RAPID EYE™ HYBRID HD

16-CHANNEL HYBRID HIGH DEFINITION DIGITAL VIDEO RECORDER (DVR) SYSTEM WITH VIDEO ANALYTICS OPTION

The Rapid Eye™ Hybrid HD 16-channel DVR is designed for effective remote access, even over limited bandwidth. The fast and responsive network connection allows instant access to critical site information as you need it. Rapid Eye can record, search and transmit video, audio and data transactions while simultaneously providing users with both live monitoring and post-event playback operation.

Rapid Eye Hybrid HD is fully integrated with the Honeywell suite of security products: MAXPRO® VMS, access control and intrusion. From standalone remote systems to fully integrated enterprise solutions, Rapid Eye is effective in a wide range of security installations. Rapid Eye uses a Linux-based operating system that is extremely secure, stable and reliable. Standard storage capacities range from 500 GB to 1 TB, field expandable up to 4 TB (up to 3 TB for Rapid Eye Active Alert units). The Rapid Clip feature makes remote clip generation to a USB device or the internal DVD-RW fast and easy.

For increased alarm verification and superior false alarm reduction, the Rapid Eye™ Active Alert® option incorporates 8 channels of intelligent video analytics with standard Rapid Eye functionality into one robust platform. This creates a true video analytics solution for companies requiring analysis of multiple channels of video without the need to invest in additional hardware such as video analytics servers and workstations.

Market Opportunities

The Rapid Eye Hybrid HD seamlessly integrates with Honeywell's WIN-PAK® SE, WIN-PAK® PE, NetAXS™ and Pro-Watch® access control software platforms as well as MAXPRO® VMS, making Rapid Eye a scalable and powerful solution that's easy to deploy. For retail markets, its built-in data capture capability makes it extremely useful as a loss prevention analysis tool. Rapid Eye is also PCI compliant and certified for use in data capture environments. Whether the market is commercial, industrial, municipal, financial, or retail, when the need includes remote video surveillance, the solution is Rapid Eye Hybrid HD.

Features

Hardware

- Hybrid support for up to a combined total of 16 channels of analogue and IP cameras
- IP camera support for up to four EQUIP® v2 and/or HD3 or HD4 IP cameras with local UI turned on, and a maximum of 16 IP channels with local UI turned off
- Real-time recording rates (NTSC/PAL)
- Up to 4CIF analogue camera recording and/or viewing resolution
- IP camera maximum recording and viewing resolution is 1280x720 (HD)
- Live viewing using LocalView
- DVD-RW drive for local clip generation
- 16 looping video inputs
- Dual audio channels (Bi-directional and VoIP)
- 16 alarm inputs, 8 control outputs, 8 serial ports
- 4 field-replaceable/removable hard drive trays
- LINUX – secure, stable multi-tasking real-time OS
- Two front panel USB ports for quick and easy access
- Up to 8 channels of embedded intelligent video analytics (analogue channels only)

Software

- Analogue camera resolutions: selectable independently per camera for live and recording
- IP camera resolutions: selectable per camera, live and recording resolutions are the same
- Event-driven response recording
- TCP/IP port forwarding –multiple units share an IP address
- DHCP (requires DHCP Server and WINS/DNS services)
- SNTP client automatically synchronizes to SNTP servers
- RapidSearch™ for video evidence by events, data, motion or alarm
- IntelliBus™ protocol support
- Enables user-defined event and alarm settings for each camera view
- Remote Client allows full distributed system access regardless of location
- Powerful search tools offer an instantaneous method of searching and locating video

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FEATURES:

The system consists of three major components:

– **Digital Video Recorder (DVR)**: featuring DSP-powered hardware capable of capturing video at 4CIF, 2CIF and CIF resolutions at up to 30 IPS (real time) per camera depending on the selected recording resolution

– **ADMIN Software**: the workstation/server-based administration tool capable of enterprise-wide site and user management

– **VIEW Software**: a feature-rich, workstation-based remote operator program with integrated support for video analytics – Active Alert® Live, Active Alert® Forensics, Active Alert® Reporting and Active Alert® Configuration. The availability of such a powerful set of tools—ADMIN, VIEW and Active Alert—combined with the DSP-powered DVR truly differentiates Rapid Eye™ Hybrid HD Active Alert® from the competition.

