocol) | Incoming: 320-channel (bandwidth: 800 Mbps)<br>Recording: 320-channel (bandwidth: 800 Mbps)<br>Outgoing: 320-channel (bandwidth: 800 Mbps)<br>Playback: 32-channel (bandwidth: 64 Mbps) |
| Picture Direct Storage                        | Incoming: 120-channel (550 KB/picture)<br>Recording: 120-channel (550 KB/picture)   |

# KX-F320R24ST-H

## 24-bay 4U Embedded Video Storage

Design and specifications are subject to change without notice. Pictures in the document are for reference only, and the actual product shall prevail.

|                        |   |
|------------------------|---|
|                        | Outgoing: 120-channel (550 KB/picture)<br>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;<br>(with enterprise-grade HDD)   |
| Record Management      | Supports record control (continuous, event-based, scheduled, scheduled & event-based).  |
| Storage Pool           | Yes   |
| <b>IPSAN</b>           |   |
| IPSAN Performance      | 280-channel × 2 Mbps video stream writing and 24-channel × 2 Mbps video playback ( I/O size of VMS is 64 KB)<br>400-channel × 2 Mbps video stream writing and 24-channel × 2 Mbps video playback (I/O size of VMS is 512 KB)  |
| <b>Alarm</b>           |   |
| 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.<br>Disarming alarm linkage action by period or one-click sync disarm config with channels   |
| <b>Port</b>            |   |
| HDD Interface          | 24 slots,<br>SATA<br>Max.18 T/HDD<br>hot swapping<br>CMR<br>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 electrical port)<br>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)<br>2 × 10-GbE optical fiber ports (optional)   |
| <b>General</b>         |   |
| Power Supply           | 100-240 VAC 50-60 Hz  |

|                       |   |
|-----------------------|---|
| Power Consumption     | <100 W (without HDD, idling)<br><300 W (all HDDs connected)   |
| Fan                   | Intelligent speed regulation fan  |
| Net Weight            | 28.4 kg (62.61 lb)  |
| Gross Weight          | 43.5 kg (95.90 lb)  |
| Product Dimensions    | Chassis: 446mm × 175mm × 736.5mm (17.56" × 6.89" × 29.00") (W × L × H)<br>Max. size: 482.6 mm (with hanger) × 175 mm × 736.5 mm (19.00" × 6.89" × 29.00") (W × L × H) |
| Packaging Dimensions  | With packaging: 687 mm × 962 mm × 526 mm (27.00" × 37.87" × 20.70") (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   |

### Dimensions (mm [inch])

