

# PERFORMANCE SERIES

## HEN040\*3V HEN041\*3V

## HEN081\*3V HEN161\*3V

### 4/8/16 Channel Embedded NVRs

Introducing Honeywell's Performance Series Embedded NVRs, our newest affordable, fully-featured NVRs offer Ultra 4k HD video resolution. Choose between a 4, 8, or 16 channel NVR, with multiple hard drive options and up to 20 TB of internal storage, for an ideal and flexible solution to fit your surveillance needs.

#### FULLY-FEATURED NVRs

- High decoding capability for Ultra 4K HD viewing and recording
- View 4/8/16 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 20 TB (10 TB each), HEN040\*3V only support one HDD
- 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 store video clips and snapshots to a USB memory device

#### FEATURES & BENEFITS

These fully featured attractive cameras are perfect for outdoor installations that require excellent picture quality at minimal bandwidth while offering maximum protection against dust, dirt, and water. Boasting a sleek, modern design and offering two different lens options, the cameras are suited for a wide range of applications.

- |   |  |   |  |  |
|---|--|---|--|--|
| <ul style="list-style-type: none"> <li>• H.265/H.264 codec decoding</li> <li>• HDMI/ VGA simultaneous video output</li> </ul> | <ul style="list-style-type: none"> <li>• Supports up to 4 alarm input channels and 2 alarm relay output channels, except HEN040*3V</li> <li>• Supports sending notifications through email or P2P</li> </ul> | <ul style="list-style-type: none"> <li>• Supports recording a video clip of events for distribution</li> <li>• Supports uploading still images at the time of the event through email and/or FTP</li> </ul> | <ul style="list-style-type: none"> <li>• Configurable to automatically detect and respond to motion in the scene, alarm inputs, and network failure or tampering</li> <li>• Maximum incoming bandwidth of 160Mbps, 80Mbps for HEN040*3V</li> </ul> | <ul style="list-style-type: none"> <li>• Supports visual or auditory notifications (a flashing light, bell, or siren)</li> <li>• Supports Smart Face detection search</li> </ul> |
|---|--|---|--|--|



HEN040\*3V

HEN041\*3V/HEN081\*3V/HEN161\*3V

#### EASY TO USE

- The Quick wizard and PoE support (up to 4/8/16 channels) enable a fast and efficient set up
- Quick installations utilizing an intuitive NVR design and easy-to-understand quick installation guides
- Simple remote configuration and firmware update through the Honeywell Viewer web client and the Honeywell Config tool

#### MARKET OPPORTUNITIES

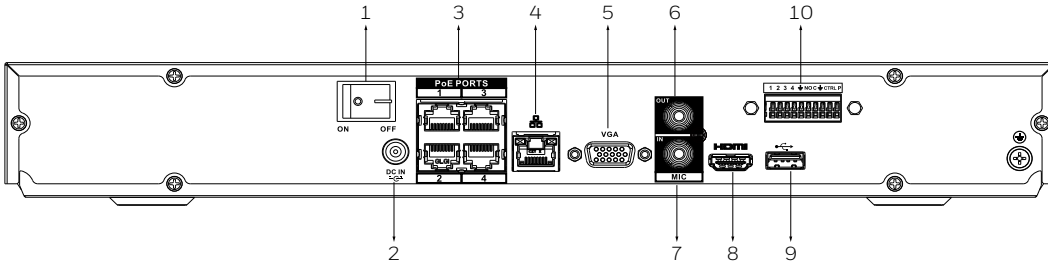
The flexible storage options, high recording and networking performance of the Embedded NVRs make these NVRs perfect for a wide range of security applications.

