# HDExpress Series Network Video Recorder (NVR)

- 1080P/60 Hz (1920 x 1080) real-time recording and display
- Built in Power-over-Ethernet (IEEE 802.3af) switch
- No programming of network cameras required
- Auto notification with self diagnosis (HDD S.M.A.R.T, temperature, network connection status, fan error, etc.)
- Onscreen Graphical Interface (GUI) for local control
- Web interface for remote viewing
- Mobile phone applications (iPhone and iPad or Android OS)
- Easy export of video to USB storage devices

The HDExpress™ is a plug-and-play Network Video Recorder (NVR) designed specifically for High Definition (HD) IP cameras. The system includes PoE ports for each camera, allowing the NVR to provide power directly to a maximum of 16 cameras. The software automatically detects and configures network cameras, eliminating the need to program any settings in the camera.

The HDExpress is optimized to work seamlessly with Vicon's V960 and V992 high definition 1080P cameras. All of the features of the camera can be configured directly through the local user interface, including zoom and focus of the lens. The HDMI 1080P/60 Hz output provides high quality multi-camera display. The graphical user interface is intuitive and easy to navigate.

The high definition graphical user interface provides intuitive controls and is rich with features such as thumbnail searches, event logs, and network connections status dashboard. The operator can choose to use a standard USB mouse or a remote control. Remote access to the NVR is simple with a thin-client HTML interface. iPhone®, iPad®, and Android™ smartphone applications are also available.

The embedded Linux® operating system provides a reliable platform, and self-diagnosis features such as HDD S.M.A.R.T and network connection alerts simplify diagnosing problems. Replacement of hard drives is simple with easy access to hard drives.

*Table 1: Model Descriptions*

| Model Number | Description |
|---|---|
| HDXPRES-4 | 4-channel embedded NVR, 1U, no hard drive included (2 hard drive bays), includes 4-port internal PoE switch; 100-240 VAC |
| HDXPRES-8 | 8-channel embedded NVR, 1U, no hard drive included (2 hard drive bays), includes 8-port internal PoE switch; 100-240 VAC |
| HDXPRES-16 | 16-channel embedded NVR, 2U, no hard drive included (5 hard drive bays), includes 8-port internal and 8-port external PoE switch; 100-240 VAC |

*Table 2: Accessories*

| | Model Number | Description |
|---|---|---|
| | V992-N525 | 1080P mini-camera with integrated 5x lens; H.264/M-JPEG IP day/night camera, 5-25 mm megapixel motorized focus/zoom lens, PoE |
| | V992D-N4 | 1080P indoor mini-dome; 4 mm fixed lens, H.264/MJPEG IP day/night camera, PoE, vandal-resistant |
| | V960 Series Professional Cameras | All D1/720P/1080P models (Indoor Dome, Outdoor Dome, Box, Bullet) |

| | | HDXPRES-4 | HDXPRES-8 | HDXPRES-16 |
|---|---|---|---|---|
| **D I S P L A Y** | Display Resolution | 1080P 60Hz | | |
| | Live Display | 120 fps @1080P | 240 fps @1080P | 480 fps @1080P |
| | Multiscreen Display | 1, 4, sequence | 1, 4, 6, 8, 9, sequence | 1, 4, 8, 9, 16, sequence |
| **P E R F O R M A N C E** | Operating System | Embedded Linux | | |
| | Watchdog | Yes | | |
| | Compression | H.264 (video); G.711 (audio) | | |
| | Cameras (Video Inputs) | 4 | 8 | 16 |
| | Recording Mode | Motion, Alarm, Panic, Video Loss; overwrite modes | | |
| | Playback Speed | x1, x2, x4, x16, x32, x64 | | |
| | Playback Search | Time, Thumbnail, Event | | |
| | Network | 100Base-T local network for cameras; 100Base-T WAN port for remote access | | |
| | Ports/Connectors | 2 USB, PoE (4/8/16), 1 LAN, 1 WAN, eSATA (external storage), HDMI monitor; mouse and remote control provided | | |
| | Transmission Rate | Max. 120 fps (camera dependant) | Max. 240 fps (camera dependant) | Max. 480 fps (camera dependant) |
| | Network Functions | Bandwidth control; remote monitoring - web viewer and smartphone application (iPhone, Android, BlackBerry®) | | |
| | Remote Users | 8 (max.) | | |
| | Protocols | WS-Discovery, RTP, RTSP, RTCP, STMP, NTP, HTTP, FTP, DDNS, DHCP, uPNP | | |
| **I N T E R F A C E** | Internal Hard Drives (SATA) | Max. 2 | Max. 2 | Max. 5, RAID 5 |
| | External Hard Drives | Yes, eSATA | | |
| | Backup | USB | | |
| | Security | Password protection, date authentication (watermarking, MD5), closed network | | |
| | Monitor | HDMI; 1080p, 60 Hz resolution | | |
| | Audio In/Out | 4 ch In (from IP camera)/1 ch Out | | |
| | Alarm Input | 4 ch (IP) + 2 ch (internal), camera dependant | 8 ch (IP) + 2 ch (internal), camera dependant | 16 ch (IP) + 2 ch (internal), camera dependant |
| | Alarm Output (Relay) | 4 channels (IP) + 1 relay (internal) | 8 channels (IP) + 1 relay (internal) | 16 channels (IP) + 1 relay (internal) |
| **G E N E R A L** | Languages | English, French, Spanish, German, Italian, Polish, Russian | | |
| | Power | 12 V adaptor, 48 V adaptor (PoE); 20 W max. power consumption (w/o HDD) | 12 V adaptor, 48 V adaptor (PoE); 20 W max. power consumption (w/o HDD) | SMPS 12 V 100 W, SMPS 48 V 100 W (PoE); 25 W max. power consumption (w/o HDD) |
| | Power-over-Ethernet: | 40 W total (15 W per port) | 72 W total (15 W per port) | 95 W total Internal/72 W total External Hub (15 W per port) |
| | Dimensions | W: 12.0 in. (305 mm); H: 1.7 in. (44 mm); D: 11.7 in. (298 mm | W: 12.0 in. (305 mm); H: 1.7 in. (44 mm); D: 11.7 in. (298 mm | W: 17 in. (430 mm); H: 3.5 in. (88 mm); D: 14.2 in. (360 mm) |
| | Weight (w/o HDD) | 8.8 lb (4 kg) | 8.8 lb (4 kg) | 15.4 lb (7 kg) |
| | Operating Temperature | 32 - 104° F (0 - 40° C) | | |
| | Operating Humidity | 10 - 90%, non-condensing | | |