

## Fusion III v3.7 DVR Series

www.honeywellvideo.com

### BRIDGING THE GAP BETWEEN ANALOG, IP AND INTELLIGENT VIDEO

The Fusion III DVR Series expands beyond the analog DVR role. It is a full featured hybrid digital recording system that bridges the gap between DVRs and NVRs. The system is designed to record, search and transmit up to a total of 32 channels of analog and digital IP video sources and up to 16 channels of audio. Firmware release v3.7 adds many new enhancements that improve performance and make Fusion easier to operate and more effective.

Fusion III v3.7 offers advanced IP camera integration, Smart Motion search, enhanced logging and enhanced Microsoft Active Directory integration. Because Fusion III v3.7 provides in-depth integration of Honeywell IP cameras, operators can discover and add Honeywell IP cameras from a single interface. Additional features such as integrated camera-based motion detection for Honeywell's HCX Megapixel camera line, and sensor input management on EQUIP™ are supported in a dynamic new way.

Fusion III v3.7 also provides integration with Honeywell intelligent video analytics; Active Alert®, Smart Impressions® or People Counter. These licensed options automatically detect, analyze and classify the behavior of people and vehicles in a scene; greatly increasing event detection accuracy while virtually eliminating false alarms. Instantaneous history of scene activity against user-selected parameters enable fast interactive searches on site and/or remotely.

#### Market Opportunities

The cost effectiveness and wide variety of analog camera sources along with the very fast development of digital IP sources have made hybrid DVRs very desirable. Market acceptance of Fusion in educational, municipal and corporate campus environments, retail and hotels and resorts has been high, and further enhancements to ease of use and support of digital IP sources create unsurpassed value for the user.

#### Features

##### Hardware

- Analog and digital IP recording up to a total of 32 channels
- Up to 16 channels digital IP
- Available with 8, 16 or 32 looping analog video inputs
- Global recording rates from 120/100 to 480/400 at CIF resolution (NTSC/PAL)
- Recording resolutions up to 720 x 480 (4CIF) for analog inputs, up to 5 megapixel for IP video sources
- Real time live video viewing on the local display
- License free substitution of unused analog channels to IP channels
- Internal storage capacity from 250 GB to 4 TB
- External storage options from 1 TB to 24 TB
- 16 sensor inputs and 16 control outputs
- Optional multiplexed or switched spot outputs
- 16 channels of audio standard on select models
- 10/100 network standard with 1 Gbps option
- Keyboard control of camera selection and PTZ control
- Windows XP® embedded operating system

##### Software

- User software included with each DVR
  - **Fusion III Server Software** - Local user interface
  - **HFRVS Remote Software** - Connect to a single DVR
  - **HFVMS Remote Management Software** - Connect to multiple DVRs
- Microsoft Active Directory® Integration
- 4/16 CH network camera support standard (requires HF3HWUPGCPU over 4CH IP video)
- Free Dynamic DNS (for the lifetime of the DVR)
- Smart Motion, Preview and Index searches
- Integrated camera discovery protocol
- Integrated intelligent video analytics and ANPR options
- Integrated POS/ATM with Honeywell's IDM software
- Access control integration to Honeywell's Pro-Watch® and WIN-PAK®
- Powerful API available for third party software integration



## Fusion III v3.7 DVR Series

### FEATURES

The powerful combination of Fusion III server, the feature rich HFRVS and HFVMS user software suites create a hybrid digital video recording solution that distinguishes Fusion III DVR Series from the competition.

