HD-CCTV Products & Solutions

Premium to your HD-CCTV

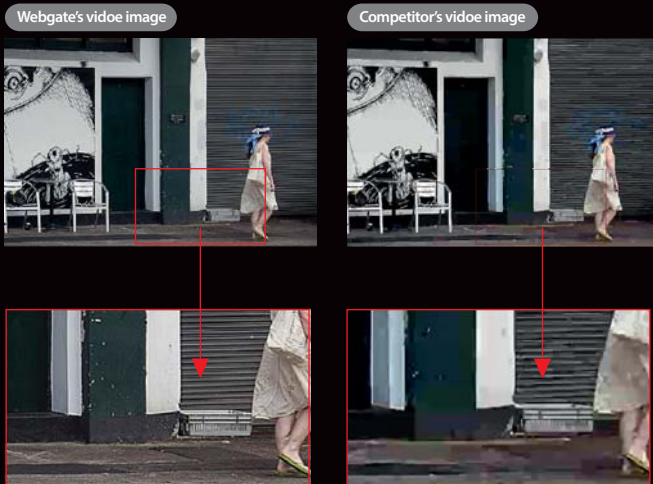# WEBGATE

Enjoy the Genuine HD Secuity
with WEBGATE HD-CCTV Solution

HD-CCTV DVR

Broadcast quality using High Fidelity Video Codec

The HD DVR Series adopted a high-performance video codec which is used for broadcasting to show excellent video quality.
Since this codec is using a toolset which requires a high level H.264 compression technology, our HD DVR series shows better quality than any competitors.

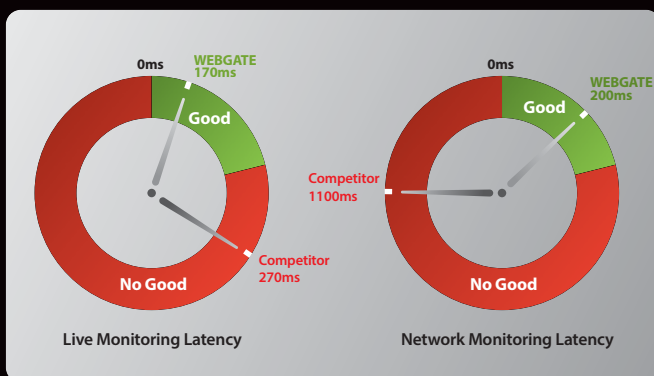Webgate's vidoe image

Competitor's vidoe image

Multi-Streaming Technology

The HD DVR series provide 3 video streams. Two H.264 video streams of HD and SD, and one JPEG SD stream. The user can easily change the second SD stream's resolution, quality, and framerate regardless of recording settings.

Rapid network response using SLL(Super Low Latency) technology

The HD DVR's video codec starts its compression before an image has fully filled up the memory, and finishes its compression as soon as the image is completely filled up the memory

0ms WEBGATE 170ms Good Competitor 270ms No Good	0ms WEBGATE 200ms Good Competitor 1100ms No Good
Live Monitoring Latency	Network Monitoring Latency

WISE Display Engine

Webgate's HD DVR series adopted the in-house WISE Display Engine. It supports clear and natural video image at single / 4-split / 9-split / 16-split display screen. Through this technology, the HD DVR provides excellent horizontal resolution of 1200TV lines.

Simple Plug & Play Network Installation

By enabling UPnP protocol and WRS service, operator can connect to a DVR which has a dynamic IP through the network without router configuration.

High Performance, High Reliability Video File System (VFS)

Webgate's VFS is a specialized DVR file system that minimizes the hard disk drive header's movement. It also always saves data into consecutive sectors. By using VFS, the DVR can maximize HDD's performance and could improve reliability and life-cycle of HDD.

- IPFR(Intelligent Power Failure Recovery) Technology
- Diverse bad block management
- Mirroring
- Mass storage

At-the-PC Playback

The HDD within the DVR can be accessed directly from a PC. The HDD can connect to a PC through USB or eSATA. Windows cannot support the HDD's read/write directly, however through the CMS software, the operator can do all the necessary work such as Playback, Search and Backup. When a full HDD backup is necessary, the above method provided is a simple solution.

Frame by Frame step reverse

Due to the high performance codec and WISE display engine, the DVR can provide forward and reverse step playback by frame.

