KT&C INNOVATIVE
HIGH DEFINITION SURVEILLANCE
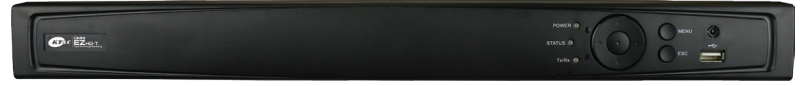
POWER · STATUS · Tx/Rx · MENU · ESC

EZHD-TVL16
16 Ch HD-TVI DVR + 2 OMNI IP* Bonus Ch
1080p @ 192 FPS, 720p @ 480 FPS

Key Features

- Intelligent Video Inputs: connect 1080p/720p EZHD HD-TVI or 960H/SD analog to ANY input at any time
  - Reuse existing analog cameras or choose any mix of HD/SD on new systems
  - Upgrade any analog camera to megapixel at any time
  - Superlative HD resolution of 1080P Full HD or 720p HD for amazing image quality
  - Useful digital zoom on live view and playback
  - Field select 1080p or 720p, 30/25 Hz or 60/50 Hz
- Operation over 'almost any' wire
  - More than 1000 feet on standard RG59 coax
  - More than 1500 feet on RG6
  - More than 500 feet on UTP (one pair from a Cat5e cable, using optional KA-HDBAL1 balun pair).
- Display Live/Record 2.1 Megapixel 1920x1080 (1080p), 1 Megapixel 1280x960 (720p), 960x480 (WD1/960H), 704x480 (SD)
  - 1080p recording at up to 12FPS per camera
  - Real time recording on any/all channels at 720p, WD1 or SD resolution
  - Playback any/all cameras at up to record rate
  - Independent configuration for each channel: resolution main/sub-stream, FPS, bit rate, image quality, etc.
- Up-the-cable control [UTC] to access compatible camera OSD menus from the DVR PTZ controls (local or remotely)
- Triple Technology Recording: Connect additional OMNI-IP Plug-and-Play cameras (16+2) up to 1080p resolution without sacrificing BNC inputs
- H.264 Compression for efficient HDD utilization
  - Two internal hard drives for up to 12Tb of internal storage
  - Up to 8 network disks (8 NAS disks, or 7 NAS disks +1 IP SAN disk)
  - Simultaneous high bandwidth recording plus sub-stream recording for reduced bandwidth remote live viewing
  - Watermarking for validation of recorded video
  - Record scheduling per-camera, with HDD quotas, holidays, parameter change on alarm/event
- Pentaplex Operation (Simultaneous live, recording, playback, archiving and remote viewing)
- Easy router setup for remote access: uPnP/NAT automatically sets up port forwarding (router must support/allow uPnP)
- HDMI & VGA Main monitor outputs for up to 1080p HD display detail
- User friendly GUI with graphical icons, visual indicators and multiple language support
  - Easy to use on-screen menus include digital zoom and instant playback of recent video
  - Operate using front panel controls, wheel mouse or included IR remote
- Quickly locate and review event video
  - Search by date/time, or preview images by pointing along a color coded timeline of record type

- Tag video of interest for easy retrieval or export
- Play based on results of extensive event/alarm log search
- Use "Smart Search" to define an area of interest; the DVR quickly reviews recorded video to list instances of motion in that area for review by the operator
- Use Video Content Analysis event detection on one BNC channel
  - Line crossing (with direction) up to four lines
  - Area intrusion (with loitering time) up to four areas
  - Rapid fast forward can scan quickly between VCA events, yet plays events at normal speed
- Digital Zoom with Virtual PTZ in Live & Playback
- Privacy masking (4 zones) to block observation of specific areas within the field of view
- Audio Input and Output for recording and/or two way audio
- Ethernet interface for remote network viewing and control, and to connect IP cameras
- Multiple Control Inputs: local mouse/hand held IR remote controller (mouse included); web browser and CMS controls
- On-screen PTZ control via mouse or IR remote
- USB 2.0 ports on front and rear panels for video archive and mouse usage
- Free DDNS Service – static IP address is not required for reliable remote access
- IE, Chrome, Firefox and Safari browser Web clients
- Free Multi-Site Windows and MAC OMNI CMS can display up to 64 live/16 playback views
- Remote configuration support from built-in web interface and/or free OMNI CMS program
- Free iOS and Android apps:
  - Scroll though 16 display live views
  - Playback specific cameras by date/time plus easy slider control
  - Audio monitoring support
  - PTZ and relay control
  - Up to 16 camera views from HD tablets (HD app)
- Rack mountable with optional KA-ORM1 brackets

