PERFORMANCE SERIES
EMBEDDED NVRs

4-/8-/16-/32-Channel ENVRs

HEN04103L/ HEN08103L/ HEN16103L/ HEN32103L

Introducing Honeywell's Performance Series Embedded NVRs, our newest affordable, fully-featured NVRs offer Ultra 4K HD video resolution. Choose between a 4-, 8-, 16- or 32-channel NVR, with multiple hard drive options and up to 12 TB of internal storage, for an ideal and flexible solution to fit your surveillance needs.

HEN16103L/ HEN32103L

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Fully-featured NVRs

- High decoding capability for Ultra 4K HD viewing and recording
- View 4/8/16/32 channels simultaneously with synchronized real-time playback on your monitor (depending on your model)
- Up to 8 MP (4K) resolution live view, preview and playback
- Up to 8 channels at 1080p H.265/H.264 decoding

Dynamic, Accessible Monitoring

- Mobile apps provide anytime, anywhere access for both Apple® and Android™ devices (smartphones, tablet computers, and laptops)
- Protect the NVR's video and network setup with password-protected access
- Conceal up to 4 areas of a scene from viewing and recording

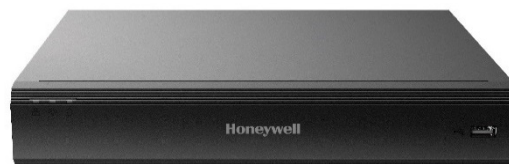## Convenient, Flexible Storage Options

- Internal storage supports 2 HDDs expandable up to 12 TB (6 TB each)
- Store video clips and snapshots to external storage, such as the client's PC, through the Internet connection
- Store video clips and snapshots to external network storage servers, such as an FTP site
- Store video clips and snapshots to a USB memory device

Easy to Use

- The Quick wizard makes setup fast and easy
- Quick installations utilizing an intuitive NVR design and easy-to-understand quick installation guides
- Simple remote configuration and firmware updates through the Honeywell Viewer web client and the Honeywell Config tool
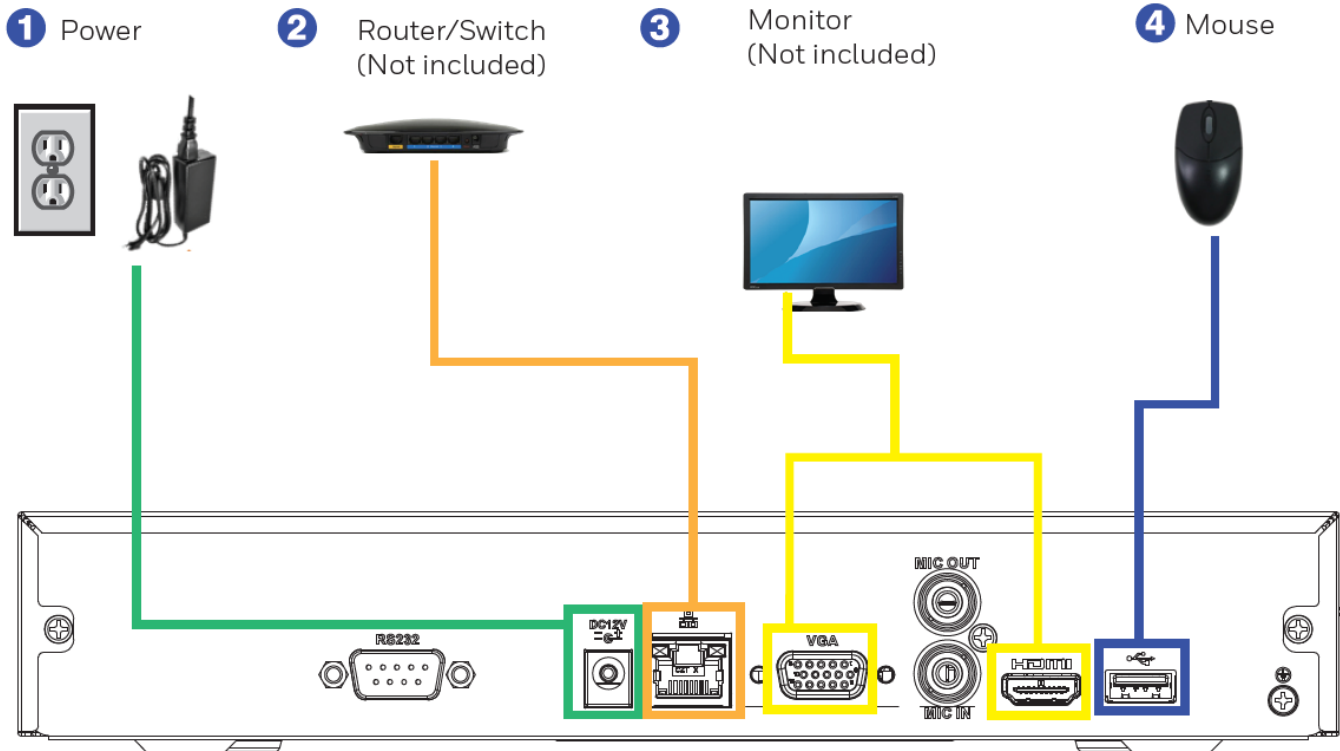
Market Opportunities