Advanced Lightning Protection

The DVRs are built with advanced protection from lightning as a precaution to minimize damage from electrical storms. The HD-SDI product line of high-frequency signals, RS-485 communication lines have the advanced surge protection circuit.
This also includes protection for the sensor/relay as well

Time Synchronized DVR Network

The DVR can get time information from the NTP and be configured to work as an NTP server itself. This will allow one DVR to get the time information from the NTP server, and distribute the acquired information to other DVRs on the local network at the same time. This way there will be no time difference within each DVR

Interface with POS/ATM

WEBGATE DVR can interface with the VSI product lines that contain 300 types of POS/ATM protocols within. Through the family of VSI products, the DVR can record text data, provide search, and playback.

Status notification by SNS (Social Network Service)

By connecting the DVR with twitter, a user can easily check or be notified of status and alarm events anytime and anywhere. While conventional e-mail notification can support only 1 person, the SNS can support many people at the same time.
An operator can set permissions to allow who may recive notifications.

Powerful CMS : Control Center Standard/ Pro/ Enterprise

Control Center Standard is provided as a bundled software for the DVR. It can manage a maximum of 1024 DVRs, 2monitors, and provides View Set, user-specific authority settings. It also provides real time even status, and all the other necessary functions.

Flexible and powerful WESP SDK

Due to the flexibility and interoperability of the WESP(Webgate Embedded Standard Protocol) SDK, it supports all functions of equipment so that a user can easily develope their own applications

Multi platform support by Java viewer

Webgate's DVRs are embedded with Java Viewer which support connections from different operating systems such as Mac and linux.

Centralized Password Management

The Webgate DVRs contain radius protocols in which a server can change every DVRs' password at once.

Mobile Viewer : WebEye

WebEye is a mobile application for DVR that supports iOS and Android. An operator can register DVRs, monitor video, and control PTZs.
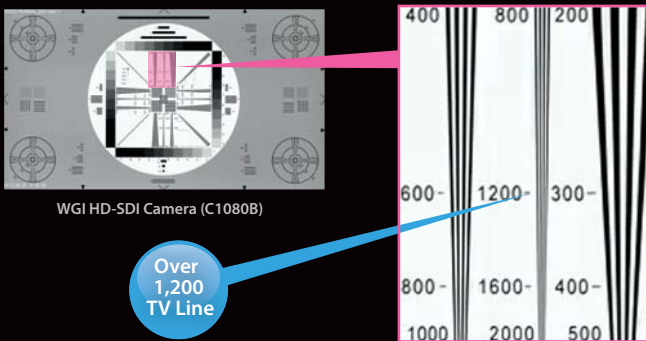
HD1600M / HD800H / HD400F / HD400H

HDC400M

Model	HD1600M	HD800H	HD400F	HD400H	HDC400M
Channel	16	8	4	4	4
Design					
Video Input	HD-SDI (SMPTE 292M) : 1080p or 720p at 25/30 fps				
Video Output	HDMI / VGA (1920 x 1080p)				HDMI (1920x1080p)
Recording Speed	120/100fps at 1080p 240/200fps at 720p	120/100fps at 1080p 240/200fps at 720p	120/100fps at 1080p 240/200fps at 720p * Realtime recording	60/50fps at 1080p 120/100fps at 720p	30/25fps at 1080p 60/50fps at 720p
Recording Mode	Manual & Event / Schedule & Evnet / Continous & Evnet				
Playback	60/50 fps at 1080p 120/100fps at 720p				30/25fps at 1080p 60/50fps at 720p
Search Type	Time, Calendar, Event, Thumbnail				
Event Source	Motion Detection, Sensor, Text				
Event Action	Buzzer, Relay, E-mail, Twitter, FTP, Alarm pop-up				
Text Input	Pos/ATM support, AVE VSI Pro/Hydra support				
Audio	4ch input / 1ch output 16KHz, 16bit sampling ADPCM				4ch RCA input / HDMI output
Network	10/100 Ethernet, Giga Ethernet for Storage (NVS04R)				10/100 Ethernet
Multi Streaming	3 different streams (Rocording / Network / Mobile)				Dual streams (Rec/Network)
User Account	1 admin, 10 users				
Storage	4 internal HDDs, 1 eSATA, Network Storage (NVS04R)				1 internal HDDs, 1 eSATA
Capacity	Max 16TB with SATA, Max 64TB with NVS04R				Max 16TB with SATA
Mirroring	Supported				Not supported
Backup	DVD or USB (2 Ports)				USB (2 Ports)
Serial Port	1 RS-232C, 2 RS-485				1 RS-232C, 1 RS-485
Sensor In/Out	16 input / 4 realys	8 input / 4 realys	4 input / 4 realys	4 input / 4 realys	4 input / 2 realys
Software	Control Center (CMS), Web Viewer, Java Viewer, Mobile Viewer (iPhone / Android), SDK				
Dimension	445(W) x 418(D) x 88(H) mm				290(W)x230(D)x68(H)mm
Weight	10Kg (No HDD)	9.5Kg (No HDD)	9.5Kg (No HDD)	9.5Kg (No HDD)	2.5Kg (No HDD)
Power	AC free volt (100~240VAC)				
Approval	KC, FCC, CE, RoHS, HDcct				

