



Ernitec Enterprise NVR

Hydra V4

- 8th Gen Intel Core i7 Coffee Lake
- 16 Gb RAM, 240Gb SSD
- Windows 10 Pro Edition
- 4 usable storage bays max 56TB
- Version 8 EasyView Enterprise VMS
- Over 8000 Native Cameras Drivers
- License Based True Video Analytics
- Unlimited Hydra Expansion
- Multi-Streaming
- Built in PSU
- 3 year Warranty

Hydra V4

The Hydra V4 has been improved with the addition of the new intel 8th Generation Core i7 Coffee Lake CPU with Intel Quick Sync ideal for smooth VMS Operation The Hydra has been reduced to 1 base part number so you can configure your own specification. Then we build, test and ship it to you.

Built in Video Analytics

Hydra V4 has been made with a faster CPU to take the load of VCA channels and the VCA software is already on board, all you need to do is activate the licence to add the amount of Video analytic channels you want on your Hydra.

Multi-Streaming

This extremely important feature enables the Hydra to record in high resolution and stream multi-screen images to the local monitors, the multi streaming enables a second or even third stream resolution choices to the programmer meaning the load to the local monitor is reduced enabling more streams to be viewed.

Real VMS on Board

Unlike other units in class our NVR has VMS software that you can actually use. Offering a host of features we have all come to expect from our video systems over the years.

Huge Camera Integration List

The Hydra, can integrate with over 8000 camera with native SDK integration offering the full features of the cameras not just the normal OnVif integration. Of course you can use OnVif cameras opening up to almost limitless choice of camera integration

New Storage Software Architecture

The new storage mechanism meets and exceeds the scalability of today's CCTV demands. Its designed to allow an unlimited number of supported disk drives or any disk drive size in mind, and to allow a mix of different size drives or network storage. It also allows flexibly removal or adding drives to the storage subsystem. It can work with direct connected disks, RAID subsystems, local drives or network drives – NAS or SAN storage systems.

3 Step Hydra Configuration

The new Hydra V4 concept allows you to customize your hydra to the needs of the project. There are one base model to choose from, then you can add your selected license configuration and hard drive requirements just like we do with our build Series servers.

Base Hydra Options

HYDRA-B64-V4Hydra NVR with 64Bit EasyView Version 8, 1400MP, 1U 4 Bay rack, 2x net,240v



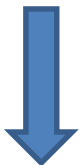
VMS Software Options

0063-80001-UK 1 Channel factory installed EasyView V8 Enterprise license
0063-80020 1 Channel factory installed EasyView Advanced VCA license



Drive Options Hydra can take up to 4 hard drives

BUILD-2TB-SATA-HDD-ESR	2TB 24/7 SATA industrial 7200rpm HDD fitted to HYDRA
BUILD-3TB-SATA-HDD-ESR	3TB 24/7 SATA industrial 7200rpm HDD fitted to HYDRA
BUILD-4TB-SATA-HDD-ESR	4TB 24/7 SATA industrial 7200rpm HDD fitted to HYDRA
BUILD-6TB-SATA-HDD-ESR	6TB 24/7 SATA industrial 7200rpm HDD fitted to HYDRA
BUILD-8TB-SATA-HDD-ESR	8TB 24/7 SATA industrial 7200rpm HDD fitted to HYDRA
BUILD-10TB-SATA-HDD-ESR	10TB 24/7 SATA industrial 7200rpm HDD fitted to HYDRA
BUILD-12TB-SATA-HDD-ESR	12TB 24/7 SATA industrial 7200rpm HDD fitted to HYDRA
BUILD-14TB-SATA-HDD-ESR	14TB 24/7 SATA industrial 7200rpm HDD fitted to HYDRA



Hydra Features

Powerful Multi-Streaming

With the power of multi streaming we have a world beating recorder offering viewing and recording all from the same unit, we can offer full HD recording with HD streams for the local and remote clients and D1 resolution to you mobile device. Sensibly dividing the streaming between devices massively reduces the load on the system and give outstanding figures.