# 4/8/16 CHANNEL EMBEDDED NVRS

## SYSTEM DIAGRAM

### HEN041\*3V

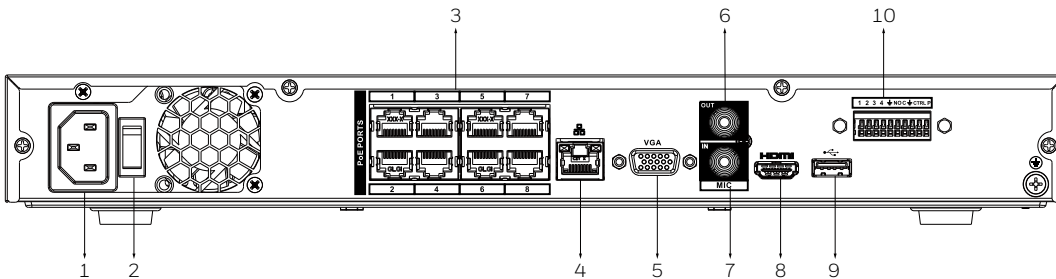
\* = hard drive capacity in TB.



1. Power Switch 2. Power Input Port 3. PoE Ports 4. Network Port 5. VGA Port 6. Mic Out 7. Mic In 8. HDMI Port 9. USB Port 10. Alarm Input/Output

### HEN081\*3V

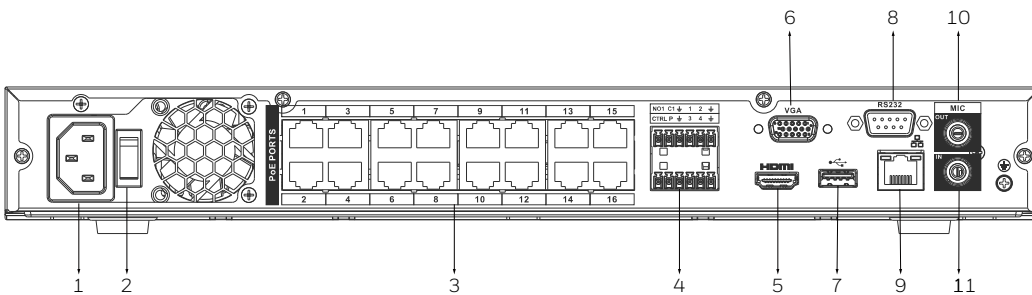
\* = hard drive capacity in TB.



1. Power Input Port 2. Power Switch 3. PoE Ports 4. Network Port 5. VGA Port 6. Mic Out 7. Mic In 8. HDMI Port 9. USB Port 10. Alarm Input/Output

### HEN161\*3V

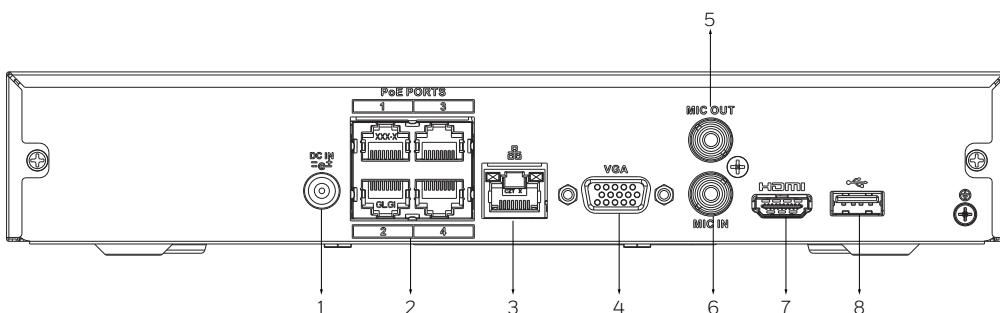
\* = hard drive capacity in TB.



1. Power Input Port 2. Power Switch 3. PoE Ports 4. NO1 C1/CTRL P 5. HDMI Port 6. VGA Port 7. USB Port 8. RS232 Port 9. Network Port 10. AUDIO OUT, RCA Connector 11. AUDIO IN, RCA Connector

### HEN040\*3V

\* = hard drive capacity in TB.