OMNI EZ HD-T
Triple Technology Recording

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Feature badges: Audio Input · Audio Output · 2 WAY AUDIO · Arming Schedule · Bandwidth Optimization · Digital Zoom · Dual Stream Record · E-MAIL NOTIFICATION · 480 FPS · FREE APP IOS/Android · FREE CMS · FREE DDNS · FREE MAC Client · Front Panel Controls · H.264 · HDMI 1080p Main Monitor · VCA · NAS SAN · OSD · Privacy Mask · Real-Time 720p · Remote Backup · Remote Preview · Smart Search · Sub Stream · Universal Port · uPnP Router Setup · VGA Main Monitor · Water-marking · 2 Bonus OMNI IP Ch · Rack Mountable

Intelligent Video Inputs	Analog EZHD/SD Inputs	16
	HD Video Resolutions	EZHD / HD-TVI 720p30(25), 720p60(50), 1080p30(25)
	Analog CVBS Video Input	Up to 960x480,720x480(NTSC); 960x576,720x576(PAL)
	Adaptive Ports	Input Format Auto Detection, EZHD/SD can be mixed in any combination, at any time
	Interface	BNC Connector; 1V p-p, 75Ω
	Privacy masking	4 areas programmable in OSD menu
	Additional OMNI-IP Plug-and-Play Channels (up to 2Mpixel)	2
	Total Cameras Supported	18
Video Output	Main HDMI & VGA	Full HD 1920×1080/60Hz; SXGA: 1280×1024/60Hz;, 720P: 1280×720/60Hz; XGA: 1024×768/60Hz 1, 2x2, 1+5, 1+7, 3x3, 4x4 split; User Defined Sequence / Alarm Pop-up
Recording	Video Compression	Dual Stream: H.264 for Main Stream and Sub-stream
	Video Bitrate	32Kb/s~6Mb/s each channel
	Encoding	**Main Stream:** 1080p (virtual real time to 12FPS max per camera); 720p; WD1; 4CIF; VGA; CIF **Sub Stream:** WD1, 4CIF (virtual real time); CIF; QVGA; QCIF
	Frame Rate	**Main Stream:** 1/16 fps ~ Real time frame rate (real time at 720p and lower resolutions) **Sub Stream:** 1/16 fps ~ Real time frame rate
	Quality	6 levels: Lowest/Lower/Low/Medium/Higher/Highest
	Mode	Continuous; Motion; Alarm; Motion or alarm, Motion + Alarm, VCA, None
	Motion Detection & VCA	Configurable per camera for area(s), sensitivity and arming schedule programmable by day of week and hour of day (One Channel VCA)
	Schedule Period	Per day in 1 hour blocks; or 8 time periods per day, each with different record mode; plus holidays
	Pre- and Post- Event Recording	Pre-record 0~30 seconds; post record 5s~10 minutes
Playback	Synchronous Playback	16 channels
	Playback Resolution	1080p, 720p, WD1, 4CIF, VGA, CIF, QVGA, QCIF
	Search Type	Time/Date; Event (Alarm, Motion, VCA); Manual Tags; Smart Search for motion events from recorded video
	Capacity	Up to record rate
	Playback Controls	Play; Pause; Forward/Reverse; speed control for single~1.8~Vmax (256x); Slide bar with overview of record type and snapshot display from slider position, VCA based accelerated playback between normal play of VCA events
	Digital Zoom During Playback	Supported on Local Displays and CMS
Event & Alarm	Event Source	MD (Motion Detection), Video Loss, Video Tampering/ Exceptions, Video Content Analysis: Line Crossing with Direction (4 lines); Area Intrusion (4 areas) for one BNC channel.
	Event Action Schedule	Per day in 1 hour blocks; or 8 time periods per day, each with different record mode; plus holidays
	Event Action	Buzzer, E-mail, Alarm Full Screen Pop-up, Notify CMS Client
	MD Area	User selectable grid pattern 22x15 areas with adjustable per camera sensitivity
System Alarm	Alarm Source	HDD Error, HDD Full, LAN Fail/Address Conflict, Illegal login, Video Signal Exception/, Record/Capture exception
	Alarm Action	Buzzer, E-mail, Notify CMS Client (network permitting)
Audio	Two-way audio	Audio input pass through to remote web or CMS client; remote audio from web or CMS client pass through to audio output
	Input / Output	1ch Input / 1ch Output; RCA, 2V p-p, 1KΩ
	Compression	Up to 64Kbps, G.711u
Network	Interface	1Gb/s 1000 Base-T Ethernet RJ-45
	Addressing	Static IP, DHCP, xDSL support
	NTP/DST	Supported; choice of time zone, NTP server, DST start/end/offset
	Protocols Supported	TCP/IP, PPPoE, DHCP, DNS, DDNS, NTP, SMTP, SNMP, NFS, iSCSI, UPnP™, HTTPS, KT&C Plug-and-Play (for connected IP Cameras), OMNI Utility Device Discovery
	NAT	uPnP router NAT/port mapping forwards ports automatically (*Router must support/permit uPnP function)
	Users	Up to 128 simultaneous connected users
	DDNS	Simple DDNS free service tracks WAN IP address and HTTP port
Security	User IDs	"Admin", plus multiple configurable login IDs
	User Levels	All rights for "admin"; Per camera per user rights assignment for Operator and User levels
	User Privilege Control	Local and remote access to Live views, audio, recording, playback, menus, PTZ, alarms, copy, logs, upgrade, reboot