HD-CCTV **CAMERA**

High-Resolution : Provides 1,200TV Line

WGI HD-SDI Camera (C1080B)

Over 1,200 TV Line

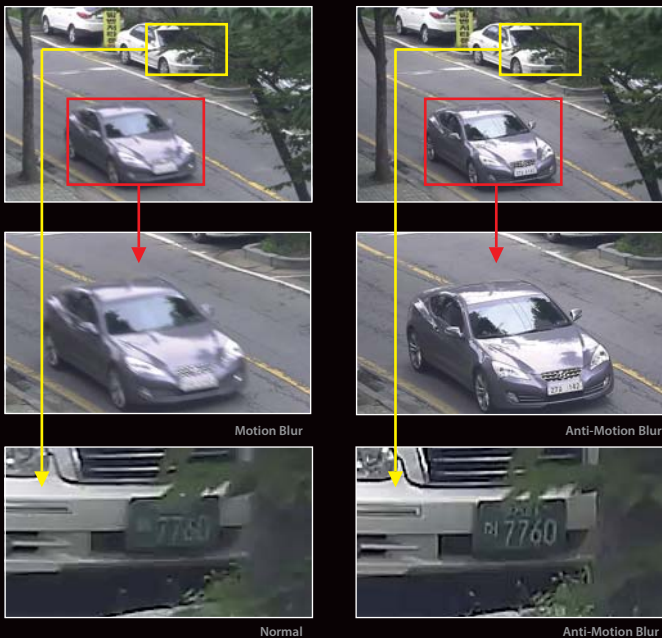## Anti-Motion blur :
Delivers more clear image for any moving object

[Indoor]

This mode minimizes the motion blurring at indoor environment like entrance or corridor.

Motion Blur

Anti Motion Blur

[Outdoor]

This mode minimizes the motion blurring at outdoor environment, and it is especially useful for the license plate recognition on the road. This function also minimizes the image blurring caused by the vibration of camera.

Motion Blur

Anti-Motion Blur

Normal

Anti-Motion Blur

Smart IR-LED : Intelligent brightness control

Normal IR-LED

Smart IR-LED

WDR : Smart Backlight Compensation

User may select BLC or HLC function according to the install environment.

WDR OFF

WDR ON

3DNR : Powerful 3-Dimensional Digital Noise Reduction

C1080B 3DNR OFF

C1080B 3DNR ON (high)

Auto Focus : Auto Focus by one-push

AF series cameras support auto focus function. Besides, if camera is connected to DVR by serial communication, user can control zoom and focus remotely.

Test Pattern : Color Bar, Stress Pattern

To help checking the quality of HD-SDI transmission cable, camera supports color bar and stress pattern. Especially, Stress pattern is the most sensitive video image to cable quality. (C1080B model only)

CVBS output : Auxiliary analog video output

By using full-screen and zoom screen of CVBS output, installer can easily adjust not only the angle of view but also focus

