

## Fusion DVR Series

### TECHNOLOGY IN ITS MOST CONCENTRATED FORM

The Fusion DVR Series by Honeywell offers the latest in digital technology. Models range from an eight-channel unit, 120 GB HDD to a thirty-two-channel unit with one terabyte of storage.

Fusion's ability to select resolutions up to 720x576 and capture up to 400 ips, allow critical information to be processed in an accurate and efficient manner.

The Fusion Series offers intelligent recording. Users can customize recording schedules based on their security and surveillance needs. The flexible set-up parameters allow users to record continuously or record only specified events. Targeted recording can be implemented by defining specific time periods and/or pre-and-post alarm recording by individual cameras.

In addition, Fusion allows for instant access to information through its advanced search capabilities and remote access. Fusion's advanced search and motion-based object search provide users the ability to access critical information in seconds. Remote viewing capabilities also provide instant access to critical information. Users have the ability to view images via wireless LAN and Internet by using compatible PDA products.

Fusion is compatible with CYA-Retail Security Software by Honeywell. Users can search recorded POS transactions combined with actual transaction video. Along with POS interface, Fusion also interfaces with ATM machines. Captured video, along with the ATM transaction details are recorded. Both POS and ATM interfaces have the ability to view recorded details locally and remotely.

Changes in security environments are simplified by the use of Fusion digital video recorders. All Fusion DVRs use the same software platform, offering compatibility across the entire line. Never has a digital video series been so versatile and comprehensive.



#### Features:

- Capture rates up to 400 ips
- Live viewing up to 400 ips
- Multiplexed or Switched Spot Output
- Direct POS Interface (TVS compatible)
- Remote Notification of alarm events
- Display Maps of Facilities
- Smart, Preview and Index Search
- Supports 5 simultaneous remote connections
- Records resolutions up to 720x576 (4CIF)
- Link events to control outputs
- Up to 1 Terabyte of onboard storage
- Up to 16 channels of audio
- Remote access through PSTN, LAN/WAN, DSL and ISDN
- Remote Health checks

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## FEATURES AND BENEFITS

### **High-Resolution and Capture Rates**

Fusion is able to record up to 720x576 and has an image capture rate up to 400 ips. This functionality allows Fusion to process information in an effective and quick manner.

### **Flexible Connectivity and Expansion**

Fusion connects to PSTN, ISDN, LAN/WAN and cable modems giving the flexibility needed for multiple installations. In addition, Fusion is built to respond and adapt to the constant changes in security environments. Upgrades easily allow you to keep pace with the latest developments.

### **Low Maintenance**

Eliminated are the worries of high VCR maintenance. The issues of replacing VCR heads and tapes are gone with the use of digital recording systems. Little time is required maintaining and servicing Fusion digital video recorders.

### **Remote Accessibility**

Users can remotely view the Fusion system through a standard Web browser or have full control capability through the remote client or central station multi-site monitoring software. Remotely, users can view live video, retrieve video, control pan-and-tilts and more.

### **Ease of Installation**

The Fusion DVR Series offers an exceptionally simple, easy to use interface. The set-up takes a simple series of mouse commands. Intuitive selection and configuration tools remove unit selection and installation confusion.

### **Instant Access to Information**

Fusion has advanced index search and motion-based object search functionality that allows users to retrieve critical information in seconds. This saves hours of available time and resources.

### **Preview Search**

The Preview Search function gives a quick overview of a 24-hour period. The search can be narrowed down to ten-minute increments to one-minute increments based on the users review needs.

### **Simultaneous Connections to Multiple-Sites**

Versatility is the key to multi-site capability. Fusion's Remote Management Software allows users to connect to a single unit or multiple sites simultaneously.

### **Bandwidth Throttling**

The Fusion Series has the capability to regulate the data rate of each remote video unit. This ensures that images and system messages are delivered quickly within the capabilities of the bandwidth of the network.