Storage & Clip copy	HDD Storage	2 SATA HDD up to 6Tb each
	NAS/SAN	up to 8 network disks (8 NAS disks, or 7 NAS disks +1 IP SAN disk)
	Copy Type	Multi-Channel or Single Channel File
	Copy Device	USB 2.0 Drive (2 ports)
	S.M.A.R.T.	Temperature, duration, error rates, bad sector detection, and more
Serial & I/O	USB 2.0 Ports	One front, one rear for mouse and data I/O
	RS-485	One; selectable speed and bit pattern; multiple protocols (Pelco P, Pelco D, others)
	Up the Cable Control	Multiple protocols, can be sent out of any BNC port to compatible cameras
User Controls	Local Controls	Front Panel function and navigation buttons; IR Remote; Mouse
Software	Web Viewer	Live view, playback and configuration via IE, Chrome, Firefox, Safari (with free plug-in/extension installed)
	User Rights Control	Per user-per camera for multiple functions
	Mobile Viewer	iOS and Android supported; live 16 camera views; 4 camera playback; snapshots from live or play; copy clips/record to smartphone; audio support; PTZ control. HD version of app, optimized for tablets, displays up to 16 live view cameras
	CMS	Free PC and MAC Clients support multiple device viewing, playback (with digital zoom) and configuration; user rights per camera; E-map support; live view up to 64 cameras in 4:3 and 48 cameras in 16:9; up to 16 cameras in playback
	Event Logging	Multiple types: alarm, exception, operation, information; dozens of sub-types within each major type
	Firmware Upgrade	From USB or remotely
	Backup/Restore Configuration	From USB or remotely
General	Dimension (W x H x D)	15" x 11.4" x 1.9"	380 × 290 × 48mm
	Chassis Type	19" rack-mountable 1U chassis (Optional rack ears KA-ORM1)
	Weight without HDDs	4.4 lb. / 2Kg
	Operating Temp	14°F~131°F (-10°C~55°C)
	Operating Humidity	10% ~ 90%
	Voltage	12VDC from included power supply, 4 pin DIN; power supply input voltage 100~220 VAC 50~60Hz
	Power	Up to 30W
	Certifications	FCC, CE, RoHS

Ordering Information:
www.ktncusa.com

EZHD-TVL16/1TB: 4 Ch, 1 TB | **EZHD-TVL16/2TB:** 4 Ch, 2 TB | **EZHD-TVL16/4TB:** 4 Ch, 4 TB
EZHD-TVL16/8TB: 4 Ch, 8 TB

*ONLY OMNI-IP PnP IP Cameras are Supported for Bonus Channels

FC CE RoHS