The flexible storage options, high recording and networking performance of the Embedded NVRs make these NVRs perfect for a wide range of security applications.

FEATURES AND BENEFITS

- H.265/H.264 codec decoding
- HDMI/ VGA simultaneous video output
- UL listed

- Supports up to 4 alarm input channels and 2 alarm relay output channels
- Supports sending notifications through email, FTP, and/or HTTP

- Supports recording a video clip of events for distribution
- Supports uploading still images at the time of the event through email and/ or FTP

- Configurable to automatically detect and respond to motion in the scene, alarm inputs, and network failure or tampering
- Maximum incoming bandwidth of 200 Mbps

- Supports visual or auditory notifications (a flashing light, bell, or siren)
- Supports Smart Face detection search

Honeywell

4-/8-/16-/32-Channel ENVRs
Performance Series Embedded NVRs

SYSTEM DIAGRAM

HEN04103L/HEN08103L

1 Power **2** Router/Switch (Not included) **3** Monitor (Not included) **4** Mouse

RS232 DC12V VGA MIC OUT MIC IN HDMI

HEN16103L/HEN32103L

1 Power **2** Router/Switch (Not included) **3** Mouse **4** Monitor (Not included)
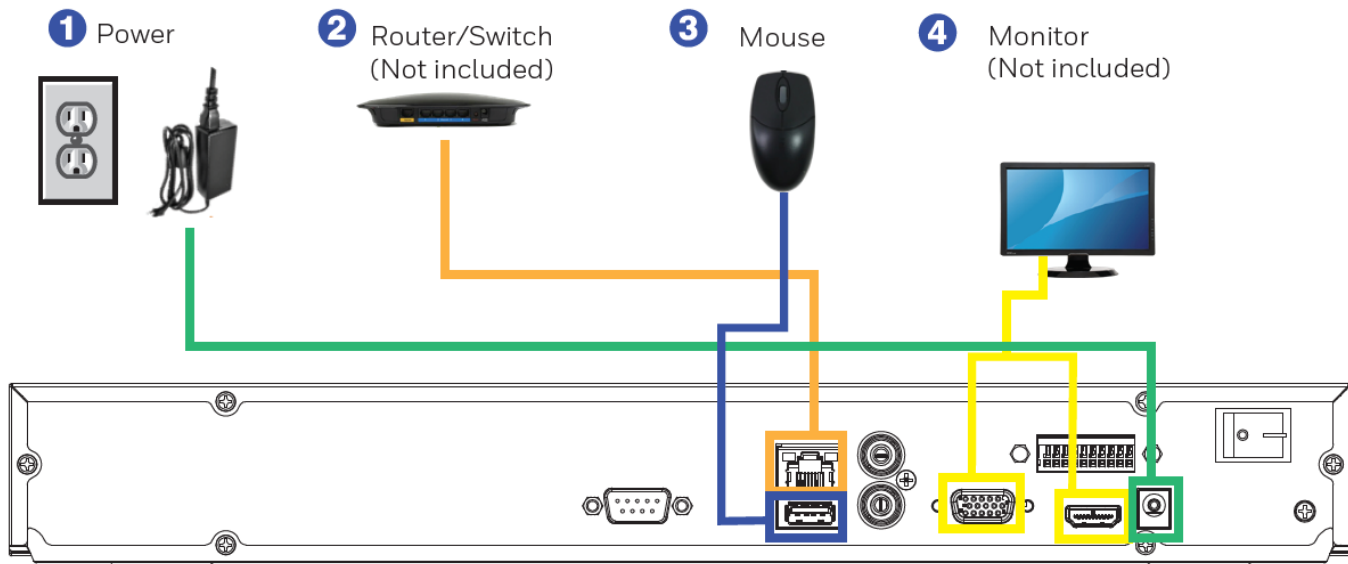
4-/8-/16-/32-Channel ENVRs
Performance Series Embedded NVRs

DIMENSIONS

HEN16103L/ HEN32103L

11.1" (281.5mm)

14.8" (375mm)

2.2" (56mm)