High performance live data base

The Hydra series runs with a full data base making this recorder one of the fastest on the planet, you can instantly retrieve video though the whole recording period, making fast retrieval and seamless high speed playback and rewind possible. This gives the user a true video recorder feel to the unit and massively increases the time to find incidents.

SDD Secure Data Distribution

Each Hydra can be fitted with up to four storage disks using the unique SDD feature. The Ernitec SDD technology distributes video frames evenly between disks. A single drive failure would thus only decrease the frames on a video clip and not leave any large blank areas during the storage interval. For forensic research a well-placed, good resolution camera gives practically the same success rate with a low frame rate as a video with a higher frame rate – meaning that the risk of not being able to analyse an event due to a failed hard disk becomes close to zero.

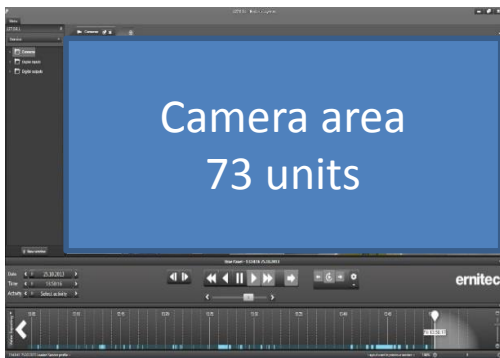


V8 EasyView Features

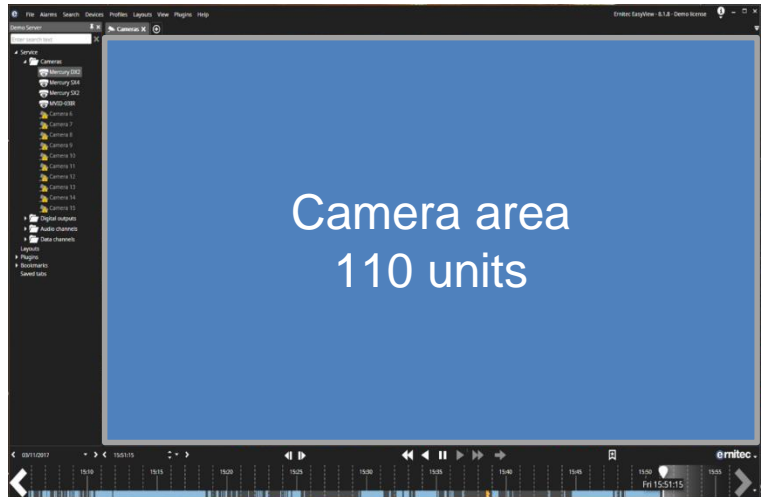
50% Larger Usable Camera Area

One of the changes to note is that without loss of functionality, there is a lot more available space for the key content for any VMS and that is Cameras. This has been made possible by eliminating wasted space by reducing the size and position of various user interface controls. Technically, there is now a 50% larger camera area with the same functions visible in version 7. Try it out and we know you'll love it!

