RAPID EYE™ HYBRID HD ACTIVE ALERT® www.honeywellvideo.com

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

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 (analog and IP), 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 1 to 2 TB, field expandable up to 6 TB. The Rapid Clip feature makes remote clip generation to a USB device or the internal DVD-RW fast and easy.

Rapid Eye Hybrid HD Active Alert uses the power of the Rapid Eye DVR platform along with video analytics to create a single box event-driven recording and video analytics solution. 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.

HD

Market Opportunities

Rapid Eye Hybrid HD Active Alert keeps all advanced remote interface capabilities of Rapid Eye Hybrid HD, so it can address all traditional DVR needs. Plus, with its intelligent video analytics capabilities, Rapid Eye Hybrid HD Active Alert is ideal for:

- Customers with multiple remote sites and multiple users viewing live and/or recorded video, audio and data

- Alarm central monitoring stations offering video verification

- Banking and financial institutions (e.g., ATMs)

- Retail sites

- Convenience store retail chains

- Educational institutions

- Fast food franchises

- Utilities

Features

- Up to 8 channels of embedded intelligent video analytics (analog channels only)

- IP camera support for up to 16 equIP® v2, equIP 1080p, equIP Wide Dynamic Range IP, equIP H.264, and/or Performance Series IP cameras

- Enables user-defined event and alarm settings for each camera view

- Remote Client allows fully distributed system access regardless of location

- Powerful search tools offer an instantaneous method of searching for 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.
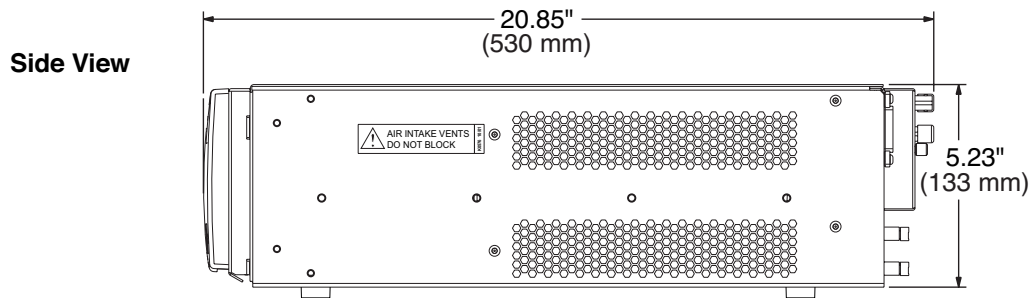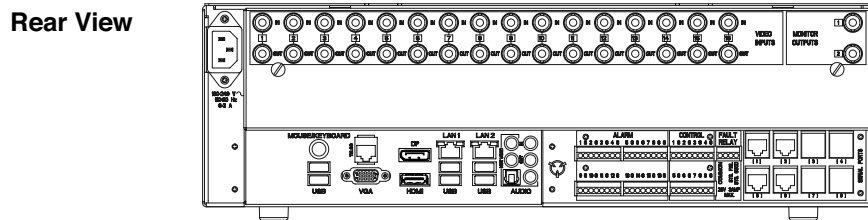
Some functionality related to the video analytics includes:

• 1 to 8 channels of Active Alert video analytics (for analog 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 the remote forensics tools

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SYSTEM DIMENSIONS

Front View

17.28"
(439 mm)

5.23"
(133 mm)

Rear View

Side View

20.85"
(530 mm)

5.23"
(133 mm)