LocalView

- Real-time live video – display a single camera or all 16 cameras simultaneously

- PTZ control – Vector driven within a video stream or full featured with PTZ controller icon

- Interactive user-controllable accelerated recording rates (boosted recording)

- Ability to switch the language on user logon to a preset language

- Public Display mode provides a simple cost-effective solution for public view monitoring

- Review recorded video, audio

- Easy creation of evidence clips using the Rapid Clip tab then exporting to DVD, CD, and/or USB memory dongle

- Review evidence clips using the Clip Player tab

- Basic system and camera configurations can be defined using the System tab

- Multiple levels of password protected user access and control

ADMIN Software

HRM10ADMIN (single license included with DVR, can also be ordered separately)

- Capable of enterprise-wide site, user, tour and alarm station management

- Windows®-based administration software has a user-friendly GUI to create the Rapid Eye database

- Can be hosted on a network server using common networked database protocols such as Access, SQL or MSDE

- Makes controlling and administering a multi-site, multi-user, enterprise-wide system fast, easy and secure

VIEW Software

HRM10VIEW (single license included with DVR, can also be ordered separately)

- Feature rich, Windows®-based operator software has a user-friendly GUI for complete remote operations and configuration of one or many different DVRs simultaneously

- Observe and monitor live or recorded video, audio and data from any DVR listed in the Site tab. Connect to multiple sites simultaneously using multiple methods from the same or multiple workstations

- Connect to the same DVR site using multiple connection methods

- Supports LAN/WAN networks and dialup connections with TCP/IP protocol

- Control multiple PTZ cameras, monitor two independent 2-way audio channels, monitor up to 16 streams of POS, ATM and/or alarm panel generated data, configure 16 alarm inputs and control eight auxiliary outputs – all from within a single VIEW session

ADMIN and VIEW Workstation Requirements:

(Workstation Requirements)

- IBM-compatible PC

- Windows 7, Windows XP or Windows 2000

- 2.4 GHz Dual Core processor or above

- 4 GB RAM

- 200 MB of free hard disk space, plus adequate storage for video clips

- CD-ROM (for software installation and upgrades)

- Video card(s) and monitor(s) that support XGA mode 1280 x 1024 or SVGA mode 800 x 600 (minimum)

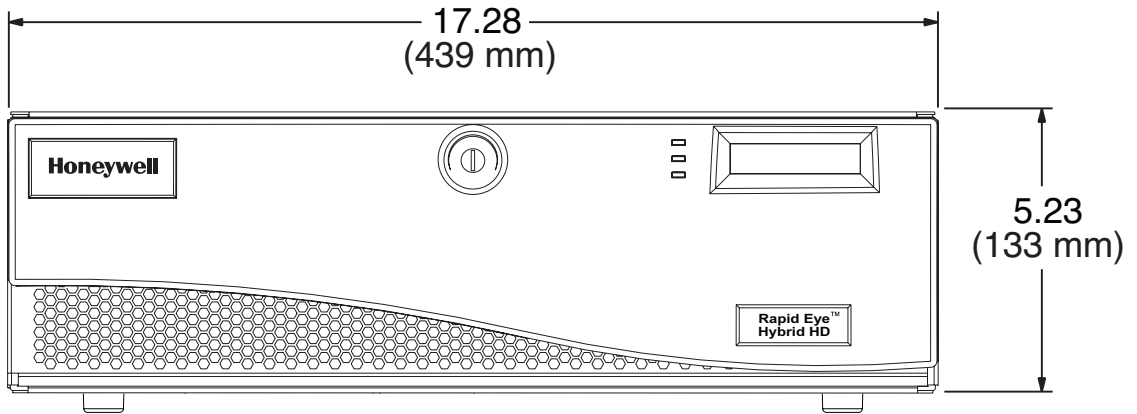- Mouse or other compatible pointing device

Functionality related to the video analytics includes:

- One to eight channels of Active Alert video analytics (for analogue inputs only, activated by license key)

- Ability to license each channel to a different package of video analytics

- Ability to configure video analytics remotely

- Ability to program automated DVR responses based on Active Alert alarms

- Ability for Active Alert to intelligently ignore lighting changes as well as outdoor environmental noise