### **Point-of-Sale Integration**

Fusion includes the option of POS integration. The integration can take place through purchasing the CYA Retail Software by Honeywell Video Systems.

# Fusion DVR Series

## FEATURES CONTINUED

### Fusion Remote Management Software Provides:

- Simultaneous viewing of multiple sites
- Viewing of live and /or recorded video
- Control PTZ domes
- Remote alarm monitoring
- Mapping capabilities
- Remote health checks



Mapping Capabilities



Multi-Site Monitoring

360x288	HOURS	DAYS	OPTIONS	
120GB	1049.62	43.7	TOTAL IPS	16
250GB	2206.04	91.9	% Day Recorded	35
500GB	4429.92	184.6	MOTION	NORMAL
750GB	6653.80	277.2	QUALITY LEVEL	NORMAL
1TB	8877.68	369.9	AUDIO	2
720x288	HOURS	DAYS		
120GB	593.88	24.7		
250GB	1248.19	52		
500GB	2506.48	104.4		
750GB	3764.76	156.9		
1TB	5023.05	209.3		
720x576	HOURS	DAYS		
120GB	300.41	12.5		
250GB	631.38	26.3		
500GB	1276.86	52.8		
750GB	1904.34	79.3		
1TB	2540.82	105.9		

STORAGE CALCULATOR

## Honeywell

% Day Recorded (Using Motion Recording)  
 20% Low Traffic Areas  
 35% Industry Average  
 50% High Traffic Areas  
 100% Continuous Recording

CALCULATING TOTAL IPS  
 Add the Images Per Second (IPS) for all the cameras together.  
 EX. 16 Cameras set to record at 5 IPS each would be a total of 80 IPS.

120 IPS MODELS  
 \*720x576 Resolution cannot exceed 25 IPS  
 \*720x288 Resolution cannot exceed 50 IPS

240 IPS MODELS  
 \*720x576 Resolution cannot exceed 50 IPS  
 \*720x288 Resolution cannot exceed 100 IPS

480 IPS MODELS  
 \*720x576 Resolution cannot exceed 100 IPS  
 \*720x288 Resolution cannot exceed 200 IPS

FUSION

- ### INSTRUCTIONS
- 1 Enter a value into the **TOTAL IPS** (images per second) field. This number cannot exceed the total number of frames available to the DVR. (see CALCULATING TOTAL IPS in the column to the left).
  - 2 Enter the **% DAY RECORDED**. This is the estimated amount of any given day that will be recorded.
  - 3 Enter a **MOTION ACTIVITY** value. This number represents the amount of motion occurring in the video. (see MOTION GUIDELINE in the column to the left).
  - 4 Enter a **QUALITY LEVEL** the cameras will be recording at. This is a setting that increases the clarity of a recorded image, but in doing so, also reduces the total number of days recorded.
  - 5 Select the number of **AUDIO** channels that will be recorded.

Sample Storage Calculator Image - This is an estimate for reference purpose only. Recording duration can be dramatically effected by PTZ cameras, higher levels of activity, image quality, light levels and noise.

### Sample Recording Specification Tables

Fusion Series Recording Specifications								
Disk Capacity	120 GB							
Images per Second	1	15	25	50	75	100	200	400
360x288								
Continuous Recording	247	16.5	9.9	5.4	4.9	3.3	2.5	0.6
35% Day Recorded	729	48.6	29	14.6	9.7	7.3	3.6	1.8
720x576*								
Continuous Recording	68.7	4.6	2.7	1.4	0.9	0.7		
35% Day Recorded	202	13.5	8.1	4.1	2.7	2		

Fusion Series Recording Specifications								
Disk Capacity	1TB							
Images per Second	1	15	25	50	75	100	200	400
360x288								
Continuous Recording	2151	143	86.1	43	28.7	21.5	10.8	5.4
35% Day Recorded	6170	411	246	123	82.3	61.7	30.8	15.4
720x576*								
Continuous Recording	59.7	39.8	23.9	12	8	6		
35% Day Recorded	1713	114	68.6	34.3	22.9	17.1		

Results listed in days of recording \* Note: Size of image effects max ips.