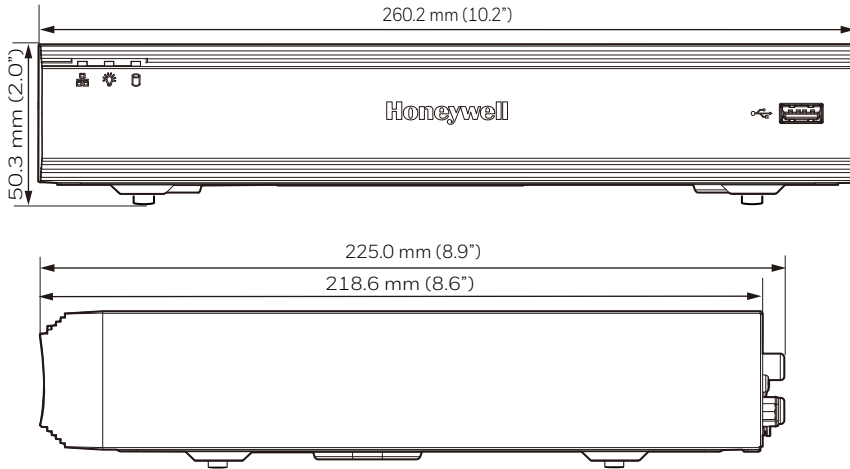


1. DC Power Input 2. PoE Ports 3. Network Port 4. VGA Port 5. AUDIO IN, RCA Connector 6. AUDIO OUT, RCA Connector 7. HDMI Port 8. USB Port