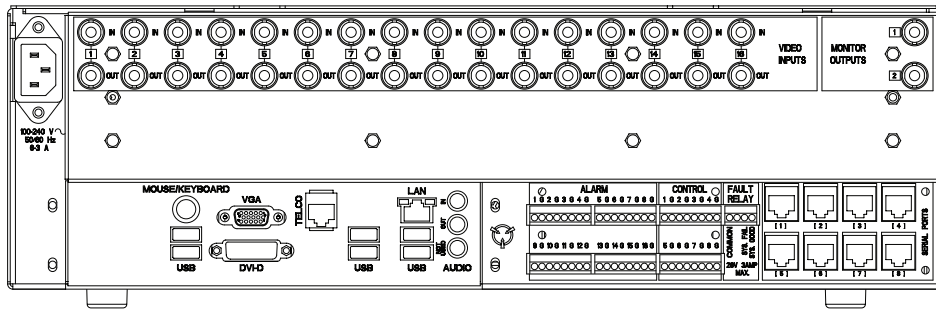- Ability to search Active Alert alarms and events with remote forensics tools

RAPID EYE™ HYBRID HD

SYSTEM DIMENSIONS:
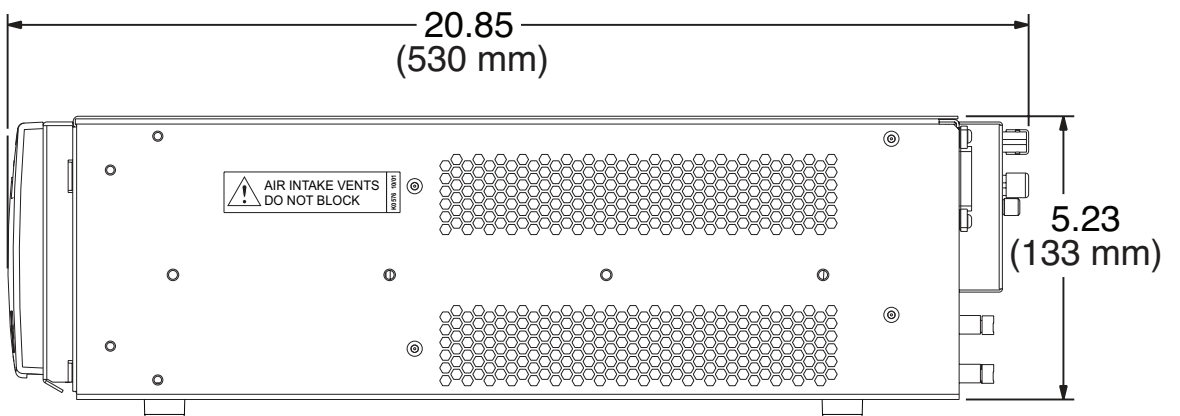
FRONT VIEW

17.28
(439 mm)

5.23
(133 mm)

REAR VIEW

SIDE VIEW

20.85
(530 mm)