HEN04103L/ HEN08103L

10.2" (260mm)

1.9" (47.6mm)

8.9" (224.9mm)

1.9" (47.6mm)
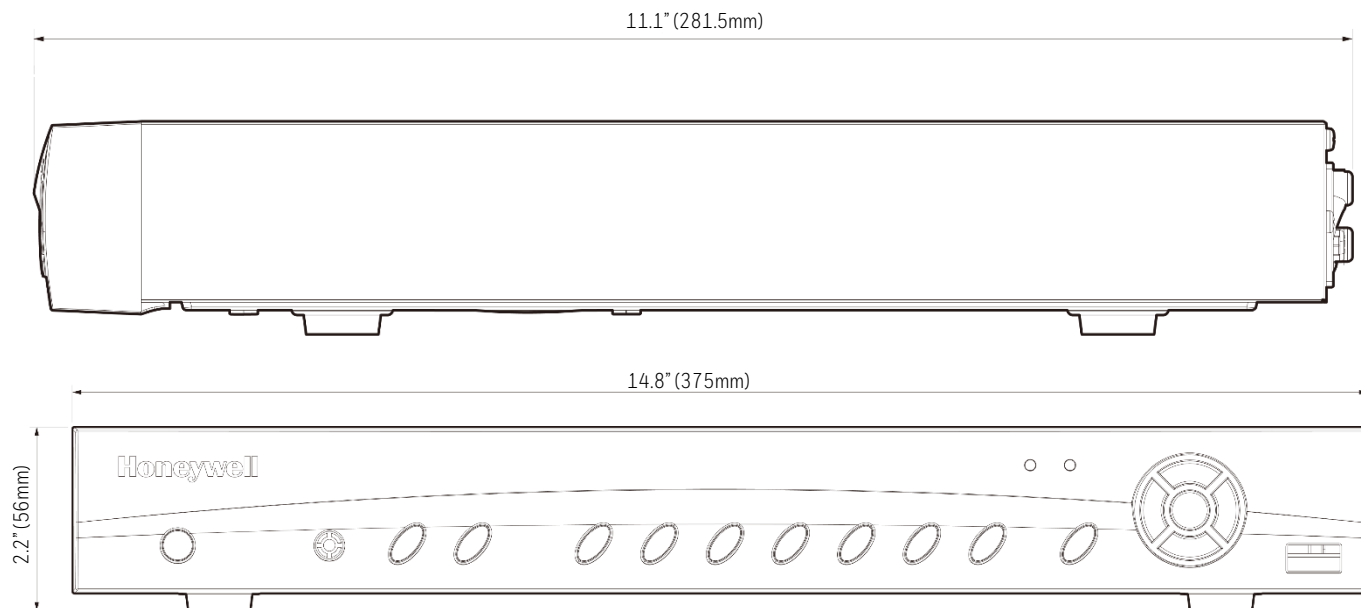
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Technical Specifications

SYSTEM	
MAIN PROCESSOR	Quad-core embedded processor
OPERATING SYSTEM	Embedded LINUX

VIDEO	
INPUTS	**HEN04103L**: 4 Channels IP **HEN08103L**: 8 Channels IP **HEN16103L**: 16 Channels IP **HEN32103L**: 32 Channels IP

AUDIO	
AUDIO INPUT/OUTPUT	1 Channel Input/1 Channel Output, RCA
TWO-WAY COMMUNICATION	Supported

DISPLAY	
INTERFACE	1 HDMI, 1 VGA
RESOLUTION	3840 × 2160; 1920 × 1080; 1280 × 1024; 1280 × 720;
DISPLAY SPLIT	HEN04103L: 1/4 HEN08103L: 1/4/8/9 HEN16103L/ HEN32103L: 1/4/8/9/16
OSD	Camera title; Time; Video loss; Camera lock; Motion detection; Recording

RECORDING	
COMPRESSION	H.265/H.264
RESOLUTION	8 MP (3840 × 2160); 6 MP (3072 ×2048); 5 MP (2560 × 1920); 4 MP (2560 × 1440); 3 MP (2048 × 1520); 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 ×576 / 704 × 480); CIF (352 × 288/ 352 × 240)
FRAME RATE	1–15 fps (8 MP); 1–25/30 fps (rest of the resolutions) for each channel
RECORD BIT RATE	200 Mbps
BIT RATE[1]	16 kbps ~ 20 Mbps, per channel
RECORDING MODE	Schedule (Regular/Continuous, Motion Detection, Alarm); Manual; Stop
RECORDING INTERVAL	1 to 120 minutes (default 60 min)
PRE-EVENT RECORDING INTERVAL	1 to 30 seconds
POST-EVENT RECORDING INTERVAL	10 to 300 seconds