#### Fusion Server Software

(Included with every DVR)

- Complete local configuration and administration
- High resolution rates - Fusion is able to record up to 720 x 480 and has an image capture rate of up to 480 ips
- Instant access to information through advanced index searching capabilities and motion-based object search functionalities
- The Preview Search function gives users a quick overview of a 24-hour period. The search can be narrowed down from hour increments to ten-minute increments to one-minute increments
- Option for POS integration
- Option for up to two channels of integrated intelligent video analytics
- Remote notification of alarm events and health check
- Multiple types of search capabilities, including Preview/thumbnail Search, Smart Motion Searches and Index Search
- Supports 5 simultaneous remote connections via HFVMS and HFRVS

#### HFRVS Remote View Software

(Included with every DVR)

- Looks and functions in a similar manner as the Fusion Server Software
- Remotely connect to a single Fusion DVR
- Remotely search and export video from the Fusion DVR
- Control PTZ cameras that are connected to the Fusion DVR
- Microsoft Windows® 2000, XP® and Vista compatible
- Remotely set up cameras, schedules, sensors, audio and network functions via the HFRVS remote software

#### HFVMS\* Video Management Software

- Complete remote configuration and administration
- Remotely monitor video, audio and alarms
- Access and export recorded video
- Create multiple customized user accounts
- Create custom live camera views
- Picture included with e-mail alert
- Connect to multiple Fusion DVRs simultaneously
- Full screen pop-up on alarm
- Maps feature allows importing of .dxf, .jpg, .wmf and other formats
- Control cameras with advanced PTZ features
- POS search capabilities
- Live audio
- TCP/IP based

\* License for HFVMS (single workstation) is included with each Fusion purchase. Activation required.

Separate license is required for accessing Rapid Eye and Performance Series (HRDP) DVRs.

#### HFRVS and HFVMS Central Station Software (Minimum Workstation Requirements)

- Pentium IV 2.0 GHz+ (or Equivalent)
- 256 MB system memory
- DirectX 8 or higher
- AGP 128 MB video card
- Internet or LAN connection
- TCP/IP Installed
- Microsoft Windows® 2000 or XP® Compatible System
- 1280 x 1024 Optimal Display Resolution
- 16 Bit Color Depth

Microsoft, Windows 2000, Windows 2000 Server, XP Pro SP2, Vista Home, and Vista Premium are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