V7



V8

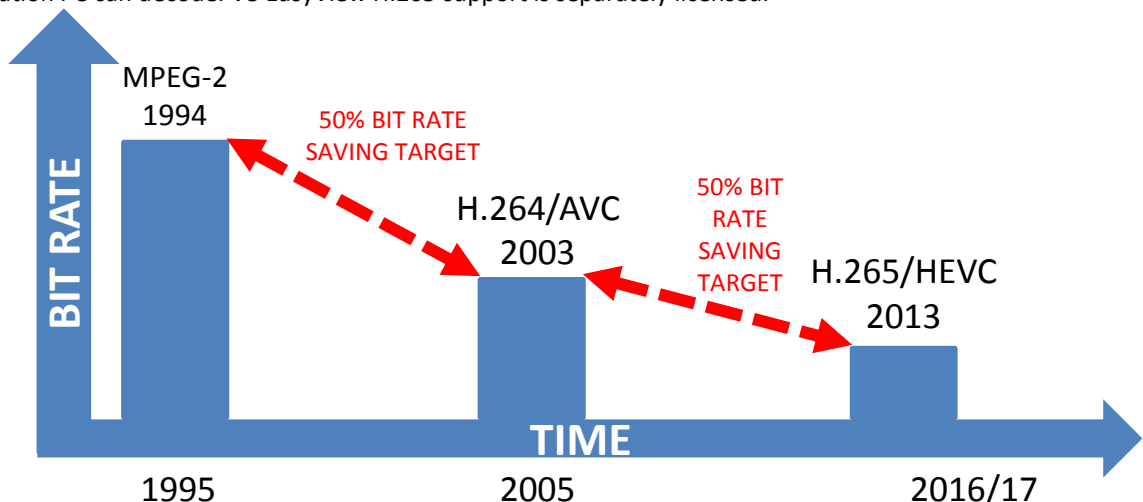


Support for the H.265 Video Format

V8 EasyView supports H265, so called "High Efficiency Video Coding" or HEVC video compression standard. For IP Video systems, it is the most likely successor to H.264, also known as AVC (Advanced Video Coding) or MPEG-4 Part 10. H.265/HEVC offers about double the data compression ratio at the same level of video image size and quality offering large savings on hard drive space requirements or substantially improved video quality at the same bit rate. H.265/HEVC supports resolutions up to 8192x4320, including 8K UHD (Ultra High-Definition).

Hardware Requirement Note:

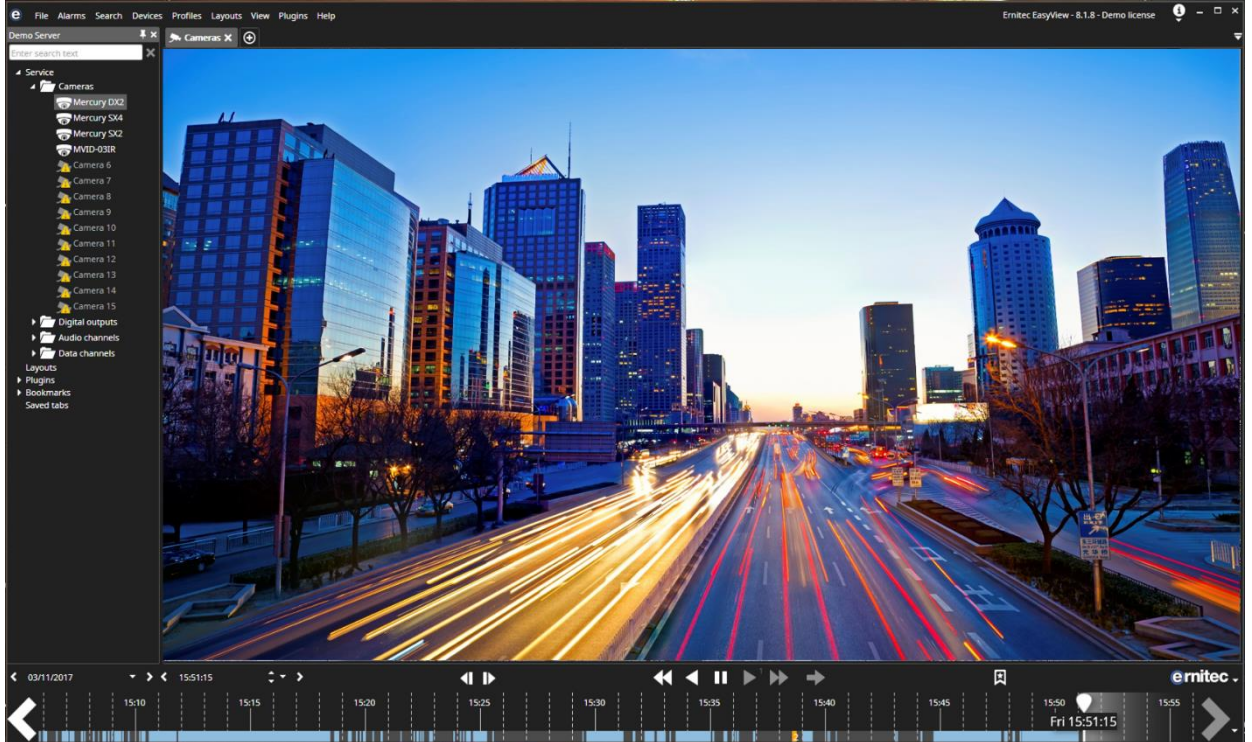
When using H.265/HEVC decoding more CPU power and/or accelerated graphics hardware/DSPs, Digital Signal Processors will be needed. H265 is more CPU intensive, which will affect how many simultaneous streams a workstation PC can decode. V8 EasyView H.265 support is separately licensed.



