Ernitec VB8000
1 Input Transmitter/Receiver

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Description

The Ernitec VB8000 Digitally compresses and transmits video, audio, alarm events and control data over standard IP networks.

Next generation MPEG4 technology offers analogue levels of quality at a choice of resolutions for the most demanding applications such as surveillance, identification and high speed movement.

Ernitec VB8000 transmitters and receivers are used in conjunction with Ernitec VB8000 software products including Control Centre, the Windows NVR Software.

The Ernitec VB8000 is available in two versions.
VB8000/standard, 1 ch. Stand-alone Ethernet transceiver, MPEG-4, 25 fps @ SIF resolution, 12,5 fps @ 2SIF, 8 fps @ 4SIF. Duplex audio, transparent data, alarm I/O.

VB8000/Enhanced, 1 ch. Stand-alone Ethernet transceiver, MPEG-4, 25 fps @ 4SIF resolution. Duplex audio, transparent data, alarm I/O.

Next Generation MPEG4 Technology

- Exceptional video and audio quality: Ernitec VB8000 transmitters introduce high quality and high compression MPEG4 video and audio to CCTV applications.
- High Resolution / High Frame Rate Video: Ernitec VB8000 transmitters guarantee 25/30 frames per second at any resolution or bit rate including SIF, 2SIF and 4SIF resolutions.
- MPEG4 Advanced Audio Coding (AAC) brings new levels of fidelity and frequency response to CCTV applications.
- Ernitec VB8000 technology ensures smooth migration from analogue to digital technology: converts existing analogue-based CCTV to digital remote monitoring systems simply and cost-effectively without equipment obsolescence.
- The same CAT5 UTP cable is used for real-time video, two-way audio, management of PTZ functions and binary I/O alarm triggers.

- Multicast technology allows limitless numbers of users to access video and audio streams using the same bandwidth as one user.
- IP-based video removes geographical barriers thus enabling co-ordinated remote monitoring and communication across multiple locations using standard network interfaces including LANs, WANs, wireless networks and internet communication links.
- Network security: Ernitec VB8000 transmitters/receivers have a built-in firewall which can be configured to restrict communication to specific users.
- Synchronized clocks: use of the Network Time Protocol (NTP) allows for central maintenance and synchronization of real-time clocks inside Ernitec VB8000 devices.
- Web administration: all administrator settings can be configured through a built-in, password-protected web interface.

Motion Detection

Motion detection is carried out by the Ernitec VB8000 transmission unit itself. Sensitivity, region of interest and object size can all be selected using the Motion Detection Configuration web page.

- Offers significant reductions in false alarm rates, as it can be taught to ignore:
  - Environmental light changes
  - rain and snow
  - foxes, cats etc.
  - moving trees and bushes
  - friendly web page
- Offers motion detection at source, no need to stream until motion is detected.
- Easy configuration, with a user friendly web page

Activity Controlled Frame Rate

A powerful feature, unique to Ernitec's MPEG4 products. When this feature is enabled, the amount of motion between frames is constantly monitored by the unit. When there is no motion in the scene, the frame rate is reduced to one frame per second. As soon as motion occurs, the frame rate is increased to the maximum specified by the user. This feature can reduce data rates by up to 50-fold. This increases the amount of video which can be stored on a NVR.

Specifications

Video	
Video Compression	Full frame rate, full colour: MPEG4 (ISO 14496-2): 25/30fps guaranteed
Audio Compression	MPEG4 Advanced Audio Encoding at 16 KHz sample rate and 16 bit resolution
Video Bit Rate	User-configurable bit rates from 32Kbps up to 4Mbps
Resolution	SIF: 352 x 288 pixels, 2SIF: 704 x 288 pixels, 4SIF: 704 x 576 pixels
Video Input	NTSC/PAL video, 75 Ohms 1V p-p, standard BNC connector
Video Output	NTSC/PAL composite video, 75 Ohms 1V p-p, standard BNC connector. Software decode for display to PCs
Audio	
Audio Input	Line in 3.5mm jack. Nominal voltage: 1V p-p. Signal to noise ratio: 78 dB. Mic 30mVp-p. Mic type: dynamic. Signal to noise ratio: 56dB
Audio Output	Line out 3.5mm jack. 1V p-p, Minimum load impedance: 8 Ohms, Signal to noise ratio: 77dB
Data Input/Output	
Data Port	RS-232/RS-422/RS-485 channel up to 115.2 Kbps
Console Port	RS-232 channel up to 115.2 Kbps
Binary	
Binary Input/Output	Four opto-isolated inputs. Maximum isolation: 5.3 KVrm Minimum If current: 10 mA. Two solid state relay outputs. Maximum load: (AC/DC): 0.1A @ 50V peak AC/ 50V DC
Network Interface	IEEE802.3 and IETF standards: 10/100 Base-T Ethernet, TCP, UDP, ICMP, IGMP
Electrical	
Operating Voltage	5V DC
Power Consumption	5W (typical) 6W (max)
Environmental	
Operating Temp.	0...+50°C/+32…+122°F
Storage Temp.	-20…+70°C/-…+158°F
General Specifications	
Dimensions	167(l) x 110(w) x 45(d), 0.6Kg (excluding power supply)
Regulatory	EN 55022(1994) ITE - Class B, EN 61000-3-2(1995) - Class A, EN 55024(1998) ITE immunity standard, EN 61000 3-3(1995) voltage fluctuation, CFR47(1995) Part 15 subpart B - Class B

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THE ONE TO WATCH

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