#### Performance characteristics with EQUIP and ACUIX IP cameras

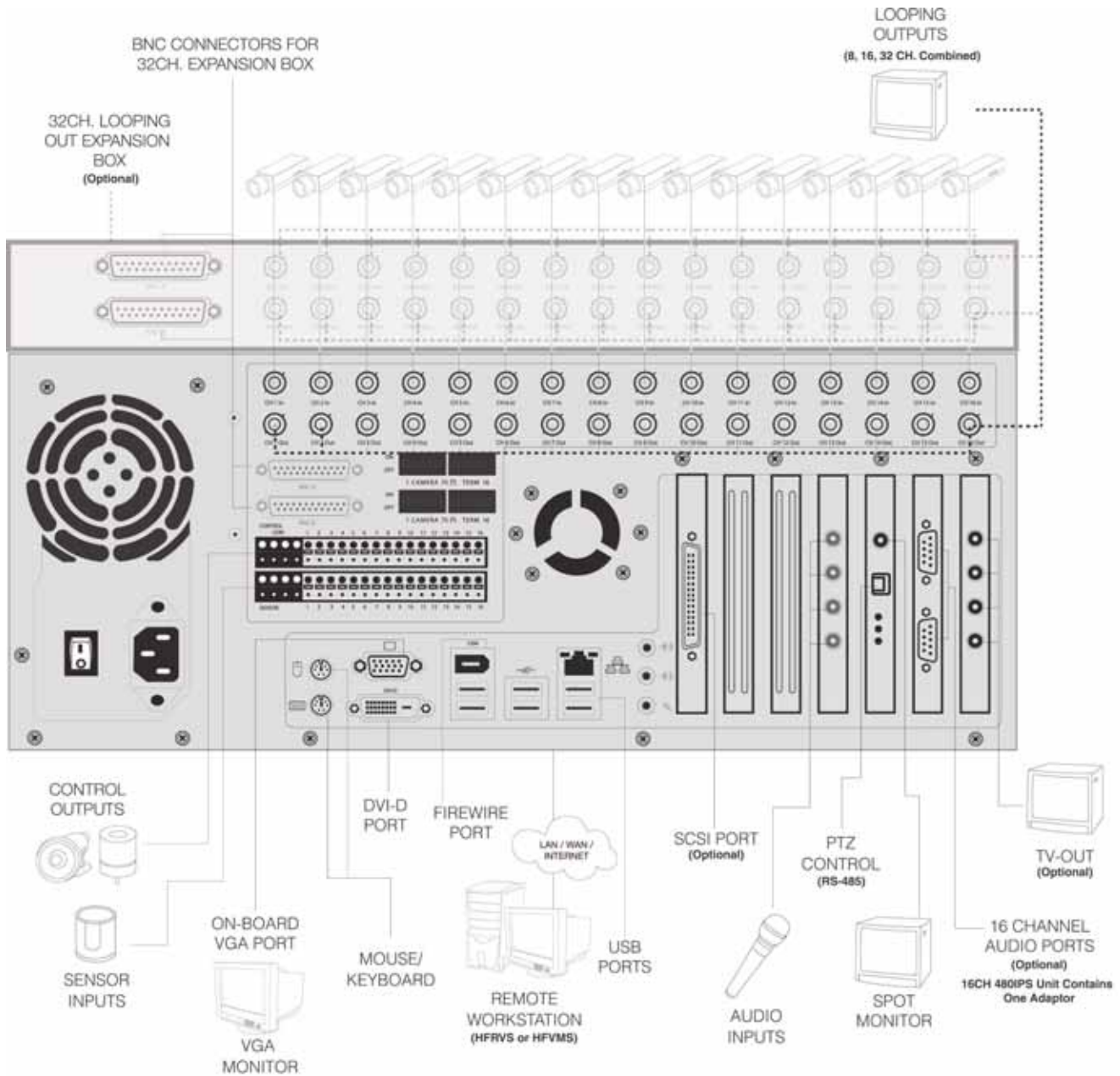
Fusion integration with EQUIP and ACUIX IP cameras currently has the following performance characteristics (with Fusion factory hardware performance upgrade – part # HF3HWUPGCPU):

- Up to 240/200 NTSC/PAL IPS total for all connected Honeywell IP cameras @ CIF resolution
- Up to 120/100 NTSC/PAL IPS total for all connected Honeywell IP cameras @ 2CIF resolution
- Up to 60/50 NTSC/PAL IPS total for all connected Honeywell IP cameras @ 4CIF resolution

Note: The total number of IPS for analog and IP cameras combined should not exceed the IPS rating on the unit.

## Fusion III v3.7 DVR Series

### SYSTEM DIAGRAM



### SYSTEM DIAGRAM NOTES

(connectors on the back of the unit may vary depending on the configuration)

\*Serial Port 1:

DB9 (M) RS-232 only; used for data input, Point of Sale or PTZ control with an additional code conversion device

\*\*On-Board VGA Port:

Used only with 16 Channel 120/100 and 240/200 PPS Real Time (No VGA Card Used with listed models)