AIR INTAKE VENTS
DO NOT BLOCK
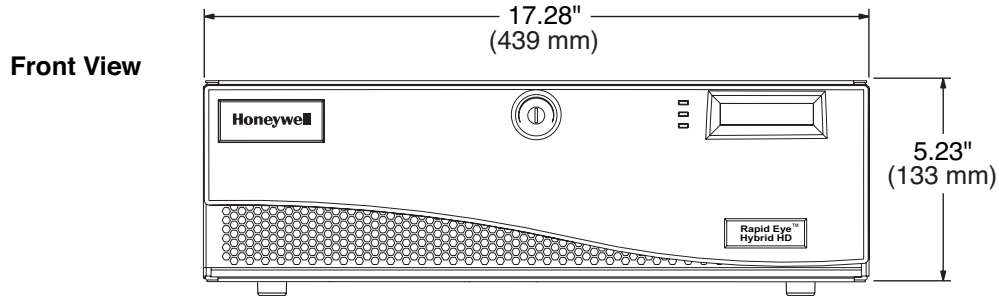
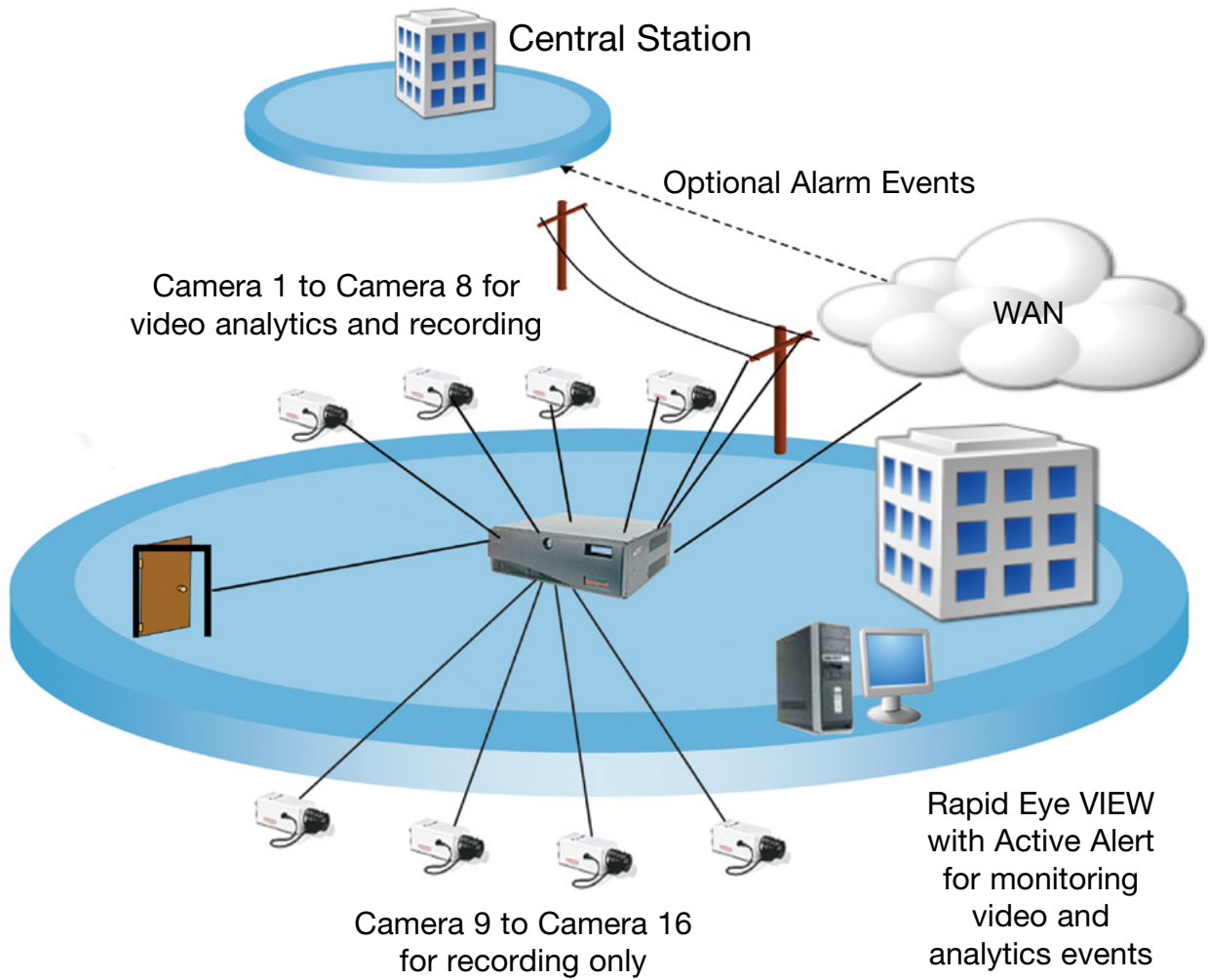# RAPID EYE™ HYBRID HD ACTIVE ALERT® www.honeywellvideo.com

