HVRM-HD1600F



FEATURES

16ch HD-SDI Real-time Standalone DVR

- 16ch HD-SDI Standalone DVR
- Certified by HDcctv
- Max. 480/400fps Recording & Playback at Full-HD 1080p resolution
- Adjustable recording quality and framerate per each channel
- Supports High-resolutions over 1200TV lines at Live/Playback
- Supports Dual Codec(H.264, JPEG) & Multi Stream (HD, nHD(640×360))
- Full-HD 1920×1080 resolution output via HDMI port
- Various Live and Playback display (1/4/9/10/13/16 Split-screen)
- Robust IPFR (Intelligent Power Failure Recovery) DVR File System
- Max. 5 Internal SATA Type HDDs
- Supports Max. 128TB(HNS04R connection via Gigabit ethernet) and
- Max. 32TB(e-SATA) external storage interface
- Date/Time, Calendar, Event, Thumbnail, Smart, Text Search available
- At-the-PC Playback of removed DVR HDD
- Lightning arrester on HD-SDI, RS-485, DIO ports
- Provides bundle CMS program, managing Max. 1,024 DVRs in various
- ways such as E-map, Viewset
- Java Viewer for Chrome, Firefox, Safari
- Supports various mobile platform (iPhone/Android Viewer, Mobile page)
- Provides Full SDK for easy and powerful customization

Specifications	
Model Number	HVRM-HD1600F
Video input standard	SMPTE 292M (HD-SDI)