DVR interface : Remote camera control by DVR

- OSD Control/Firmware Update RS485
- Zoom / Focus Control

Excellent sensitivity : Clear image at 0.0005 lux

High-performance signal processing makes camera to have high sensitivity at dark environment where even human eyes cannot identify target object.
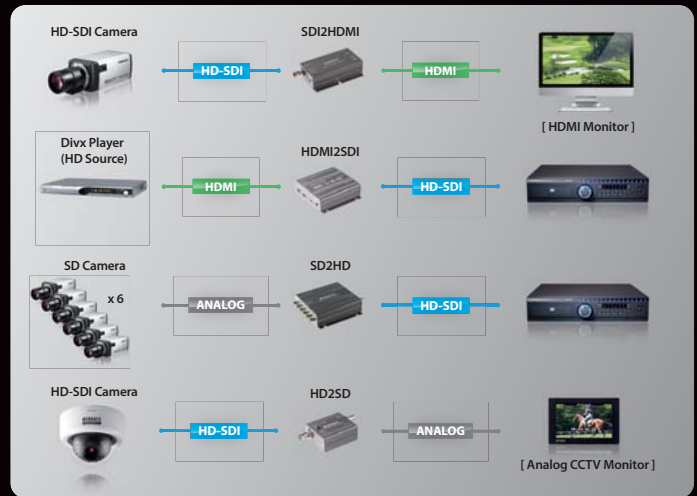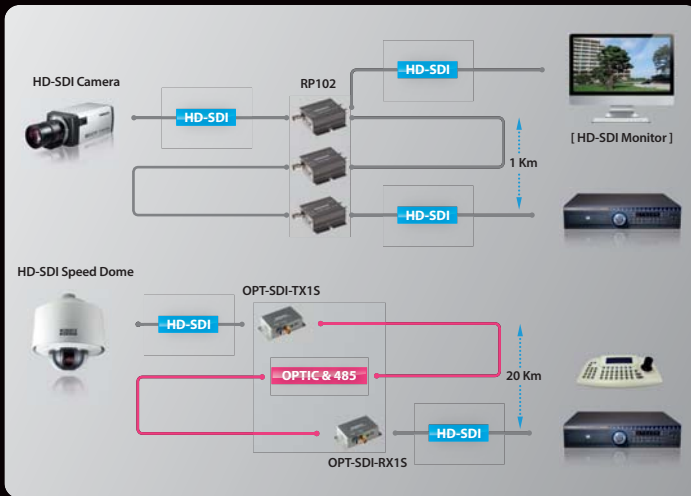
DSS : Digital Slow Shutter (Sense-up)

At very dark environment, DSS function accumulates the light into the sensor pixels, and provides visible video image as a result.

Model	C1080PT-Z20	C1080B	C1080BM	C1080BL-IR18-AF	C1080BL-IR48-AF
Design					
Chipset	1/3" 2.1Megapixel CMOS				
Video Output	HD-SDI (SMPTE 292M)				
Resolution	35/25fps@1080p 60/50fps@720p	30/25fps@1080p, 60/50fps@720p (Clipping)			
Lens	X20, Optical Zoom	CS / C (Ring Adaptor)	CS / C (Ring Adaptor)	DC Iris, 2.8mm~10mm, F1.2, IR Corrective Mega Pixel Lens	
Auto Focus	-	-	-	O	O
LEDs	-	-	-	18	48
Function	3DNR / WDR / DSS / BLC / AGC				
Upgrade Firmware / OSD (RS485)	Only OSD Control	O	O	O	O
IP66	O	-	-	O	O
Power	AC24V	DC12V	DC12V	AC24V / DC12V	
Dimension	259 x 266mm, Dome(ø) : 146mm	68(W) x 150(D) x 63(H) mm	68(W) x 81(D) x 56(H) mm	88(W) x 118(D) x 198(H) mm	120(W) x 140(D) x 254(H) mm
Weight	6Kg	350g (Lens not include)	320g (Lens not include)	720g (1.6 lbs)	1600g (3.5 lbs)

Model	C1080D	C1080D-IR	C1080D-AF	C1080D-IR-AF	C1080VD	C1080VD-IR	C1080VD-AF	C1080VD-IR-AF
Design								
Chipset	1/3" 2.1Megapixel CMOS							
Video Output	HD-SDI (SMPTE 292M)							
Resolution	35/25fps@1080p, 60/50fps@720p (Clipping)							
Lens	DC Iris, 2.8~10mm, F1.2, IR Corrective Mega Pixel Lens							
Auto Focus	-	-	O	O	-	-	O	O
LEDs	-	24	-	24	-	24	-	24
Function	3DNR / WDR / DSS / BLC / AGC							
Upgrade Firmware / OSD (RS485)	O	O	O	O	O	O	O	O
IP66	-	-	-	-	O	O	O	O
Power	AC24V / DC12V							
Dimension	130(ø) x 104(H)mm				136(ø) x 111(H)mm			
Weight	359g	399g	370g	380g	759g	769g	770g	780g

HD-SDI Converter & etc.

As a HD-CCTV solution provider, WEBGATE provides all required devices.
Various devices are prepared such as repeater for extending transmission distance, optic converter and signal converter of HD-SDI, HDMI, Analog.