## Fusion III v3.7 DVR Series

### SPECIFICATIONS

Fusion Specifications (480 ips)	480 - 32 Ch.		480 - 16 Ch.
	480 - 32 Ch.	480 - 16 Ch.	
Analog Inputs	32	16	
Looping Outputs	32	16	
Sensors	16	16	
Control Outputs	16	16	
Display - Live(L) or Recorded(R)	L	L	
Frame Setup - Individual(I) or Global(G)	I	I	
Resolution - Individual(I) or Global(G)	I	I	
Resolution - 720 x 480 (720) or 640 x 480 (640)	720	720	
Resolution - 720 x 240 (720) or 640 x 240 (640)	720	720	
Resolution - 360 x 240 (360) or 320 x 240 (320)	360	360	
Audio - Line In	8	16	
Spot Monitor - Multi-Screen Controllable(M)/Switched(S)	M	M	
Intensive Record - Selectable(S) or Max(M)	S	S	
USB 2.0 Ports	6	6	
Fusion Specifications (240 ips)	240 - 32 Ch.		
	240 - 32 Ch.	240 - 16 Ch.	240 - 8 Ch.
Analog Inputs	32	16	8
Looping Outputs	32	16	8
Sensors	16	16	8
Control Outputs	16	16	8
Display - Live(L) or Recorded(R)	L	L	L
Frame Setup - Individual(I) or Global(G)	I	I	I
Resolution - Individual(I) or Global(G)	I	I	I
Resolution - 720 x 480 (720) or 640 x 480 (640)	720	720	720
Resolution - 720 x 240 (720) or 640 x 240 (640)	720	720	720
Resolution - 360 x 240 (360) or 320 x 240 (320)	360	360	360
Audio - Line In	8	4	4
Spot Monitor - Multi-Screen Controllable(M)/Switched(S)	M	M	M
Intensive Record - Selectable(S) or Max(M)	S	S	S
USB 2.0 Ports	6	6	6
Fusion Specifications (120R ips)	120R - 16 Ch.		
	120R - 16 Ch.		
Analog Inputs		16	
Looping Outputs		16	
Sensors		16	
Control Outputs		16	
Display - Live(L) or Recorded(R)		L	
Frame Setup - Individual(I) or Global(G)		I	
Resolution - Individual(I) or Global(G)		G	
Resolution - 720 x 480 (720) or 640 x 480 (640)		720	
Resolution - 720 x 240 (720) or 640 x 240 (640)		720	
Resolution - 360 x 240 (360) or 320 x 240 (320)		360	
Audio - Line In		4	
Spot Monitor - Multi-Screen Controllable(M)/Switched(S)		M	
Intensive Record - Selectable(S) or Max(M)		M	
USB 2.0 Ports		6	

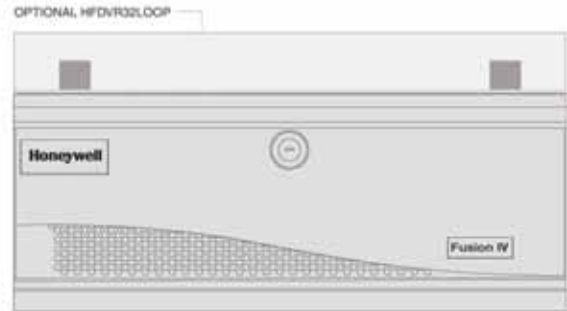
Fusion III Server	
Remote Sessions	Maximum of 5
Video Standard	NTSC: 720 x 480 max.; PAL: 720 x 576 max.
Image Compression	Proprietary
3-4 Kbytes Per Frame	(360 x 240)
Record/Viewing	Up to 480/400 ips
Internal Storage Media	250 GB to 4 TB
Video Inputs	
Composite	Analog input: BNC 1.0 - Vp-p @ 75 Ohms
IP	MPEG-4/MJPEG stream from network
Video Outputs	
Composite	RCA connector 1.0 - Vp-p @ 75 Ohms
SVGA	15 pin D-type port for a PC monitor connection
Electrical	
Input Voltage	115 - 230 VAC, 50 - 60 Hz 10/7A
Operating Voltage	115V/230V Auto sensing
Power Consumption	465 W
Mechanical	
Dimensions	7i x 17.3" x 21.75" 180 mm x 440 mm x 552 mm
Weight	Unit: 64 lbs (29kg) Shipping: 64 (29kg) lb to 84 lb (38kg)
Construction	Housing: Steel Chassis
Finish	Housing: 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	Operating: 0% - 90% non-condensing
Regulatory	
Emissions	FCC Part 15, Subpart B. Class A. EN55022 + A1:1995 and A2:1997 EN61000-3-3 EN61000-3-2
Immunity	EN 55024:1998 + A1:2001 and A2:2003.
Safety U.S. and Canada International	UL, cUL Listed; UL 60950-1:2003; IEC/EN 60950-1:2001 CB report and certificate
Recording Archive	
On Board Device	DVD-RW
Base System	
Includes	HFRVS and HFVMS Software, Keyboard, Mouse, Rack Mounts and DVD-RW, Audio In, Network Connectivity, Printer Port, USB Ports, Keyboard and Mouse PS2 Ports, RS485/232 Ports