Hydra Features

EasyView

Intuitive and easy to use Version 8 EasyView application for local or remote monitoring, searching, playback and export of video content for external analysis.



Huge Camera Integration List

The Hydra series, can integrate with over 3000 camera with native SDK integration offering the full features of the cameras, if not our OnVif driver will find the rest.



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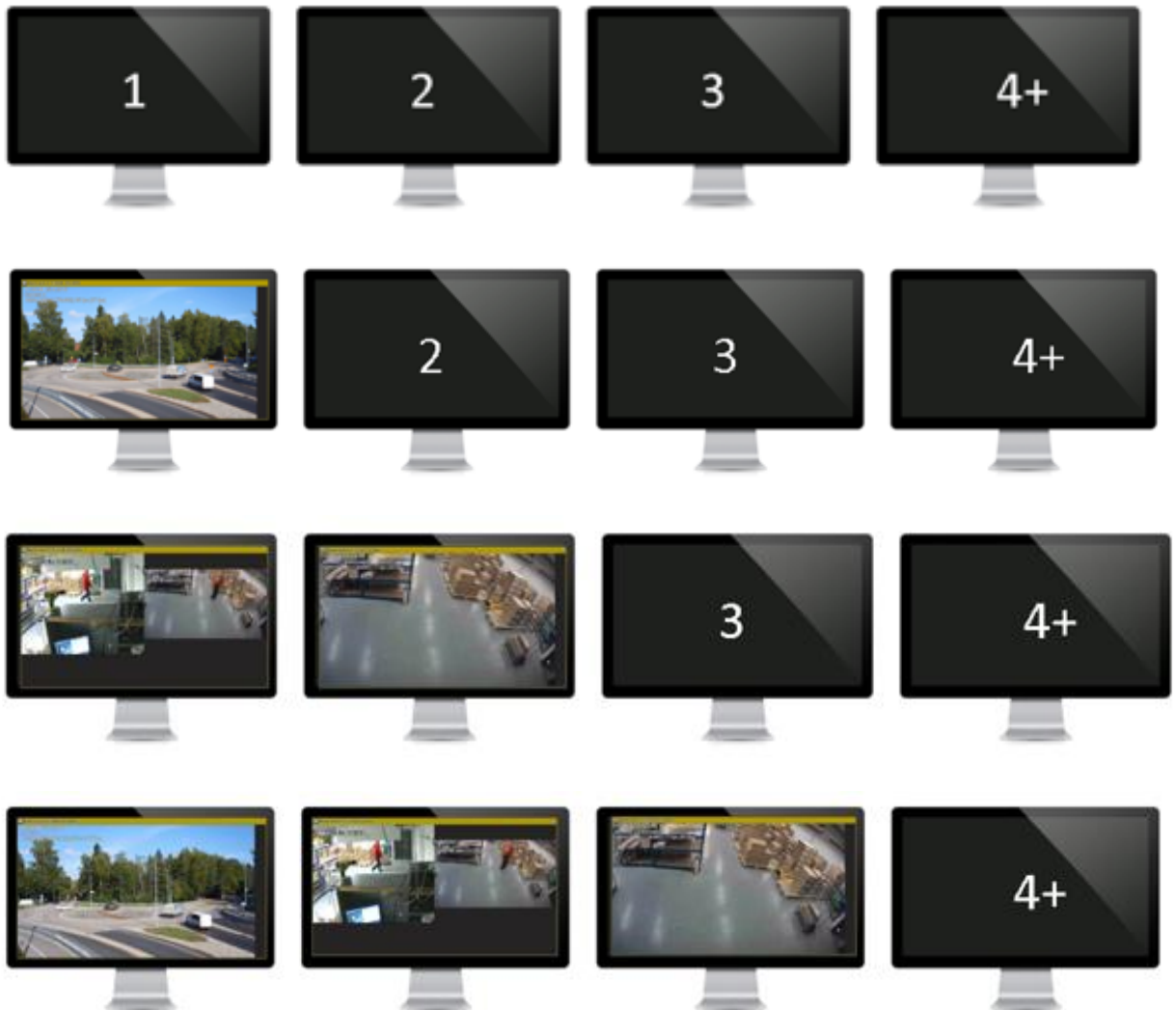
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Multiple Alarm Monitors True Matrix Style