Model	Design	Feature	
RP102		- The world's first HDcctv certified repeater - HD-SDI repeater & distributer - BNC 1ch input / 2ch output - Auto detection on input image	- Transmission distance expandable using multiple repeaters - HD-SDI transmission distance : Approx. 200m(650 ft.) of RG6 or 150m(490 ft.) of RG59 Power, Link LED indicator
SDI2HDMI		- The world's first HDcctv certified converter - HD-SDI to HDMI converter - BNC input / HDMI output - HDMI embedded audio output	- HD-SDI transmission distance : Approx. 200m(650 ft.) of RG6 or 150m(490 ft.) of RG59 - Power, Link LED indicator
HDMI2SDI		- HDMI to HD-SDI converter - Auto detection on input image - HD-SDI embedded audio & RCA audio output	- Mode selection switch for video output format selection - Power, Link LED indicator
SD2HD		- CVBS to HD-SDI converter - Max 6ch CVBS signal input - NTSC/PAL switch selectable - 1/4/6ch output selectable	- 16:9, 4:3 video ratio mode - HD-SDI transmission distance : Approx. 200m(650 ft.) of RG6 or 150m(490 ft.) of RG59 - Power LED indicator
HD2SD		- The world's first HDcctv certified converter - HD-SDI to CVBS converter - HD-SDI 1080p & 720p video format - Auto detection on input video	- Auto standby mode for power saving - Full screen(16:9), Zoom-in mode(4:3) output - 50/60Hz system compatible - Power, Link LED indicator
OPT-SDI-TX1/RX1		- HD-SDI optical transceiver - 3G/HD/SD high resolution video signal support - Max. 20Km(12.4mi) signal transmission(1.5Gbps)	- BNC connector for HD-SDI and ST type fiber connector - Robust metal die-casting enclosure for harsh environment - Power, Link LED indicator
OPT-SDI-TX1S/RX1S		- HD-SDI optical transceiver - 3G/HD/SD high resolution video signal support - Max. 20Km(12.4mi) signal transmission(1.5Gbps) - One directional RS485 communication support	- Automatic shutdown of laser head to extend the laser life (input signal detection) - Overload protection and automatic recovery - Power, Link LED indicator
WKC-100		- Support 255 DVRs, 255 SPD connection - Control unit, channel of CMS - Support RS485/422/232 port	- Control camera connected to PTZ channel via DVR and CMS - Control preset, tour, pattern, group and other major features - Support various protocol (Pelco-D, Pelco-P and so on)

HD-CCTV **Storage**

The NVS04R has two network ports that can be cascaded up to 8 units without an additional hub network device.
If the Mirroring function is in use, two 64TB storages are used to save the same video data.
Additionally, external eSATA storage which may have RAID technology can be connected to HD DVR's eSATA port, and this can expand
the DVR storage up to 16TB.

Model	NVS04R	ES0104	ES0212
Design			

Feature	- Extended Storage Device for DVR
	- Support MH & HD DVR Series of Webgate
	  HD series : Max 64TB with cascaded NVS04R
	  MH series : Max 32TB with cascaded NVS04R
	- Support IPFR (Intelligent Power Failure Recovery)
	  File System
	- 4 HDD Racks with Hot-Swap SATA
	- Built-in 1 network Port for DVR Connection
	- Built-in network Port for Extended Storage(NVS04R)
		- 1U/4Bays, eSATA - SATA II RAID sub-system
		- RAID 0,1,0+1,3,5, and JBOD
		- eSATA (3Gbps) host interface
		- Multi volume host access
		- Max. 8TB connecting to LH/EH/MH series DVR
		- Max 16TB connecting to HD series
		- Hot-spare and auto rebuild
		- Inside buzzer alarm
		- Password protection
		- Serial port for external event notification
			- 2U/12Bays, eSATA - SATA II RAID sub-system
			- RAID 0,1,10(1E),3,5,6 and JBOD
			- Redundant power supplier
			- eSATA (3Gbps) host interface
			- Max. 8TB connecting to LH/EH/MH series DVR
			- Max 16TB connecting to HD series
			- Hot-spare and auto rebuild
			- Inside buzzer alarm
			- Password protection
			- Serial port for external event notification
			- Smart LCD panel
			- Realtime drive and status notification
			- Web base GUI management utility

HD-CCTV **IP/NVR**

High Definition NVR Solution

mage data from max 16 IP devices including both HD and SD can be stored in NVS04S via network. The CMS software allows user remote
monitoring and management. In addition, built-in hot swappable 4 HDDs enable user to replace HDD easily.