VIDEO DETECTION AND ALARMS	
TRIGGER EVENTS	Recording; PTZ; Tour; Alarm; Video Push; Email; FTP; Snapshot; Buzzer, Screen Tips
VIDEO DETECTION	Motion Detection—MD Zones: 396 (22 × 18); Video Loss; Tampering
ALARM INPUT	4 Channels
RELAY OUTPUT	2 Channels

STORAGE	
INTERNALHDD	HEN16103L/ HEN32103L: 2 SATA III ports, up to 12 TB HEN04103L/HEN08103L: 1 SATA III Port (up to 6 TB)

PLAYBACK AND BACKUP	
SYNC PLAYBACK	4-channel NVRs:1/4 8-channel NVRs: 1/4/8 16-channel NVRs: 1/4/8/16 32-channel NVRs: 1/4/8/16
SEARCH MODE	Time/Date; Alarm; Motion Detection (MD); Exact Search (accurate to a second); Smart Search
PLAYBACK FUNCTION	Play; Pause; Stop; Rewind; Fast play; Slow play; Next File; Previous File; Next Camera; Previous Camera; Full Screen; Repeat; Shuffle; Backup Selection; Digital Zoom
BACKUP MODE COMPATIBILITY	USB Device; Network
Decoding	2-ch in 8 MP@15pfs or 4-ch in 1080P@30fps

NETWORK	
ETHERNET	1 RJ-45 port (10/100/1000 Mbps)
POE	N/A
SUPPORTED PROTOCOLS[2]	HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, P2P
MAXIMUM NUMBER OF USERS	128 users
NETWORK THROUGHPUT	HEN04103L/HEN08103L: 80 Mbps HEN16103L/ HEN32103L: 200 Mbps
SMART PHONE COMPATIBILITY	iPhone; iPad; Android

AUXILLARY INTERFACE	
USB PORTS	HEN04103L/HEN08103L: 2 USB Ports (2 USB2.0) HEN16103L/HEN32103L: 2 USB Ports (1 USB2.0, 1 USB3.0)
RS232	1 port (for PC communications)

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ENVIRONMENTAL	
OPERATING TEMPERATURE	-10ºC ~ +55ºC (+14ºF ~ +131ºF), 86 ~ 106kpa
RELATIVE HUMIDITY	10% to 90%, non-condensing
STORAGE TEMPERATURE	–4ºF to 158ºF (–20ºC to 70ºC)

PHYSICAL	
DIMENSIONS	**HEN16103L/HEN32103L:** 1U, 375mm×281.5mm×56mm (14.8" x 11.1" x2.2") **HEN04103L/HEN08103L:** Compact 1U, 260mm×224.9mm×47.6mm (10.2" x 8.9" x 1.9")
WEIGHT (WITHOUT HDD)	**HEN16103L/HEN32103L** 1.6kg (3.5 lb) (without HDD) **HEN04103L/HEN08103L:** 0.8kg (1.76 lb) (without HDD)

ELECTRICAL	
POWER SUPPLY	**HEN04103L/HEN08103L:** DC12V/2A **HEN16103L/HEN32103L:** DC12V/4A
POWER CONSUMPTION	**HEN04103L/HEN08103L:** <6.3W (Without HDD) **HEN16103L/HEN32103L:** <6.9W (Without HDD)

REGULATORY	
EMISSIONS	+AC: 2013 HEN08103/HEN16103: FCC Part 15B, EN55032: 2012 +AC: 2013, EN61000-3-2: 2014, EN61000-3-3: 2013
IMMUNITY	EN50130-4: 2011
PLAYBACK FUNCTION	EU: EN60950-1 North America UL listed to UL/CSA 60950-1
ROHS	EN50581: 2012

1. Actual bitrate is scene and motion dependent with H.264 stream.

2. Some development might be required in specific user cases to support some of these protocols in the field, as protocols will mature over time.

ORDERING

HEN04103L	H.265 4CH NVR, OTB, NO POE, 4k, output HDMI/VGA 4k, Ethernet Gigabit, 4 inputs/2 outputs
HEN08103L	H.265 8CH NVR, OTB, NO POE, 4k, output HDMI/VGA 4k, Ethernet Gigabit, 4 inputs/2 outputs
HEN16103L	H.265 16CH NVR, OTB, NO POE, 4k, output HDMI/VGA 4k, Ethernet Gigabit, 4 inputs/2 outputs
HEN32103L	H.265 4K 32CH NVR, OTB, NO POE, 4k, output HDMI/VGA 4k, Ethernet Gigabit, 4 inputs/2 outputs

HEN04103L/ HEN08103L HEN16103L/ HEN32103L
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