This scenario shows 4 alarm Monitors. When one alarm is active, it is displayed on the first alarm monitor. If there are two active alarms, then the first alarm is always displayed on the first monitor, and the newest alarm opens on the second monitor in a Que. Then, as can be expected, the third alarm opens on the third alarm monitor. When the first alarm is handled (user ends the alarm) it's then closed on the first monitor, and the remaining alarms shift to the left. In other words, what was the second alarm on the second monitor moves now to the first monitor as it is now the oldest alarm in the alarm stack.

Note: This scenario can also be set up on a quad grid on one monitor.





Ernitec Video Analytics

iLids Approved Video Analytics

- Integrated into EasyView
- Trip Wire
- Tracking
- People Counting
- Dwell Filter
- Remove Object
- Speed Detection
- Smoke
- Fire

Video Analytics Package

The Ernitec Video Analytics Package can be implemented either as a counting functionality or with full VCA functionality. It includes tempering detection mechanism to prevent camera vandalism. The easy to use graphical configuration tool for camera calibration and generating zones, lines and rules for VCA events.

The VCA functionality includes a full set of filters, such as entry/exits, dwell time, tripwire, speed detection, object detection and removal.

Located in the VCA you can select on a camera by camera basis the most appropriate analytics function to be used. The web based reporting tool can be used via browser.

Counting Function

With the counting function you can set object counts based on object classification and movement direction, its also fully integrated with the EasyView video Management Solution.

This can be used with any given camera on the Ernitec EasyView Enterprise VMS, weather it be IP or Analog cameras.

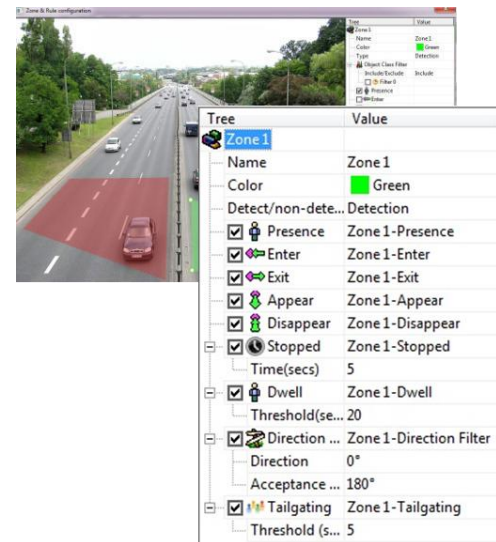
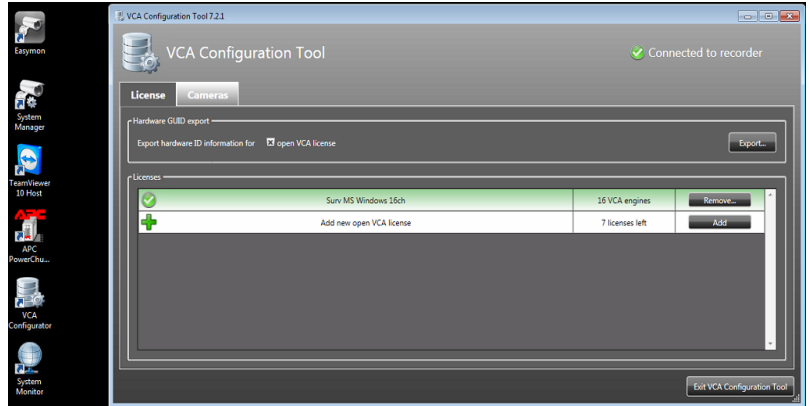
You can create multiple counting zones on one camera overlay to suit what instances the camera view might incur.