Recording Server Solution & Schedule Backup

WEBGATE Server Solution provides high recording performance including real-time image recording, event information. System configuration,
monitoring and searching and searching service through Control Center for WESP protocol based products (WebEye Series, eDVR Series).
WEBGATE provides powerful schedule backup program as a bundle with CMS software through which user can backup the data of DVR through
the network safely.

Multi streaming

Multi streaming features flexible and usage. Today, higher quality and resolution are required for recording images.
However, less computing power and network bandwidth are required for central management system.
Multi Streaming is the only solution to satisfy those complex usage environments simultaneously.

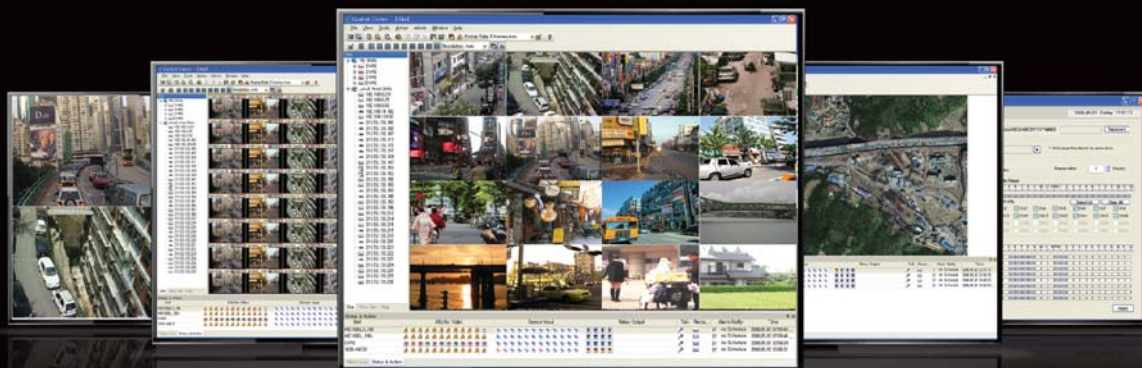| Model	HDC730C	SPD350M	B101M	D101M	NVS04S
Design					

Feature	- 1CH MPEG-4 High Definition
	  Network Camera
	- Support 30fps@720p,
	  22.5fps@1280x960
	- Support 1280x720, (x1/4),
	  (x1/16) Resolution
	- Superior Feature under the
	  Low Light Condition
	  0.001lux@B&W, 0.5lux@Color
	- 1/3" 1.3M CMOS Sensor
	- Bi-Directional Audio
	  (1CH Input/Output)
		- 1CH MPEG-4 High Definition
		  Network Speed Dome Camera
		- Support Multi Streaming(Max.8)
		  at D1/60fps)
		- x35 Optical Zoom
		  (x12 Digital Zoom)
		- Built-in Image Stabilization
		  Circuit, 360-Degree Spin
		- Bi-Directional Audio (RCA type)
			- 1CH MPEG-4 Video Server
			- Support Multi Streaming(Max.8)
			  at D1/60fps
			- Support Dual-Codec
			  (MPEG-4 & JPEG)
			- Support D1 / Half D1 / CIF / QCIF
			  Resolution
			- 2 Sensor Input (Dry Contact)
			  / 2 Digital Output (TTL level)
			- Monitoring and Setup via
			  IE Browserk
				- 1ch video decoder with MPEG-4
				- Support various resolution,
				  "D1(4CIF), HALF, D1(2CIF), CIF, QCIF"
				- Support Dual-Codec
				  (MPEG-4 & JPEG)
				- Support sequential monitoring
				  up to 16 video server
				- Support OSD of video server
				  in non-PC environment
				- Support bi-directional audio
				  (1ch input & output with RCA type)
					- Network Video Storage Device
					  (Stand Alone Type)
					- 16 HD IP Video Channel Support
					- 4 Hot-Swap SATA HDD Racks
					  can be Installed
					- Remote Monitoring / Control
					  via Integrated Software
					- IPFR Support (Intelligent Power
					  Failure Recovery)