\*Note: Frame Rate ÷ # of inputs = max frame rate per camera

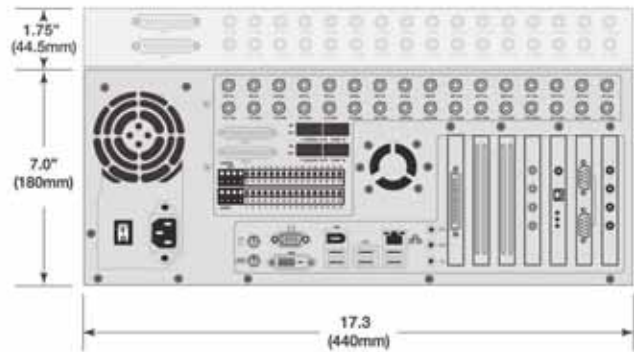
## Fusion III v3.7 DVR Series

### SYSTEM DIMENSIONS

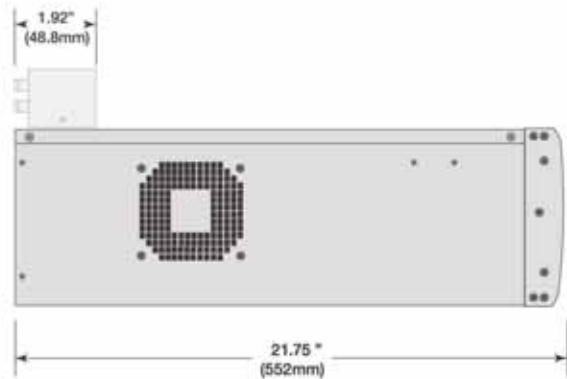
Front View



Back View

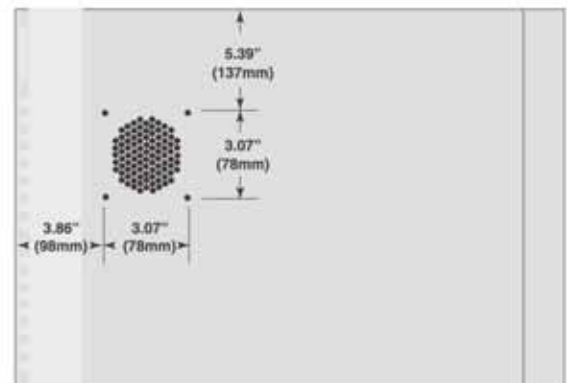


Side View



Top View

Keep Clear  
(CPU EXHAUST FAN)



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## ACCESSORIES AND ORDERING

Factory Installed Accessories (denoted with suffix A)	
HF3HWUPGCPU	Fusion III Hardware Performance Package Dual Core CPU & 512 MB Memory
HF3MEM512	512 MB Memory Upgrade
HF3R5	Fusion III Internal RAID5 Configuration
HFDVRR1	Internal RAID-1 Controller
HFDVRSCSI	SCSI Interface Card, HD 68 Ultrawide
HF3GBNIC	Gigabit Ethernet Upgrade MB Port
HFDVRGBNIC	Gigabit Network Interface, Adds 2nd Ethernet Port
HFDVR4VOUT	4 CH Analog TV Output Card
HF34VOUTM	4 CH Multiplexed Analog TV Output Card (2 independent channels in MUX mode, 4 in switched mode)
HFDVR16AUDIO	16 CH Audio Input Card
HAABF <sup>1,2</sup>	Video Analytics Active Alert Base Package
HAASF <sup>1,2</sup>	Video Analytics Active Alert Standard Package
HAAPF <sup>1,2</sup>	Video Analytics Active Alert Premium Package
HASIF <sup>1,2</sup>	Video Analytics Smart Impressions
HAACF <sup>1,2</sup>	Video Analytics People Counter
External Storage Accessories	
HFDVREXT1T	External storage 1 TB – includes SCSI adapter
HFDVREXT2T	External storage 2 TB – includes SCSI adapter
HFDVREXT4T	External Raid, 4 TB – requires separate SCSI adapter
HFDVREXT5T	External Raid, 5 TB – requires separate SCSI adapter
HFDVREXT8T	External Raid, 8 TB – requires separate SCSI adapter

