E-class IP codec

Real time IP (Internet Protocol) networked digital video codec system for security, CCTV, industrial monitoring and conferencing applications.

COE's IP codec has been introduced for customers who wish to place video, data and two-way audio information on network systems that utilise IP addresses such as Ethernet LANs or WANs. The codec takes a standard analogue signal straight from a camera and converts it to a digital signal using ITU-standard M-JPEG or H261, utilising the flexibility of digital technology. The codec provides customers with a level of flexibility and control previously unknown; from selecting cameras and setting picture quality, to bandwidth-on-demand. The E-class IP codec is ideally suited to both small and large systems, either new installations or extension of existing networks.
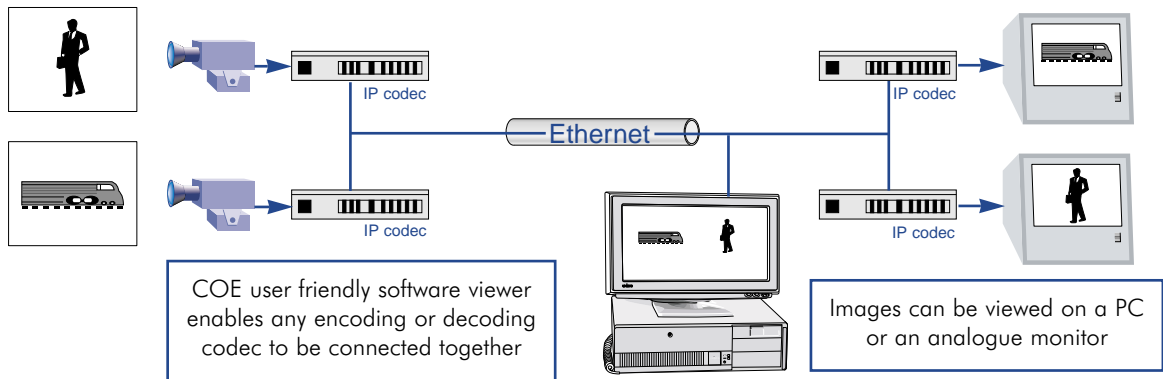
Features and Benefits

- Up to four video camera BNC inputs or one video output per codec – Allows viewing of several video sources, selected via the COE software viewer - reducing system cost

- Straight codec to camera connection – No need for multiplexers, transmission amplifiers or other ancillary equipment - reducing system cost

- Re-programmable encoder or decoder option – One codec for both options, reduces spares holding and system cost

- Integrated two-way audio and serial data transmission – Removes the need for supporting systems - reducing system cost

- *Opto-isolated inputs and solid state relay outputs – Giving maximum flexibility when designing systems - no ancillary equipment required - reducing system cost

- Image viewing on PCs or analogue monitors – Cost effective choice for the user depending upon requirement with no additional hardware required for the PC

- *Digital recording and storage using only 4GB per 24hrs – No banks of tapes - reducing system cost

- Programmable formats: M-JPEG or H261 – Image format choice to suit application such as static or PTZ viewing, image quality, safety critical, etc..

- Password hierarchy protection - 3 levels of protected access: administrator, supervisor, operator – Provides network integrity and secure operating systems

- Quick video image selection via high, medium and low tab buttons – Reduces set-up time and operator reaction times

IP codec encoder & decoder modules

The IP codec offers unrivalled flexibility for designing, installing and commissioning video, data and audio systems. By using high video compression of 80:1 and a simple 100Mbps Ethernet, up to 200 real-time video audio streams can be carried; this can be increased to 2000 streams by adding an ethernet switch. Each codec can be connected to a network via a RJ-45 connection with the bandwidth programmable from 8Kbps to 3Mbps. A multitude of PCs can be used for viewing of video streams and real-time administration of codecs over an IP network. Using the software management tool, units can be programmed to either encode or decode video streams on to or from a network. The codec offers customers the flexibility to design systems that can view video, use audio to respond to situations and transmit data for control functions.

IP codec

Ethernet

IP codec

IP codec

IP codec

COE user friendly software viewer enables any encoding or decoding codec to be connected together

Images can be viewed on a PC or an analogue monitor

Sales codes and ordering information

ECIP600B	E-class IP codec (Internet Protocol) with programmable M-JPEG or H261 format. Providing simplex video, integrated duplex data and audio. Includes ECSSM1 and ECIPPSU
ECSSM1	Video viewer and software management tool
ECIPPSU	Spare power supply

Performance overview

Power

5V DC @ 1.2A 7W

Video

Input	4 x BNC, 75 Ohms 1V p-p, NTSC/PAL
Output	1 x BNC, 75 Ohms 1V p-p
Resolution	QCIF = 176 x 144, CIF = 352 x 288 and SIF = 352 x 240 pixels. User selected resolution at frame rates to 30 frames per second
Compression	ITU-standard H261 - up to 30fps at CIF resolution ITU-standard M-JPEG - up to 10fps at CIF resolution
Switching	Maximum multiplexer switching speed 20ms

Network

Interface	IEEE802.3 and IETF standards, 10/100 Base-T ethernet, TCP, UDP, ICMP, IGMP
Connection	RJ-45 Twisted pair cable

Inputs and Outputs*

Inputs	4 x Opto-isolated inputs, minimum current 10mA
Outputs	2 x Solid state relays, maximum load 48V AC/DC @ 0.1A

Dimensions

Dimensions	167mm (l) x 110mm (w) x 45mm (d)
Weight	0.6kg

Environmental specification

Operating temp.	0°C to +50°C

Data and Audio

Data - serial 1	EIA-574 RS232 or EIA-422 RS422*, 115Kbps via 9-pin D-type male connector
- serial 2*	EIA-574 RS232 230Kbps via 9-pin D-type male connector
Audio	G.711 or G.728 selectable, input and output via 3.5mm jack (line level)

Software performance

Microsoft Windows 95, 98, 2000 and NT**

Simultaneous viewing of two independent video streams from any codecs

Selection of video inputs and images properties via drop down menu

Any stream on the network may be viewed by simple source selection

PC requirements

Minimum	IBM compatible Pentium II 266, 32MB ram
Recommended	IBM compatible Pentium III 550, 128MB ram

* Not currently available, please contact COE Sales for further information

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Dealer Stamp

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