Resolution / framerate Connectors 16ch, 75 \(D\) BNC connector Video output HDMI Live Displays 1, 4, 9, 10, 13, 16 split-screen Compression H.264 / JPEG Resolution 1920×1080 Rate 480/400 fps at 1080p Quality 1080p, 10 levels up to 12Mbps Mode Manual & Event / Schedule & Event / Continuous & Event Schedule 24hrs / 7days Mode Instant playback / search Speed Max. 480/400 fps at 1080p Search type Time, Calendar, Timeline, Event, Thumbnail, Smart, Text Block playback 24hours ~ 99days Event source MD(Motion Detection), sensor, text, Video Loss Event check schedule 24hrs / 7days Event action Buzzer, Relay, E-mail, FTP, Alarm pop-up MD area 15x10 Sensor input Dry contact (NO or NC selectable) Text input POS/ATM support, AVE VSI Pro/Hydra support Alarm source HDD fail, HDD almost full, Fan fail, Password fail, WRS fail Alarm action Warning message, Buzzer, E-mail, Relay Input/output Input 4ch RCA / output HDMI, RCA Compression 16KHz, 16bit sampling ADPCM Direction Both Protocols 35 models including C1080, C1080PT-Z20, Pelco-D, Pelco-P, Samsung, Panasonic and others Interface 1 Gigabit Ethernet (10/100/1000Mbps) Type Static IP, Dynamic IP, xDSL DDNS WNS, DynDNS, NoIP, WRS Bandwidth limit Supported Users 1 HD, H.264 stream, Same as recording setting 1 additional H.264 stream, nHD(640 x 360) 1 JPEG stream, nHD(640 x 360) for e-mail or mobile User privilege Menu, PTZ, Relay, Playback, Power, Copy, Network MIC	Specifications		
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Protocols 35 models including C1080, C1080PT-Z20, Pelco-D, Pelco-P, Samsung, Panasonic and others Interface 1 Gigabit Ethernet (10/100/1000Mbps) Type Static IP, Dynamic IP, xDSL DDNS WNS, DynDNS, NoIP, WRS Bandwidth limit Supported NTP Server / Client / Both Users 10 monitoring, 2 playback 1 HD, H.264 stream, Same as recording setting 1 additional H.264 stream, nHD(640 x 360) 1 JPEG stream, nHD(640 x 360) for e-mail or mobile User level 1 admin, 10 users User privilege Menu, PTZ, Relay, Playback, Power, Copy, Network MIC IP filtering Supported Storage devices 5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	Compression	16KHz, 16bit sampling ADPCM	
Panasonic and others Interface 1 Gigabit Ethernet (10/100/1000Mbps) Type Static IP, Dynamic IP, xDSL DDNS WNS, DynDNS, NoIP, WRS Bandwidth limit Supported NTP Server / Client / Both Users 10 monitoring, 2 playback 1 HD, H.264 stream, Same as recording setting 1 additional H.264 stream, nHD(640 x 360) 1 JPEG stream, nHD(640 x 360) for e-mail or mobile User level 1 admin, 10 users User privilege Menu, PTZ, Relay, Playback, Power, Copy, Network MIC IP filtering Supported Storage devices 5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	Direction	Both	
Type Static IP, Dynamic IP, xDSL DDNS WNS, DynDNS, NoIP, WRS Bandwidth limit Supported NTP Server / Client / Both Users 10 monitoring, 2 playback 1 HD, H.264 stream, Same as recording setting 1 additional H.264 stream, nHD(640 x 360) 1 JPEG stream, nHD(640 x 360) for e-mail or mobile User level 1 admin, 10 users User privilege Menu, PTZ, Relay, Playback, Power, Copy, Network MIC IP filtering Supported Storage devices 5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	Protocols		
DDNS WNS, DynDNS, NoIP, WRS Bandwidth limit Supported NTP Server / Client / Both Users 10 monitoring, 2 playback 1 HD, H.264 stream, Same as recording setting 1 additional H.264 stream, nHD(640 x 360) 1 JPEG stream, nHD(640 x 360) for e-mail or mobile User level 1 admin, 10 users User privilege Menu, PTZ, Relay, Playback, Power, Copy, Network MIC IP filtering Supported Storage devices 5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	Interface	1 Gigabit Ethernet (10/100/1000Mbps)	
Bandwidth limit Supported NTP Server / Client / Both Users 10 monitoring, 2 playback 1 HD, H.264 stream, Same as recording setting 1 additional H.264 stream, nHD(640 x 360) 1 JPEG stream, nHD(640 x 360) for e-mail or mobile User level 1 admin, 10 users User privilege Menu, PTZ, Relay, Playback, Power, Copy, Network MIC IP filtering Supported Storage devices 5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	Type	Static IP, Dynamic IP, xDSL	
NTP Server / Client / Both Users 10 monitoring, 2 playback 1 HD, H.264 stream, Same as recording setting 1 additional H.264 stream, nHD(640 x 360) 1 JPEG stream, nHD(640 x 360) for e-mail or mobile User level 1 admin, 10 users User privilege Menu, PTZ, Relay, Playback, Power, Copy, Network MIC IP filtering Supported Storage devices 5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	DDNS	WNS, DynDNS, NoIP, WRS	
Users 10 monitoring, 2 playback 1 HD, H.264 stream, Same as recording setting 1 additional H.264 stream, nHD(640 x 360) 1 JPEG stream, nHD(640 x 360) for e-mail or mobile User level 1 admin, 10 users User privilege Menu, PTZ, Relay, Playback, Power, Copy, Network MIC IP filtering Supported Storage devices 5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	Bandwidth limit	Supported	
Streaming 1 HD, H.264 stream, Same as recording setting 1 additional H.264 stream, nHD(640 x 360) 1 JPEG stream, nHD(640 x 360) for e-mail or mobile User level 1 admin, 10 users User privilege Menu, PTZ, Relay, Playback, Power, Copy, Network MIC Supported Storage devices 5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	NTP	Server / Client / Both	
Stream, nHD(640 x 360) 1 JPEG stream, nHD(640 x 360) for e-mail or mobile User level 1 admin, 10 users User privilege Menu, PTZ, Relay, Playback, Power, Copy, Network MIC IP filtering Supported Storage devices 5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	Users	10 monitoring, 2 playback	
User privilege Menu, PTZ, Relay, Playback, Power, Copy, Network MIC IP filtering Supported Storage devices 5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	Streaming	stream, $nHD(640 \times 360) 1$ JPEG stream, $nHD(640 \times 360)$ for e-mail or	
IP filtering Supported Storage devices 5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	User level	1 admin, 10 users	
Storage devices 5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	User privilege	Menu, PTZ, Relay, Playback, Power, Copy, Network MIC	
storage (NS04R)	IP filtering	Supported	
RAID Level 1/5/10 Supported	Storage devices	5 internal SATA HDDs, 1 external eSATA Interface, 1 Gigabit network for storage(NS04R)	
	RAID Level	1/5/10 Supported	

Specifications	
File system	Proprietary file system, data-loss protection against power-failure
Capacity	Max. 32TB with eSATA, Max. 128TB with cascaded NS04R
Backup type	Multi-channel or Single channel avi file
Backup device	USB drive (2 ports)
S.M.A.R.T.	Temperature and Health checking
Serial port	1 RS-232C, 2 RS-485
Sensor input	16 Dry-contact
Relay output	4 Relay
Device	Front panel, IR remote, Joystick Keyboard, Mouse
Web viewer	Monitoring / Event / PTZ / Playback with IE
Java viewer	Monitoring / Event/ PTZ with IE, Chrome, Safari
Mobile viewer	Monitoring / PTZ / LogView with iPhone & Android
CMS	Control Center Standard, Max. 1024 DVRs
Dimension	17.5 (W) x 16.5 (D) x 3.46 (H) inch
Weight	22 lb (No HDD)
Operating temperature	5°C~45°C (41°F ~ 113°F)
Power	AC free volt (100 ~ 240VAC), 50/60Hz
Power consumption	Max. 100W Typical 70W(1 HDD)
Approval	KC, FCC, CE, RoHS, HDcctv