H.264 **DVR**

With over 16 years experiences in Video Surveillance field, WEBGATE successfully has landed on high end market with superior hardware and software features which are required not only for simple monitoring but also for complicated Intergraded security solution.
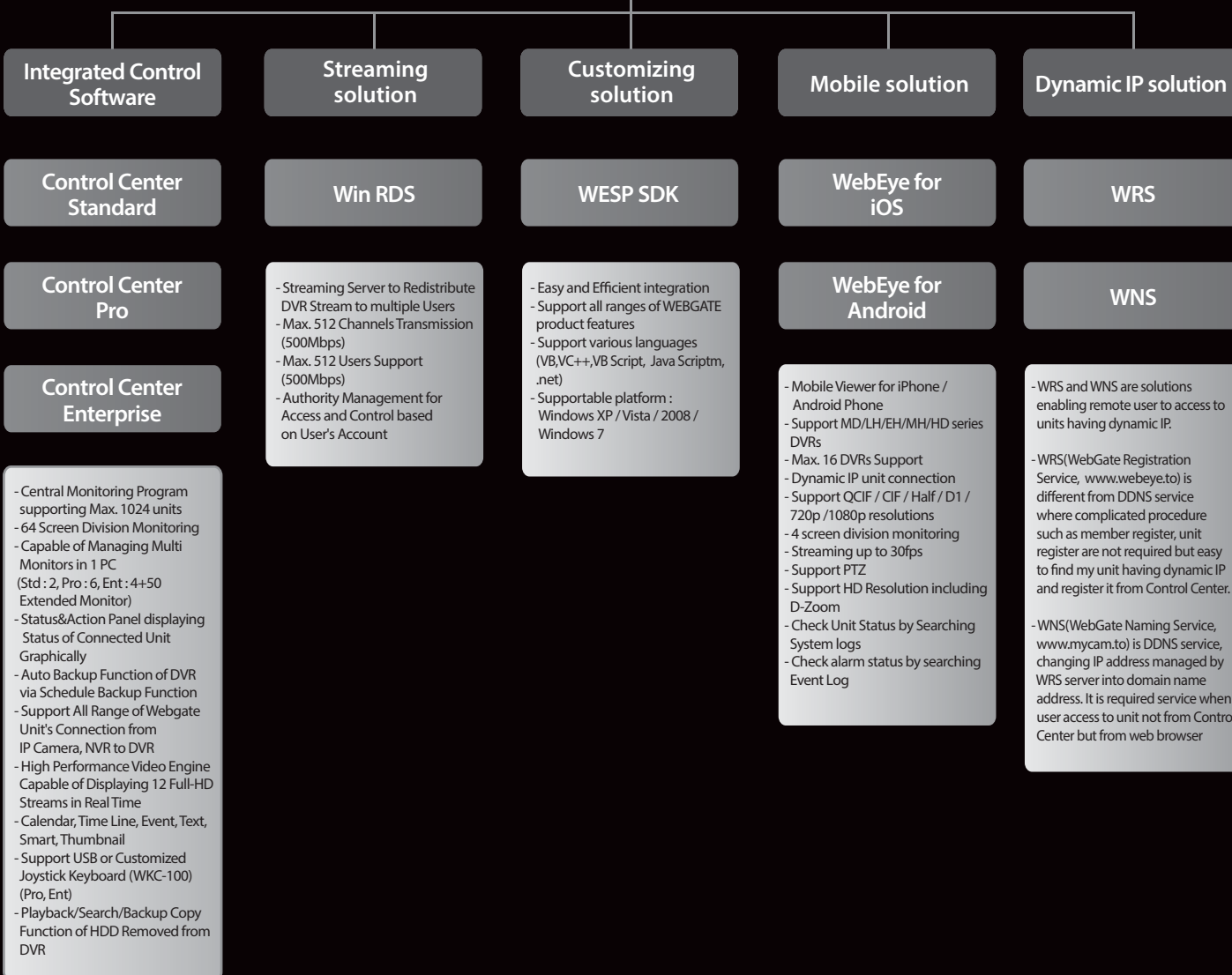
Model	MH3200	MH1600H	MH1600M	EH1600L	EH800M	EH400H	LH1600C	LH800L
Channel	32	16	16	16	8	4	16	8
Design								
Video Input	32 BNC	16 BNC	16 BNC	16 BNC	8 BNC	4 BNC	16 BNC	8 BNC
Video Output	4 BNC (4 Main) / 2 DVI		2 BNC (2 Main) / 1DVI	2 BNC (1 Main, 1 Spot) / 1 DVI			2 BNC (1 Main, 1 Spot) / 1 VGA	
Recording Speed	960/900fps at Half D1	480/400fps at D1	480/400fps at Half D1	480/400fps at CIF	240/200fps at Half D1	120/100fps at D1	480/400fps at CIF	240/200fps at Half D1
Recording Mode	Manual & Eevent / Schedule & Event / Continous & Event							
Search Type	Time, Calendar, Event, Thumbnail							
Event Source	Motion Detection, Sensor, Text							
Event Action	Buzzer, Relay, E-mail, Twitter, FTP, Alarm pop-up						Buzzer, Relay, E-mail, FTP, Alarm pop-up	
Text Input	Pos/ATM support, AVE VSI Pro/Hydra support							
Audio	16ch in / 1ch out			4ch in / 1ch out				
Network	10/100 Ethernet , Giga Ethernet for Storage(NVS04R)			10/100 Ethernet				
Multi Streaming	3 different streams (Rocording / Network / Mobile)							
User Account	1 admin, 10 users							
Storage	4 internal HDDs, 1 eSATA, Network Storage (NVS04R)			2 internal HDDs, 1 eSATA			2 internal HDDs	
Capacity	Max 8TB with SATA, Max 32TB with NVS04R			Max 8TB with SATA				
Mirroring	Supported			Not Supported				
Backup	DVD or USB (2 Ports)						DVD(Option) or USB (2 Ports)	
Serial Port	1 RS-232C, 2 RS-485							
Sensor In/Out	16 input / 4 realys			16 input / 2 realys	8 input / 2 realys	4 input / 2 realys	16 input / 2 realys	8 input / 2 realys
Software	Control Center(CMS), Web Viewer , Java Viewer , Mobile Viewer(iPhone/Android) , SDK							
Dimension	445(W) x 418(D) x 88(H) mm			350(W) x 413(D) x 88(H) mm				
Weight	9.5 Kg (No HDD)			8.0 Kg (No HDD)				
Power	AC free volt (100~240VAC)							
Approval	FCC, CE, MIC, RoHS							