AIR INTAKE VENTS
DO NOT BLOCK

5.23
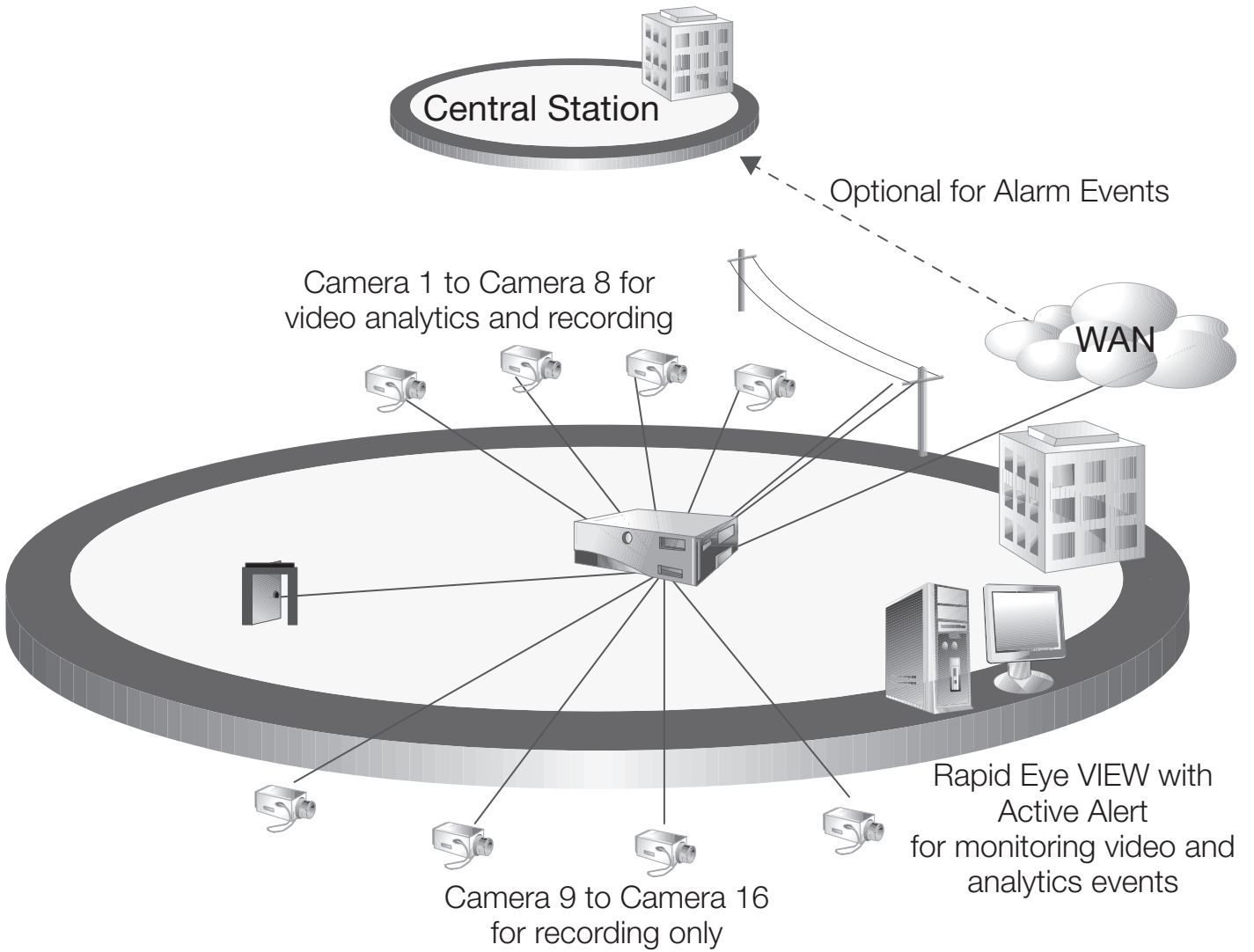(133 mm)

RAPID EYE™ HYBRID HD

RAPID EYE™ ACTIVE ALERT® SPECIFICATIONS:

For models incorporating Honeywell's video analytics (Rapid Eye™ Active Alert®), five packages are offered including three Active Alert variants, Smart Impressions and People Counter, each of which enables a different set of detectable events.

	Honeywell Video Analytics				
	Active Alert Base	Active Alert Standard	Active Alert Premium	People Counter	Smart Impressions
PEOPLE EVENTS					
Person entered restricted area	X	X	X		
Person exited restricted area	X	X	X		
Person entered sterile zone		X	X		
Person loitering in restricted area		X	X		
Person started moving in wrong direction	X	X	X		
Person stopped moving in wrong direction	X	X	X		
Person on fence line		X	X		
Person started running			X		
Person stopped running			X		
People converged		X	X		
People passed by		X	X		
Person trespassing--tripwire	X	X	X		
Person running in wrong direction			X		
CAR TRAFFIC EVENTS					
Car started moving in wrong direction	X	X	X		
Car stopped moving in wrong direction	X	X	X		
Car entered restricted area	X	X	X		
Car parked in restricted area		X	X		
Car entered sterile zone		X	X		
Car speeding			X		
Car made illegal u-turn		X	X		
Car parked in disabled zone		X	X		
Car pulled off road		X	X		
Car needs assistance		X	X		
Car exited restricted area	X	X	X		
Car trespassing--tripwire	X	X	X		
VIDEO/CAMERA EVENTS					
Video signal lost	X	X	X	X	X
Video signal restored	X	X	X	X	X
Camera sabotage features	X	X	X	X	X
COUNTING EVENTS					
Person counted as entering		X	X	X	X
Person counted as exiting		X	X	X	X
Car entered lot		X	X		X
Car exited lot		X	X		X
Car counted in lane			X		X
PREMIUM EVENTS					
Object left unattended			X		
Object removed			X		
Possible theft			X		
SMART IMPRESSIONS ONLY					
Entering target zone [merchandising]					X
Staying in target zone [dwell time]					X

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RAPID EYE™ ACTIVE ALERT® SYSTEM DIAGRAM:

Central Station

Optional for Alarm Events

Camera 1 to Camera 8 for
video analytics and recording

WAN

Rapid Eye VIEW with
Active Alert
for monitoring video and
analytics events

Camera 9 to Camera 16
for recording only

RAPID EYE™ HYBRID HD

SYSTEM DIAGRAM:

Looping Outputs 1 ~ 16

Spot

Sequential Output

VIDEO INPUTS

MONITOR OUTPUTS

VGA or DVI Monitor

LocalView Configuration Utility

Mouse
(Mouse Supplied)

2 Audio Channels Bi-directional

Sensors 1 ~ 16

Siren   Flashing Light
Control Outputs 1 ~ 8

Serial Ports 1 ~ 8
(See Notes)

PTZ   Dome Control

IP Cameras
Honeywell EQUIP® v2 or HD3/4

Network Switch

WAN

Rapid Eye Hybrid HD
ADMIN and VIEW workstation

External Alarm Panel

ATM or POS Data Up to 16

SYSTEM DIAGRAM NOTES

Serial Ports 1-8:
RJ-45 RS232/RS422/RS485 individually user-configurable; used for data input, external modem or PTZ controls.

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SPECIFICATIONS:

Rapid Eye VIEW Software	
Sessions Maximum per DVR	Live Video (all users) 32 streams
Users Viewing Live Video (and activating outputs)	10 sessions
Users Retrieving Video	10 sessions
Users Accessing Events	10 sessions
Users Accessing Alarms	10 sessions
Users Accessing Maintenance	1 session

DVR Unit	
Video Standard	NTSC/EIA or PAL/CCIR
Analogue Video Format	160x120, 320x240, 640x240, 640x480, 704x480 (NTSC) 192x144, 384x288, 704x288, 704x576 (PAL)
IP Video Format	320x180, 352x240, 640x360, 704x240, 704x480, 800x450, 1280x720
IP Camera Support	Up to 4 EQUIP v2 and/or HD3/HD4 IP cameras with local UI turned on Maximum of 16 IP channels with local UI turned off
Colours	24-bit true colour
Recording and Transmission Compression Algorithm	Modified H.261/263 (REM proprietary)
Record Mode	(FIFO) Continuous buffer
Recording Capacity	500 GB – 1 TB Std. expandable up to 4 TB (up to 3 TB for Rapid Eye Active Alert units)
Recording Rate	480/400 CIF global (NTSC/PAL)
Video Quality Settings	6-10 (low-high)
Video Motion Detection	Configurable to sense mass and motion within multiple regions of interest
Video Motion Search	Configurable post-event motion search within multiple regions of interest
POS/ATM or Alarm Data	16 Streams (max)
Event Recording and Reporting	Session, System, Inputs, Outputs, Video, Motion and POS/ATM data
Mass Storage	Power Off 'Cold Swap' 4 field-upgradeable hard drive bays
Removable Media	Optional DVD-RW
Front Panel Control and Display Module (lockable front panel)	Power Switch, 3 Status LEDs 2 x 16 Status LCD
SNTP Client	Synchronise DVR to SNTP servers
DHCP Enabled	Network support for DHCP, WINS or DNS name servers
TCP/IP Port Forwarding	Multiple DVRs share same IP Address
USB 2.0 Ports	6 total (2 in front panel; 4 in rear panel)

PTZ Dome Control	
Local	Mouse control only
Remote	Mouse control and configuration
Protocols Support	7 major protocols, Over 50 using Bossware (requires additional hardware)

Rear Panel Connections	
Video Input (Analogue)	16 – Looping, BNC 1.0 – Vp-p @ 75 Ohms
Video Output	1 – Spot or switcher, BNC 1.0 – Vp-p @ 75 Ohms
Audio Input/Output	2 – Line level, 3.5 mm jack
Alarm/Control Inputs	16 – TTL or 12V level compatible User-configurable NO, NC, EOL 3.5 mm terminal block
General Purpose Control Outputs	8 – TTL or 12V open collector TTL @ +15 mA /-100 mA 12V @ -100 mA current sink 3.5 mm terminal block
Fault Relay	DPDT Form C relay 28 V, 3 A
Serial Ports	8 – RJ45
Modem/Telco	V.90 multi-protocol Standard RJ-11 Interface
Networking	10/100 base T Ethernet, Standard RJ45 Interface
VGA or DVI Output	1024x768 monitor LocalView Interface
AC Power	100-240 VAC 50/60 Hz IEC-320 connector Regional power cord included

Electrical	
Input Voltage	100-240 VAC, 60/50 Hz
Operating Voltage	120V/240V Auto-sensing
Power Consumption	350 W (maximum)

Mechanical	
Dimensions (W x H x D)	440 x 133 x 530 mm
Weight	Unit: 19.5 kg Shipping: 23 kg
Construction	Housing: Steel chassis Finish: Black matt paint