# Fusion DVR Series

## SPECIFICATIONS

Specification Chart	480 - 32 Channel		480 - 16 Channel		240 - 32 Channel		240 - 16 Channel		240 - 8 Channel		120 - 16 Channel	
Cameras	32	16	32	16	8	16						
Looping Outputs		16		16	8							
Sensors	16	16	16	16	8	16						
Control Outputs	16	16	16	16	8	4						
Display - Live (L) or Recorded Rate (R)	L	L	L	L	L	R						
Frame Setup - Individual (I) or Global (G)	I	I	I	I	I	I/G*						
Resolution - Individual (I) or Global (G)	I	I	I	I	I	G						
Resolution - 720x576 (720) or 640x480 (640)	720	720	720	720	720	640						
Resolution - 720x288 (720) or 640x240 (640)	720	720	720	720	720	640						
Resolution - 360x288 (360) or 320x240 (320)	288	288	288	288	288	288						
Audio - Line In	4	4	4	4	4	2						
Spot Monitor - Multi-Screen Controllable/Switched	M	M	M	M	M	S						
Intensive Record - Selectable (S) or Max (M)	S	S	S	S	S	M						
USB 2.0 Ports	4	4	4	4	4	2						

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

Factory Installed Accessories	
<b>HFDVRHDDUPG1</b>	Factory Accessory, Hard Drive, 250GB upgrade, Fusion I Chassis only
<b>HFDVRHDDUPGL</b>	Factory Accessory, Hard Drive Expansion controller, allows a 3rd or 4th drive to be added in the field. This must be ordered with unit at time of original purchase or as part of a return to factory upgrade. Only available as an accessory for the 120, 250 or 500GB models. Included with 750GB version.
<b>HFDVRDVRW</b>	Factory Accessory, DVD Burner
<b>HFDVR4VOUT</b>	Factory Accessory, Fusion Analog Monitor Interface - Provides 4 Analog Outputs for Live Viewing for 240/480ips units. Not available in 32 channel units
<b>HFDVR16AUDIO</b>	Factory Accessory, 16 Port Audio Card
<b>HFDVRGBNIC</b>	Factory Accessory, Fusion Gigabit Network Interface Card - Adds Gigabit Network Interface to DVR.
<b>HFDVRR1</b>	Factory Accessory, Internal RAID-1 Controller
<b>HFDVRR5</b>	Factory Accessory, Internal RAID-5 Controller
<b>HFDVRSCSI*</b>	Factory Accessory Fusion SCSI Adapter - Adds SCSI Interface for External Storage Solutions. Has HD68 Ultrawide 160 Connector.
<b>HFDVREXT1T**</b>	Factory Accessory, Fusion External Storage 1 Terrabyte - includes required SCSI adapter

\*NOTE: HFDVRSCSI must be ordered at the time of the original Fusion DVR purchase to enable future expansion to external storage arrays (HFDVREXT1T, HFDVRR225, HFDVRR325).

\*\*NOTE: HFDVREXT1T now includes a bundled SCSI adapter, it is not necessary to order this part as a separate item.