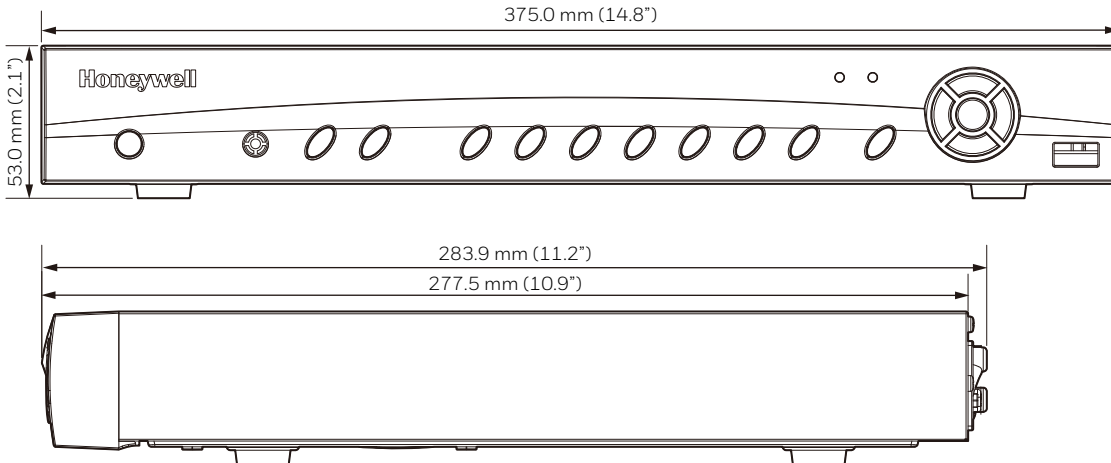
# 4/8/16 CHANNEL EMBEDDED NVRS

## DIMENSIONS

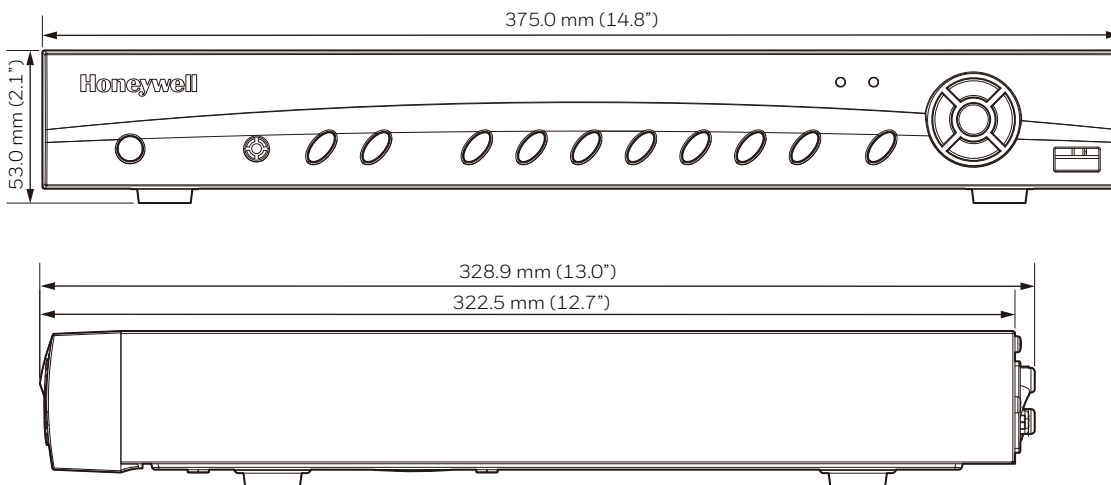
HEN040\*3V



HEN041\*3V



HEN081\*3V/HEN161\*3V



# 4/8/16 CHANNEL EMBEDDED NVRs

## TECHNICAL SPECIFICATIONS

SYSTEM	
Main Processor	Quad-core embedded processor
Operating System	Embedded LINUX
VIDEO	
Inputs	HEN040*3V: 4 channels IP HEN041*3V: 4 channels IP HEN081*3V: 8 channels IP HEN161*3V: 16 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	HEN040*3V / HEN041*3V: 1 / 4 HEN081*3V: 1 / 4 / 8 / 9 HEN161*3V: 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	1~30 fps (8 MP); 1~25 / 30 fps (rest of the resolutions) for each channel
Record Bit Rate	128 Mbps (HEN040*3V: 80 Mbps)
Bit Rate <sup>1</sup>	1.6 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 Bit Rate <sup>3</sup>	4 channels only for units with 2 HDD
Relay Output <sup>3</sup>	2 channels only for units with 2 HDD
STORAGE	
Internal HDD	1 or 2 SATA III ports, single up to 10 TB
PLAYBACK AND BACKUP	
Sync Playback	4 channel NVRs: 1 / 4 8 channel NVRs: 1 / 4 / 8 16 channel NVRs: 1 / 4 / 8 / 16
Decoding	2 ch in 8 MP@30 fps or 8 ch in 1080p@30 fps
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

NETWORK	
Ethernet	1 RJ-45 port (10 / 100 / 1000 Mbps)
PoE	HEN040*3V / HEN041*3V: 4 ports (802.3 af / at) HEN081*3V: 8 ports (802.3 af / at) HEN161*3V: 16 ports (802.3 af / at)
Supported Protocols <sup>2</sup>	HTTP, HTTPS, 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	Incoming: 160Mbps (HEN040*3V: 80 Mbps) Outgoing: 64Mbps (HEN040*3V: 60 Mbps)
Smart Phone Compatibility	iPhone; iPad; Android
AUXILIARY INTERFACE	
USB Ports	2 (2 USB2.0)
RS232	1 port (only for 16 ch)
ELECTRICAL	
Power Supply	HEN040*3V/HEN041*3V: DC 48 V / 53 V, 1.25 A / 1.13 A HEN081*3V/HEN161*3V: AC100V ~ 240V, 50 ~ 60 Hz
Power Consumption	10 W (without HDD)
PoE	HEN040*3V / HEN041*3V: max 25.5 w for single port, 36 w in total HEN081*3V / HEN161*3V: max 25.5 w for single port, 117 w in total
ENVIRONMENTAL	
Operating Temperature	-10 °C ~ 55 °C (14 °F~131 °F)
Relative Humidity	0% to 90% relative humidity
Storage Temperature	0 °C to 40 °C (32 °F~104 °F)
PHYSICAL	
Dimensions	HEN040*3V: compact1 U, 260.2 mm × 225.0 mm × 50.3 mm (10.2" × 8.9" × 2.0") HEN041*3 V: 1U, 375.0 mm × 283.9 mm × 53.0 mm (14.8" × 11.2" × 2.1") HEN081*3 V / HEN161*3V: 1U, 375.0 mm × 328.9 mm × 53.0 mm (14.8" × 13.0" × 2.1")
Weight (Without HDD)	HEN040*3V: 0.8 kg (1.9 lb) (without HDD) HEN041*3V: 1.6 kg (3.5 lb) (without HDD) HEN081*3V: 2.6 kg (5.7 lb) (without HDD) HEN161*3V: 2.7 kg (6.0 lb) (without HDD)
REGULATORY	
Emissions	FCC Part 15B, EN55032: 2015, EN61000-3-2: 2014, EN61000-3-3: 2013
Immunity	EN50130-4: 2011 + A1: 2014
Safety	EU: EN62368-1: 2014 North America UL listed to UL/CSA 62368-1
ROHS	EN50581: 2012

