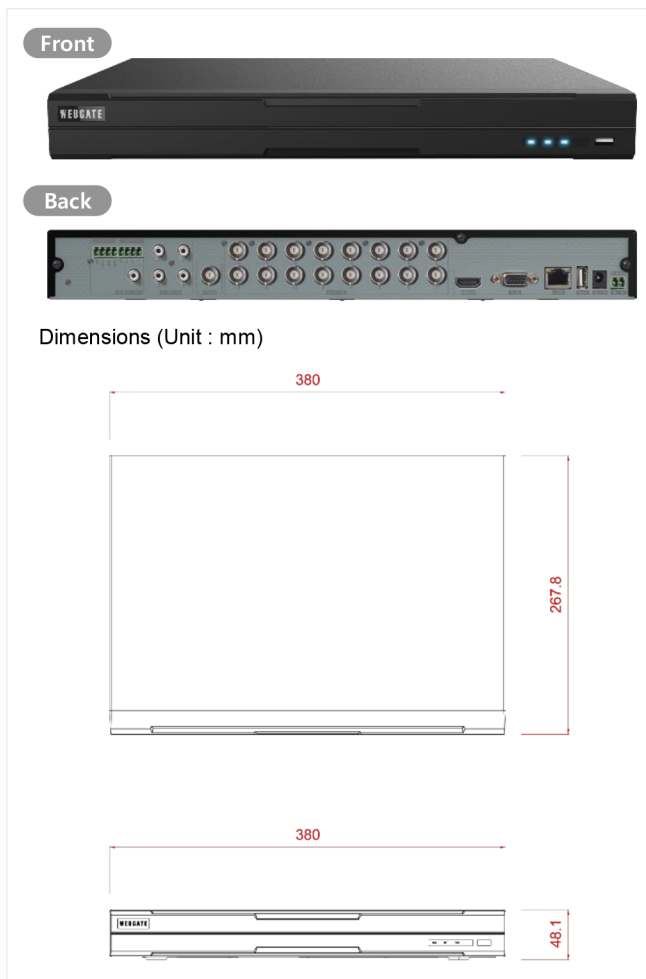# HAC1630F

All-in-One Analog HD DVR supporting Analog video & IP video stream

Key Features

- 16ch All-in-One Analog HD DVR
- Supports diverse video standards
    ① Analog HD : HD-TVI, HD-A, HD-C(TBD) / 1080p, 720p
    ② Analog SD : CVBS, 960H (NTSC/PAL)
    ③ IP video stream : 4ch supported
- Up to 30fps@1080p recording and playback performance per channel
- Adjustable recording quality and framerate per channel
- Supports Dual Codec(H.264,JPEG) & Multi Stream
- HDMI, VGA video output
- Various Live and Playback display (1/4/9/10/13/16 Split-screen)
- Max. 2 Internal SATA Type HDDs (8TB HDD supported)
- Date/Time, Calendar/Time-line, Event, Thumbnail, Text Search available
- At-the-PC Playback of removed DVR HDD
- Provides bundle CMS program, managing Max. 1,024 DVRs in various ways such as E-map, Viewset
- Java Viewer for Chrome, Firefox, Safari
- HTML5 webviewer supported with no need of any ActiveX or NPAP plug-in
- Supports various mobile platform (iPhone/Android Viewer)
- The easiest mobile connection by P2P function
- Provides Full SDK for easy and powerful customization

Front

Back

Dimensions (Unit : mm)

Specifications

VIDEO INPUT

Video input Format	BNC	HD-TVI 1080p/720p
		HD-A / HD-C 1080p(TBD)
		Analog 960H/SD
	IP	Onvif Profile-S (4ch supported)
Resolution / Frame Rate	HD-TVI	1920x1080 / 25, 30fps
		1280x720 / 25, 30fps
	HD-A / HD-C(TBD)	1920x1080 / 25, 30fps
	Analog 960H	960x480 / 60i or 960x576 / 50i
	Analog SD	720x480 / 60i or 720x576 / 50i
	IP	1920x1080 / 2048x1536
Connectors	16ch, 75Ω BNC connector	
CoC	16ch, Control over Coax	