SPECIFICATIONS

Honeywell's video analytics is offered in five packages including three Active Alert packages, 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	X		
car speeding			X		
car made illegal u-turn		X	X		
car parked in handicapped 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 [merchandizing]					X
staying in target zone [dwell time]					X

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SYSTEM DIAGRAM

Typical Site

Central Station

Optional Alarm Events

WAN

Camera 1 to Camera 8 for
video analytics and recording

Camera 9 to Camera 16
for recording only

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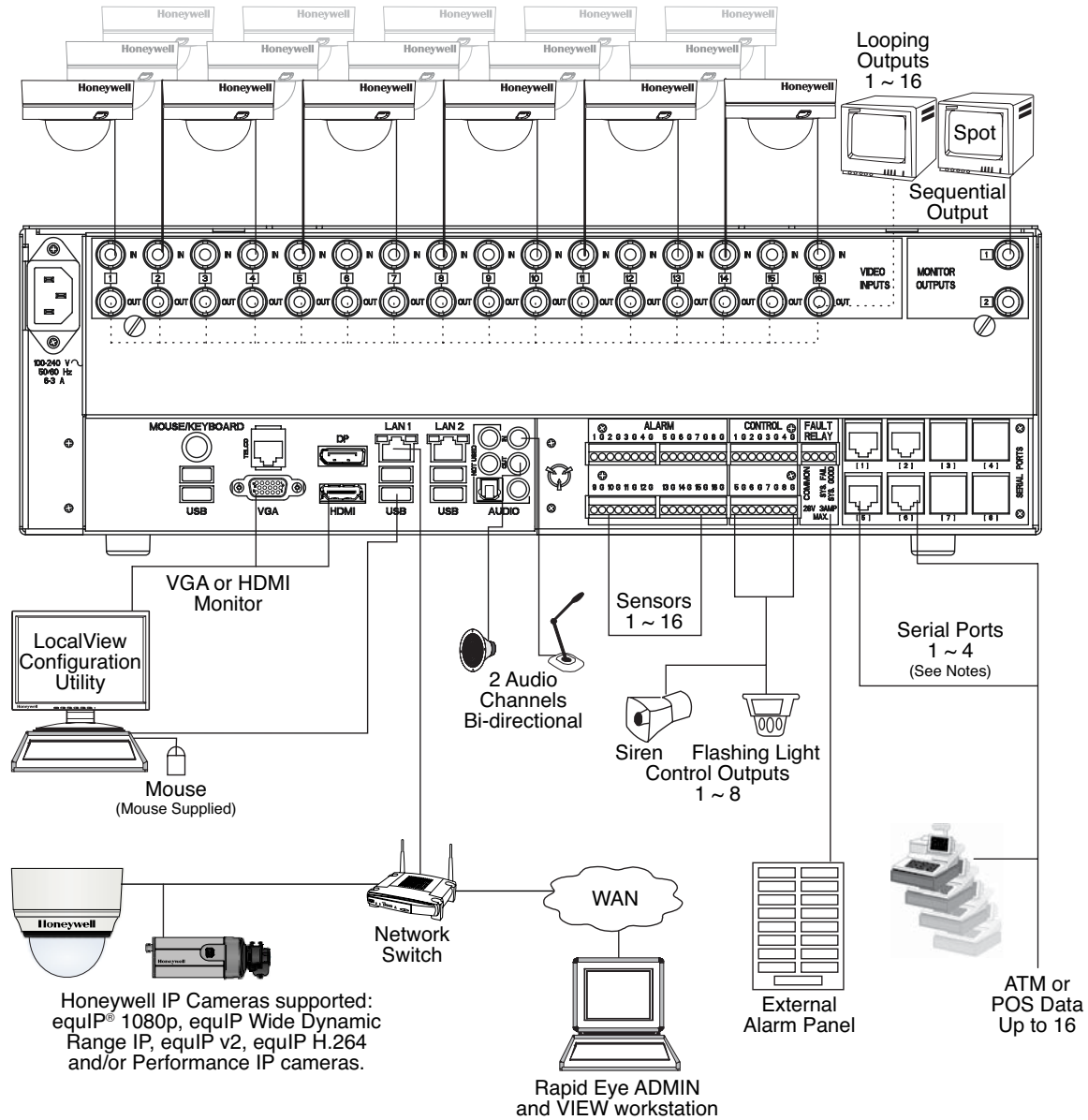with Active Alert
for monitoring
video and
analytics events