Also with the counting function it can distinguish between objects weather it be a Bike, Car, Person etc... It is highly accurate with its built it self training analytics engine. You can also use the reporting tool for flow analytics and daily/weekly/monthly/yearly visitor statistics.

Video Analytics Solution

VCA Configuration Tool

The VCA configuration screen is where you configure the initial setup of the VCA. The separate license for the VCA needs to be added at this stage.



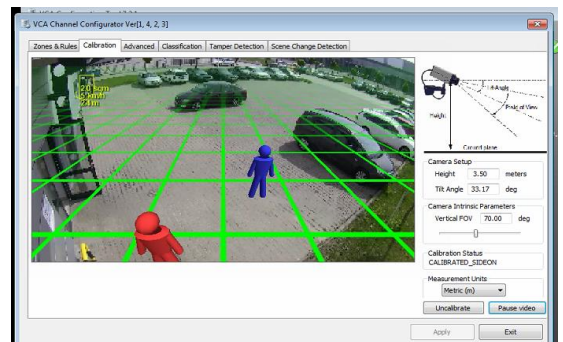
Zones & Lines

The configuration screen is where you configure the zones and lines you need to use for different aspects of the VCA.

You can add lots of different filters to each zone/line, such as direction filters, people dwelling, tripwires, object appeared/disappeared, speed tracking and many others.

VCA Channel Configuration

The VCA configuration screen is where you can set the camera up for use with VCA. For the VCA to work you need to add the angle of the camera and the height of the camera so it can work out the area in a 3D space, so this can determine whether the camera is looking at a car, person or other objects. When you get the next screen you need to configure the channel by using the image overlay (right). This is based on a 6ft human so you can obtain the right height and FOV for the camera (near and far).



Hydra Features

Stackable NVR Expansion Solution When designing a CCTV system you try to cover all angles and offer the best solution to a customer, however more often than not when a customer sees the quality of the megapixel cameras that have been installed customers will come back and ask for more cameras. If you have purchased a Linux box NVR solution this means you have add a whole new unit just for maybe one of two more cameras.

Upgrading your Hydra is simple you can just add the extra licenses you want to increase the number of cameras. If you want to expand over 32 cameras then you can add another Hydra to your system to offer a stackable NVR solution just add a server expansion license 0063-80010 to add another Hydra. You can also spread these Hydras across large networks and even worldwide, the limits are just your imagination.



Hydra Upgrades & Extension Part Numbers

ENTERPRISE CHANNEL

Version 8 Enterprise single Channel License 5 users, 1 Hydra expansion max 32 channels.

Part no: 0063-99948

VIDEO ANALYTICS CHANNEL

Advance VCA Surveillance License, enterprise license required to run Video Analytics.

Part no: 0063-80020

1 HYDRA EXTENSION

Master server license for additional single Hydra V8 Enterprise units. Active directory integration.

Part no: 0063-80010

10 HYDRA EXTENSION

Master server license for additional 10 Hydras V8 Enterprise units. Active directory integration.

Part no: 0063-80010

1 USER EXTENSION

License for additional 1 user on Hydra V8 VMS Enterprise.

Part no: 0063-80013

ANPR Base License

4 Channel ANPR Base License Enterprise license required to run ANPR.

Partno: 0063-80063

ANPR 1 Channel Extension

2 Channel ANPR channel expansion License required to run extra ANPR channels.

Partno: 0063-80064

10 USER EXTENSION

License for additional 10 users on Hydra V8 VMS Enterprise.