VIDEO OUTPUT

Video output	HDMI/VGA Duplicate Mode	1, 4, 9, 10, 13, 16 split-screen
		HDMI : 1920 x 1080
		VGA : 1920x1080, 1280x1024, 1024x768
		User defined display / Alarm pop-up / Sequential switching with Analog Spot
	VGA Spot Mode	1, 4, 9, 16 split-screen
		1920x1080, 1280x1024, 1024x768
		User defined display / Sequential switching without Analog Spot
	Analog Spot	1, 4, 9, 16 split-screen
		CVBS
		User defined display / Sequential switching

RECORDING

Compression	H.264 / JPEG
Resolution	1920 x 1080, 1280 x 720, 960 x 480(576)
Rate	Max. 480/400 fps
Quality	10 levels up to 8Mbps
Mode	Normal/Event Record, Schedule/Event Record, Emergency Record
Schedule	24hrs / 7days

PLAYBACK

Mode	Instant Playback / Search
Speed	Max. 480/400fps
Search type	Date/Time, Calendar/Time-line, Event, Thumbnail(Interval/Motion), Text, Bookmark
Block playback	24hours ~ 99days

EVENT & ALARM

Event source	MD(Motion Detection), Sensor, Video Loss
Event check Scehdule	24hrs / 7days
Event action	Buzzer, Relay, E-mail, FTP, Alarm pop-up
	Mobile Alarm Push
MD area	15 x 10

SYSTEM ALARM

| Alarm source | HDD fail, HDD almost full, Password fail, WRS fail |
| Alarm action | Warning message, Buzzer, E-mail, Mobile Alarm Push |

AUDIO

Input/output	4 RCA input / HDMI & 1 RCA output
Compression	ADPCM (32Kbps, 8KHz, 16bit sampling)
Direction	Both

PTZ

| Protocols | 41 models including C1080, C1080PT-Z20B, C1080PT-Z10B, Pelco-D, Pelco-P, Samsung, Panasonic and others |

NETWORK

Interface	1 Ethernet port (10/100Mbps)
Type	Static IP, Dynamic IP, xDSL, UPnP, RTSP
DDNS	WNS, DynDNS, NoIP, WRS
Bandwidth limit	Supported
NTP	Server / Client / Both
Users	10 Monitoring, 4 Playback
Streaming	H.264 stream, High resolution
	1 additional H.264 stream, Normal resolution
	1 JPEG stream, Normal resolution for e-mail or mobile

SECURITY

User level	1 admin, 10 users
User privilege	Playback, Menu, Copy, PTZ, CameraSetup, Relay, Power, NetworkMic
IP filtering	Supported

STORAGE & BACKUP

Storage devices	2 internal SATA HDDs
File system	Proprietary file system
	Data-loss protection against power-failure
Backup type	EXE : multi channel with log AVI : single channel JPEG : single channel capture
Backup device	USB 2.0 drive (2 ports)
S.M.A.R.T.	Temperature and Health checking

SERIAL PORT

Serial port	1 RS-485
Sensor input	4 Dry-contacts
Relay output	1 Relay

CONTROLLER

| Device | IR remote controller, Joystick Keyboard, Mouse |

SOFTWARE

HTML5 Web viewer	Monitoring / Event / PTZ / Playback for browser supporting HTML5
Web viewer	Monitoring / Event / PTZ / Playback for IE
Java viewer	Monitoring / Event / PTZ for IE, Chrome, Safari
Mobile viewer	Monitoring / Playback / Alarm Push / PTZ / Audio / Log View with iPhone & Android
CMS	Control Center, Max. 1024 Units
SDK	ActiveX(COM) SDK

ENVIRONMENTAL & PHYSICAL

Dimension	380(W) x 267.8(D) x 45(H) mm
Weight	1.66kg (No HDD)
Operating Temperature	5°C~45°C (41°F ~ 113°F)
Power	DC 12V / 4A
Power Consumption	Max. 15W (without HDD)
Approval	FCC, KC, CE, RoHS