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SYSTEM DIAGRAM

SYSTEM DIAGRAM NOTES

Serial Ports 1-4:

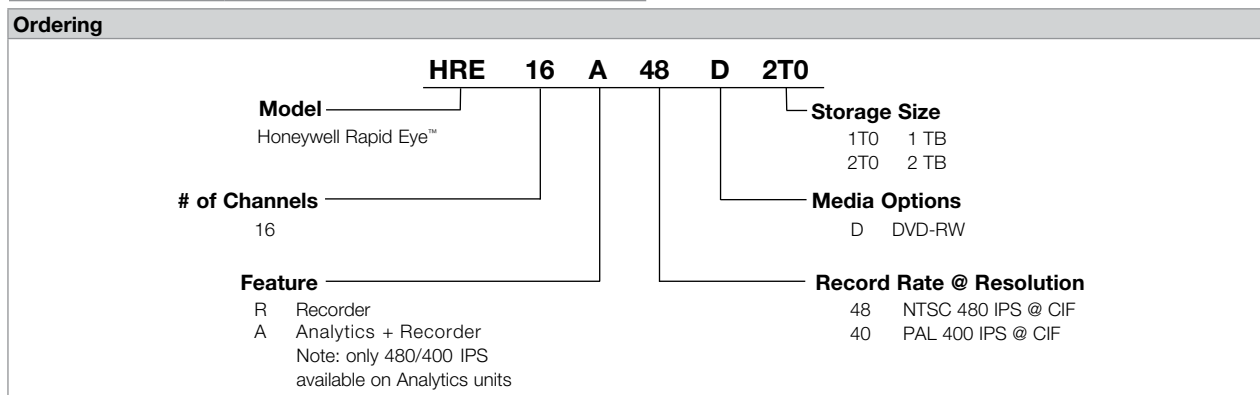RJ-45 RS232/RS422/RS485 individually user-configurable; used for data input, external modem or PTZ control

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SPECIFICATIONS

Rapid Eye VIEW Software	
Site Connections per PC	64 sites
Video Streams per PC	1024 streams
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
Analog Video Format	NTSC: 160x120, 320x240, 640x240, 640x480, 704x480 PAL: 192x144, 384x288, 704x288, 704x576
IP Video Format	320x180, 352x240, 640x360, 704x240, 704x480, 800x450, 1280x720, 1920x1080
IP Camera Support	Up to 16 equIP v2, equIP 1080p, equIP Wide Dynamic Range IP, equIP H.264, and/or Performance Series IP cameras
Colors	24-bit true color
Recording and Transmission Compression Algorithm	Modified H.261/263 (REM proprietary) IP camera codec (MPEG4 & H.264)
Record Mode	(FIFO) Continuous buffer
Storage Capacity	1 – 2 TB Std. expandable up to 6 TB
Analytics Storage	*1 TB
Recording Rate	480/400 CIF global (NTSC/PAL) 80 HD 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" 3 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	Synchronize 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	8 total (2 in front panel; 6 in rear panel)