# Fusion DVR Series

## SPECIFICATIONS CONTINUED

Software	
<b>HFRVS</b>	Fusion Remote Viewing Software - Supplied with Each DVR
<b>HFVMS</b>	Fusion Video Management Software - Adds Central Station Type Functions for Remote Viewing and Operation.
<b>HFVMSR</b>	Software License, Fusion to Rapid Eye
<b>HFDVRCYASA</b>	Stand Alone CYA Software for POS Interface
<b>HFDVRCYAATM</b>	Stand Alone CYA for ATM
<b>HFDVRCYA1NWR</b>	Network Accessibility Software for CYA
<b>HFDVRCYANATM</b>	Network Accessibility Software for CYA-ATM
Field Installed Accessories	
<b>HFDVRCYAACL1</b>	CYA Client Software
<b>HFDVR32LOOP</b>	32 Channel Looping Expansion Box for Fusion II chassis only
<b>HFDVR250UPG</b>	Field Accessory, Storage Drive Expansion, 250 GB Hard Drive for Fusion II chassis only
<b>HFDVRUSBM</b>	Fusion External USB Modem
<b>HFDVRR225</b>	Field Accessory, RAID 5 Storage 2.25 TB, External
<b>HFDVRR325</b>	Field Accessory, RAID 5 Storage 3.25 TB, External
Video Recording System	
<b>Video Standard</b>	PAL: 720x576 max.
<b>Image Compression</b>	Proprietary
<b>2~4 Kbytes per frame</b>	(320x288)
<b>Record/Viewing</b>	Up to 400 ips
<b>Storage Media Internal</b>	Up to 1TB
	Record directly to SAN Drive Array
Video Inputs	
<b>Composite</b>	Analog input, BNC, MPEG-4 stream from network
Video Outputs	
<b>Composite</b>	Controllable analog out, display up to 16 images
<b>SVGA</b>	15 pin D-type port for a PC monitor connection
Rear Panel Connections	
<b>Alarm inputs</b>	Up to 16 dry contact, NC/NO programmable
<b>Control output</b>	Up to 16
<b>Audio Inputs</b>	Up to 16 line inputs – RCA Connector
<b>Audio Out</b>	1 line output, 1/8" stereo
<b>Network connectivity</b>	10/100 Mbps Ethernet, RJ45
<b>Com Ports</b>	Up to 2
<b>Printer Port</b>	25 Pin D-Type
<b>USB Port</b>	Up to 4 USB 2.0
<b>Keyboard &amp; Mouse</b>	PS2 or USB
<b>RS485/422/232 Ports</b>	Plug in connector for control of Honeywell Video Systems Rapid Dome Series and KD6 series speed domes, along with many other major manufactures

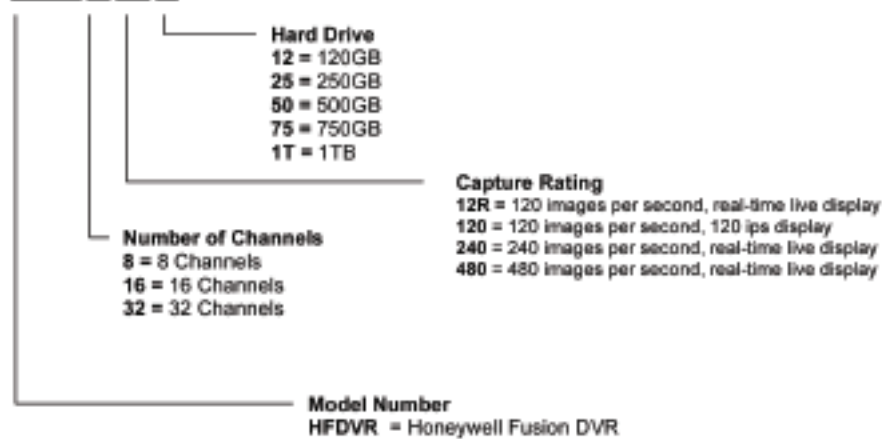
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## SPECIFICATIONS CONTINUED

Recording Archive	
On Board Device	CD/RW, DVD +R/-R
Optional	DVD/RW
Mechanical	
Dimensions	17" W x 20" D x 7"H
Weight	38-65 lbs dependent on model
Electrical	
Power	100-240VAC (50Hz/60Hz)
Environment	
Operation Temperature	40° to 104°F (5° to 40°C)
Recommended	72° F/21°C
Base System	
Includes	HFRVS- Fusion Remote Video Software, Keyboard, Mouse, Rack Mounts, and CD-RW
Warranty	
3 year warranty excluding drives	

## Ordering

### HFDVR 32 480 50



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

## Honeywell Security

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# Honeywell

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