Field Installed Accessories	
HF3WUPGCPUF	Fusion III Hardware Performance Package Dual Core CPU & 512 MB Memory (Field Upgrade) – requires DVR Serial#
HFDVR32LOOP	32 Analog Looping Outputs Expansion Module
HF3HD250	Fusion III 250 GB Upgrade Kit
HF3HD500	Fusion III 500 GB Upgrade Kit
HF3HD1T0	Fusion III 1 TB Upgrade Kit
HFDVRUSBM	USB Powered Modem
Software Part Numbers	
HFRVS	Single Workstation Fusion Remote View Software
HFVMS	Single Workstation Fusion Video Management Software
HFVMSR	Single Workstation Fusion to Rapid Eye Remote Software
HF3LICDATA	1 CH Fusion Alarm Panel or POS Data License
NVR Software Licenses	
HF3LICNVR1	Adds 1CH of Digital IP Inputs to Fusion III
HF3LICNVR4 <sup>2</sup>	Adds 4CH of Digital IP Inputs to Fusion III
HF3LICNVR8 <sup>2</sup>	Adds 8CH of Digital IP Inputs to Fusion III
HF3LICNVR16	Adds 16CH of Digital IP Inputs to Fusion III

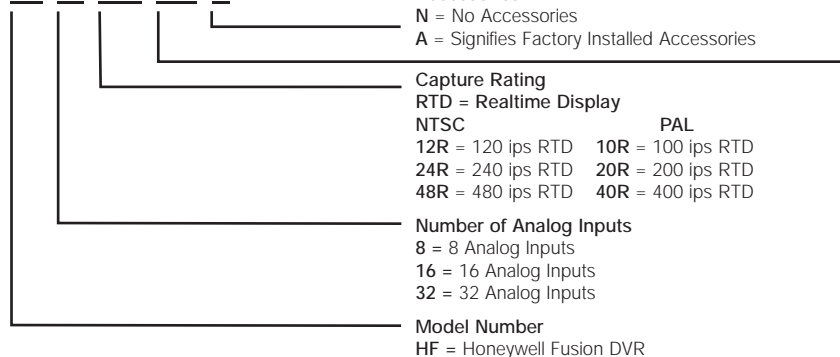
<sup>1</sup> Up to 2 channels of ONE ONLY Video Analytics Package. All analytics packages require Factory Performance Upgrade option. Video Analytics options are available with 240 IPS and 480 IPS real time Fusion III v3.7 configurations only.

<sup>2</sup> Requires HF3HWUPGCPU.

## Ordering

### HOW TO ORDER

**HF 32 48R 250 N**



Example:  
**HF3248R250N** =  
 32 Analog Inputs / 480 ips RTD  
 250 GB Storage / No Accessories

**Internal Storage**  
 250 = 250 GB Storage  
 500 = 500 GB Storage  
 750 = 750 GB Storage  
 1T0 = 1 TB Storage  
 1T5 = 1.5 TB Storage  
 2T0 = 2 TB Storage  
 3T0 = 3 TB Storage  
 4T0 = 4 TB Storage

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

## Honeywell Security & Data Collection

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