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

Rear Panel Connections	
Video Input (Analog)	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 12 V level compatible User-configurable NO, NC, EOL 3.5 mm terminal block
General Purpose Control Outputs	8 TTL or 12 V open collector TTL @ +15 mA/-100 mA 12 V @ -100 mA current sink 3.5 mm terminal block
Fault Relay	DPDT Form C relay 28 V, 3 A
Serial Ports	4 RJ45
Modem/Telco	V.90 multi-protocol Standard RJ-11 Interface
Networking	Gigabit Ethernet, Standard RJ45 Interface
VGA or HDMI Output	1024x768 monitor LocalView Interface
AC Power	100-240 V AC 50/60 Hz IEC-320 connector Regional power cord included

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

Mechanical	
Dimensions (W x H x D)	17.28" x 5.23" (3U) x 20.85" (440 x 133 x 530 mm)
Weight	Unit: 43 lb (19.5 kg) Shipping: 51 lb (23.0 kg)
Construction	Housing: Steel chassis Finish: Black matte paint

Environmental	
Temperature	Operating: 40°F to 105°F (5°C to 40°C) Storage: 14°F to 150°F (-10°C to 65°C)
Relative Humidity	0%-90%, non-condensing

Regulatory	
Emissions	FCC: Part 15, Class B CE: EN 55022
Immunity	EN 50130-4
Safety U.S. and Canada International	ETL Listed to UL 60950-1 / CSA C22.2 No. 60950-1 CE report: IEC 60950-1:2005 (2nd Edition) and EN 60950-1:2006
PCI Compliance	Certified by Coalfire Systems Inc. 2010
Country of Origin	Product of the USA

*Analytic storage is not included in the unit storage capacity.

ACCESSORIES AND ORDERING

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

Compatible Cameras	
Analog	
Analog Cameras (Fixed, Domes, PTZ)	See Honeywell's full line of indoor and outdoor cameras, housings and lenses
Network	
Supported Honeywell IP cameras	Supports Performance Series IP, EQUIP® Series, ACUIX™ IP PTZ cameras including high definition. Refer to the compatibility list at www.honeywellsecurity.com/hota
Supported third party IP cameras	AXIS IP cameras: P3301 – 5.11.2, P3344 – 5.20.3, and P5522 – 5.25. Refer to the compatibility list at www.honeywellsecurity.com/hota

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	People Counter License for Rapid Eye (Single Channel Add-On License, does not include car counting)
HASIR	Smart Impressions License for Rapid Eye (Single Channel Add-On License)

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).	
HREHD1T0	Hard drive expansion Rapid Eye Hybrid HD v10, SATA, 1 TB, in frame
HREHD2T0	Hard drive expansion Rapid Eye Hybrid HD v10, SATA, 2 TB, in frame
Hard drive only (blank) without frame for 16 ch Rapid Eye Hybrid HD v9/v10 units (with or without analytics).	
HREHD1T0-N	Hard drive only, 3.5" Rapid Eye Hybrid HD v10, SATA, 1 TB, no frame
HREHD2T0-N	Hard drive only, 3.5" Rapid Eye Hybrid HD v10, SATA, 2 TB, no frame
Hard drive (system pre-installed) in frame for Rapid Eye Hybrid HD v9/v10 units, with analytics ONLY!	
HREHD1T0A10	Hard drive program for Rapid Eye Hybrid HD v10, with Analytics, 1 TB, in frame
HREHD2T0A10	Hard drive program for Rapid Eye Hybrid HD v10, with analytics, 2 TB, in frame

NOTE: Hard drives listed here are not usable/interchangeable with Rapid Eye v8 or older legacy units.

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

Ordering	

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HRE    16    A    48    D    2T0
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Model
Honeywell Rapid Eye™

# of Channels
16

Feature
R   Recorder
A   Analytics + Recorder
Note: only 480/400 IPS available on Analytics units

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

Media Options
D   DVD-RW

Storage Size
1T0   1 TB
2T0   2 TB

NOTE: The resolutions listed above refer to recording rates for analog camera systems only.

For more information:
www.honeywell.com/security

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