Partno: 0063-80014

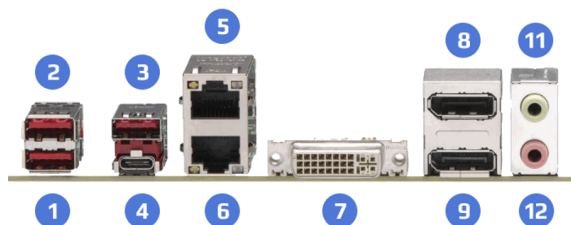
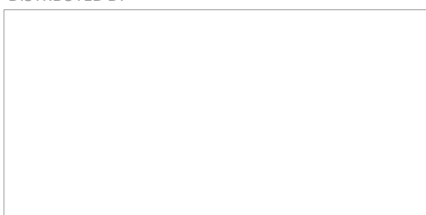
Technical Specification Hydra B64 V4

System	
Form factor	1U 4 Bay Rack Server
CPU	8 th Gen Intel I7-8700 COFFEE LAKE
System memory	16 GB DDR4 RAM
System Drive	240Gb M.2 2280 motherboard SSD
Storage 4 * 3.5" HDD	Empty fit (up to 56TB)
Redundancy	EasyView SDD Secure Data Distribution
Recording frame rate at resolution 1280 x 720	Up to 1400/sec in H.264
Number of IP camera inputs	Max 32 IP cameras*
Operating System	Windows 10 PRO 64bit version
Video Management System	Ernitec EasyView 64Bit Software***
USB Ports	7 USB 2.0 ports (6 headers, 1 Type A) 2 USB 3.1 Gen1 ports(2 headers) 6 USB 3.1 Gen2 ports (3 Rears Type A + 1 Rear Type C, 2 headers)
Network card	Single Intel® PHY I219LM LAN controller Single Intel® Ethernet Controller I210-AT
Graphic controller for 3 monitor output	1xDVI-D, 2xDisplay Port, 1xThunderbolt, up to 4096 x 2304
Automatic camera finder	Yes
Multi-streaming camera support	Yes
Multiple video export formats	Yes
Alarm Management	Yes
3rd-party camera support	Yes
Onvif supported cameras	Yes
PTZ camera support	Yes Erna Analog Protocol
Codecs supported	H.264, MPEG-4 , MJPEG
EasyView Enterprise	License option
EasyView Professional	License option
EasyView VCA	License option
App for smart devices	EasyView GO for IOS/ android

General	
Unit Dimension (W x H x D)	43x437x503mm (1U 19")
Unit Weight (without storage)	16.0 kg
Package Dimension (W x H x D)	427x 178 x 531mm
Package Weight	17.0 kg
Operation temperature	+5°C to +40°C
Operation humidity	10% to 90%
Power requirements	100V -240V AC/50-60Hz/300W
Power unit	Internal PSU
Languages	Arabic, Danish, Dutch, English, Estonian, Finnish, French, German, Hungarian, Icelandic, Italian, Norwegian, Polish, Portuguese, Russia, Spanish, Swedish
warranty	3 years
Included accessories	Quick guide, User Manual, Mouse, Schuko Power Cable, UK power Cable, rack kit
Part Number	HYDRA-B64-V4

Optional accessories	
V8 EasyView Enterprise License	0063-80001-UK
V8 EasyView VCA Advanced License	0063-80020
2TB-HDD Fitted to HYDRA (max 4)	BUILD-2TB-SATA-HDD-ESR
3TB-HDD Fitted to HYDRA (max 4)	BUILD-3TB-SATA-HDD-ESR
4TB-HDD Fitted to HYDRA (max 4)	BUILD-4TB-SATA-HDD-ESR
6TB-HDD Fitted to HYDRA (max 4)	BUILD-6TB-SATA-HDD-ESR
8TB-HDD Fitted to HYDRA (max 4)	BUILD-8TB-SATA-HDD-ESR
10TB-HDD Fitted to HYDRA (max 4)	BUILD-10TB-SATA-HDD-ESR
12TB-HDD Fitted to HYDRA (max 4)	BUILD-12TB-SATA-HDD-ESR
14TB-HDD Fitted to HYDRA (max 4)	BUILD-14TB-SATA-HDD-ESR

DISTRBUTED BY



1. USB 3.0	5. LAN 1	Audio Jacks	10. Line Out
2. USB 3.0	6. LAN 2		11. Mic In
3. USB 3.0	7. DVI Port		
4. Thunderbolt	8. Display Port		
	9. Display Port		

- * You can add up to 32 IP cameras using additional licenses
- ** Expand beyond 5 Hydras using license option 0063-99995 and 0063-99994.
- *** Hydra comes with EasyView installed however you need to order the channels you require by using the license part numbers.

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