Software **Solution**

Integrated Control Solution

Integrated Control Software	Streaming solution	Customizing solution	Mobile solution	Dynamic IP solution
Control Center Standard	Win RDS	WESP SDK	WebEye for iOS	WRS
Control Center Pro			WebEye for Android	WNS
Control Center Enterprise				

Control Center Enterprise

- Central Monitoring Program supporting Max. 1024 units
- 64 Screen Division Monitoring
- Capable of Managing Multi Monitors in 1 PC (Std : 2, Pro : 6, Ent : 4+50 Extended Monitor)
- Status&Action Panel displaying Status of Connected Unit Graphically
- Auto Backup Function of DVR via Schedule Backup Function
- Support All Range of Webgate Unit's Connection from IP Camera, NVR to DVR
- High Performance Video Engine Capable of Displaying 12 Full-HD Streams in Real Time
- Calendar, Time Line, Event, Text, Smart, Thumbnail
- Support USB or Customized Joystick Keyboard (WKC-100) (Pro, Ent)
- Playback/Search/Backup Copy Function of HDD Removed from DVR

Win RDS

- Streaming Server to Redistribute DVR Stream to multiple Users
- Max. 512 Channels Transmission (500Mbps)
- Max. 512 Users Support (500Mbps)
- Authority Management for Access and Control based on User's Account

WESP SDK

- Easy and Efficient integration
- Support all ranges of WEBGATE product features
- Support various languages (VB,VC++,VB Script, Java Scriptm, .net)
- Supportable platform : Windows XP / Vista / 2008 / Windows 7

WebEye for Android

- Mobile Viewer for iPhone / Android Phone
- Support MD/LH/EH/MH/HD series DVRs
- Max. 16 DVRs Support
- Dynamic IP unit connection
- Support QCIF / CIF / Half / D1 / 720p /1080p resolutions
- 4 screen division monitoring
- Streaming up to 30fps
- Support PTZ
- Support HD Resolution including D-Zoom
- Check Unit Status by Searching System logs
- Check alarm status by searching Event Log

- WRS and WNS are solutions enabling remote user to access to units having dynamic IP.

- WRS(WebGate Registration Service, www.webeye.to) is different from DDNS service where complicated procedure such as member register, unit register are not required but easy to find my unit having dynamic IP and register it from Control Center.

- WNS(WebGate Naming Service, www.mycam.to) is DDNS service, changing IP address managed by WRS server into domain name address. It is required service when user access to unit not from Control Center but from web browser

WEBGATE

HD-CCTV Solution provider