<sup>1</sup> Actual bitrate is scene and motion dependent with H.264 stream.

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

<sup>3</sup> Supports up to 4 alarm input channels and 2 alarm relay output channels, except HEN040\*3V

\* = hard drive capacity in TB.

# 4/8/16 CHANNEL EMBEDDED NVRS

## RECOMMENDED CAMERAS AND ACCESSORIES

RECOMMENDED CAMERAS <sup>1</sup>	
IP Eyeball Cameras	HEW2PER3V, HEW2PER2V, HEW4PER3V, HEW4PER2V, HEW8PER2V, HEW8PER1V
IP Bullet Cameras	HBW2PER1V, HBW2PER2V, HBW4PER1V, HBW4PER2V, HBW8PER2V
IP PTZ Cameras	HDZP252DI, HDZP304DI
IP Dome Cameras	H4W2PER3V, H4W2PER2V, H4W4PER3V, H4W4PER2V, H2W4PER3V, H4W8PER2V, H4W8PER1V, HBW8PER1V

ACCESSORIES	
Rack Mount Tray	HENHQATRAY

<sup>1</sup> Visit the Honeywell website for new camera support information

ORDERING	
HEN04003V	H.265 4 ch NVR 0 TB, 1 HDD, 4 PoE
HEN04013V	H.265 4 ch NVR 1TB, 1 HDD, 4 PoE
HEN04023V	H.265 4 ch NVR 2 TB, 1 HDD, 4 PoE
HEN04043V	H.265 4 ch NVR 4 TB, 1 HDD, 4 PoE
HEN04083V	H.265 4 ch NVR 8 TB, 1 HDD, 4 PoE
HEN04103V	H.265 4 ch NVR 0 TB, 2 HDD, 4 PoE
HEN04123V	H.265 4 ch NVR 2 TB, 2 HDD, 4 PoE
HEN04143V	H.265 4 ch NVR 4 TB, 2 HDD, 4 PoE
HEN04183V	H.265 4 ch NVR 8 TB, 2 HDD, 4 PoE
HEN08103V	H.265 8 ch NVR 0 TB, 2 HDD, 8 PoE
HEN08123V	H.265 8 ch NVR 2 TB, 2 HDD, 8 PoE

ORDERING	
HEN08143V	H.265 8 ch NVR 4 TB, 2 HDD, 8 PoE
HEN08183V	H.265 8 ch NVR 8 TB, 2 HDD, 8 PoE
HEN081103V	H.265 8 ch NVR 10 TB, 2 HDD, 8 PoE
HEN081163V	H.265 8 ch NVR 16 TB, 2 HDD, 8 PoE
HEN16103V	H.265 16 ch NVR 0 TB, 2 HDD, 16 PoE
HEN16143V	H.265 16 ch NVR 4 TB, 2 HDD, 16 PoE
HEN16183V	H.265 16 ch NVR 8 TB, 2 HDD, 16 PoE
HEN161103V	H.265 16 ch NVR 10 TB, 2 HDD, 16 PoE
HEN161163V	H.265 16 ch NVR 16 TB, 2 HDD, 16 PoE
HEN161203V	H.265 16 ch NVR 20 TB, 2 HDD, 16 PoE

### For more information

[buildings.honeywell.com/security](http://buildings.honeywell.com/security)

### Honeywell Commercial Security

715 Peachtree St. NE  
Atlanta, GA 30308  
Tel: +1 800 323 4576

Honeywell reserves the right, without notification, to make changes in product design or specifications.

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