Environmental	
Temperature	Operating: 5°C to 40°C Storage: -10°C to 65°C
Relative Humidity	Operating: 0%-90%, non-condensing

Regulatory	
Emissions	FCC: Part 15, Class B CE: EN 61000-6-3:2007 CE: EN 61000-3-2:2006
Immunity	CE: EN 50130-4:1995 +A1:1998
Safety U.S. and Canada International	ETL Listed to UL 60950-1 / CSA C22.2 No. 60950-1 CB report: IEC 60950-1:2005
PCI Compliance	Certified by Coalfire Systems Inc. 2010
Country of Origin	Product of the USA

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Software	
HRM10ADMIN	ADMIN & VIEW software CD & user manuals (included)
HRM10VIEW	VIEW software CD & user manuals
HRM10CLIP	Clip player for Windows
HRM10UPADMIN	Upgrade ADMIN & VIEW Software CD and User Manuals

Recommended Accessories	
HVBPIT4POS	Four to one serial protocol interface translator, POS or alarm panel data
HASMPIT	SmartPIT™, POS/ECR or ATM text inserter and PTZ protocol translator, compatible with NTSC or PAL video formats
HRPSARE2EARS	Rackmount ears
HRMSLIDE	Rackmount slide kit
HRPSLOCK	Lock for front lid
Analogue Cameras (Fixed Cameras, Domes, PTZ)	See Honeywell's full line of indoor and outdoor cameras, housings and lenses
ACUIX™ IP	Honeywell PTZ network camera series
EQUIP® v2 Series Network Cameras	HCD554IP, HCD554IPX, HD4MDIP, HD4MDIPX, HD3MDIP and HD3MDIPX

Expansion Hard Drives and Spare Hard Drives

Hard drive only (blank) in frame for 16 ch Rapid Eye Hybrid HD v9/v10 units (with or without Analytics). Not usable/interchangeable with Rapid Eye v8 or older legacy units.

HREHD500G	Hard drive expansion Rapid Eye Hybrid HD v10, SATA, 500 GB, in frame
HREHD1T0	Hard drive expansion Rapid Eye Hybrid HD v10, SATA, 1 TB, in frame

Hard drive only (blank) without frame for 16 ch Rapid Eye Hybrid HD v9/v10 units (with or without Analytics). Not usable/interchangeable with Rapid Eye v8 or older legacy units.

HREHD500G-N	Hard drive only, 3.5" Rapid Eye Hybrid HD v10, SATA, 500 GB, no frame
HREHD1T0-N	Hard drive only, 3.5" Rapid Eye Hybrid HD v10, SATA, 1 TB, no frame

Hard drive (system pre-installed) in frame for Rapid Eye Hybrid HD v9/v10 units, WITHOUT Analytics ONLY! Not usable / interchangeable with Rapid Eye v8 or older legacy units.

HREHD500GP10	Hard drive v10 programme Rapid Eye Hybrid HD v10, without Analytics, SATA, 500 GB, in frame

Hard drive (system pre-installed) without frame for Rapid Eye Hybrid HD v9/v10 units, WITH Analytics ONLY! Not usable/interchangeable with Rapid Eye Hybrid HD units without Analytics or older legacy units.

HREHD500GA10	Hard drive programme for Rapid Eye Hybrid HD v10, with Analytics, 500 GB, in frame

Add-On Licenses

HAABR	Active Alert Base License for Rapid Eye (Single Channel Add-On License)
HAASR	Active Alert Standard License for Rapid Eye (Single Channel Add-On License)
HAAPR	Active Alert Premium License for Rapid Eye (Single Channel Add-On License)
HAACR	Active Alert People Counter License for Rapid Eye (Single Channel Add-On License, does not include Car Counting)
HASIR	Active Alert Smart Impressions License for Rapid Eye (Single Channel Add-On License)

Ordering

HRE 16 R 40 D 1T0

Model
Honeywell Rapid Eye™

# of Channels
16

Feature
R Real-time
A Analytics + Real-time

Storage Size
500 500 GB
1T0 1 TB

Media Options
D DVD-RW

Record Rate @ Resolution
48 NTSC 480 IPS @ CIF
40 PAL 400 IPS @ CIF

Note: The resolutions listed above refer to recording rates for analogue camera systems only.
Honeywell reserves the right, without notification, to make changes in product design or specifications.

For more information:
www.honeywell.com/security/uk

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