

the i-Volution i4124 Ruggedized MPEG-2 + 4 Encoder

The i-Volution i4124 (i4124-E) Video-over-IP encoder delivers outstanding performance for advanced video surveillance applications requiring high resolution, full-motion video. The i4124-E can encode concurrent MPEG-2 and MPEG-4 streams along with two serial data channels for transport over standards-based IP network. The MPEG-2 stream is ideally suited for high quality live video monitoring while the MPEG-4 stream can be setup for low bandwidth wireless networks, internet streaming or network video recording. The i4124-E is available as a standalone single port video encoder.



Applications

- Security Surveillance
 - Airports
 - Seaports
 - Military
 - Industrial Complexes
 - Unattended Sites
- Transportation
 - City Intersection Monitoring
 - Roads
 - Rail/Metro/Subway

Features

- MPEG-2 and MPEG-4 concurrent streaming
- Up to Full D1, 25/30 fps on each stream
- Variable Frame Rate MPEG-4
- QoS enabled (L3) video streaming
- Embedded Hardware motion detection
- Contact Sense / Contact Close

High Resolution - Full Motion MPEG-2 Video

The i4124-E provides the highest digitized video quality over standard IP Ethernet networks. Every image is encoded in real-time and displayed at 30/25 (NTSC/PAL) frames per second. This advanced capability provides full motion DVD quality video for digital CCTV surveillance applications

Scaleable MPEG-4 Video

The i4124-E's MPEG-4 stream is independent from the MPEG-2 stream, which provides optimal performance under all system configurations. The MPEG-4 stream can offer high-resolution full motion video or scale down to very low bit rates for use in bandwidth-restricted applications.

Feature-Rich Standalone

The stand-alone i4124-E is ideal for surveillance applications requiring single channel flexibility and high quality full motion video. Features such as On-Screen-Display (OSD) allow network administrators to display camera name, date, time, resolution, bit rate and other related information onto any video monitor in the network. When used in combination with the Video Motion Detection feature, the i4124-E provides effective, real-time surveillance and alarm notification.

Temperature Hardened

The i4124-E is designed to meet high availability network requirements. The unit is environmentally hardened to operate over extended operating ranges and is conformal coated to ensure maintenance free operation.

Standards Compliant

Video is encoded using standard MPEG-1/MPEG-2 and MPEG-4 compression. The video stream(s) can be viewed by Impath software/hardware decoders and/or 3rd Party products. The video and serial data can be transmitted over any standard IP network. This includes Ethernet, Gigabit Ethernet, SONET/SDH and ATM networks.

Network Managed

The i4124-E can be managed locally and remotely using Telnet, an embedded web-server or via 3rd Party SNMP network management systems.

i-Volution i4124-E

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Typical Application

Control Center
Large Video Display
Monitoring



Internet Streaming



Wireless

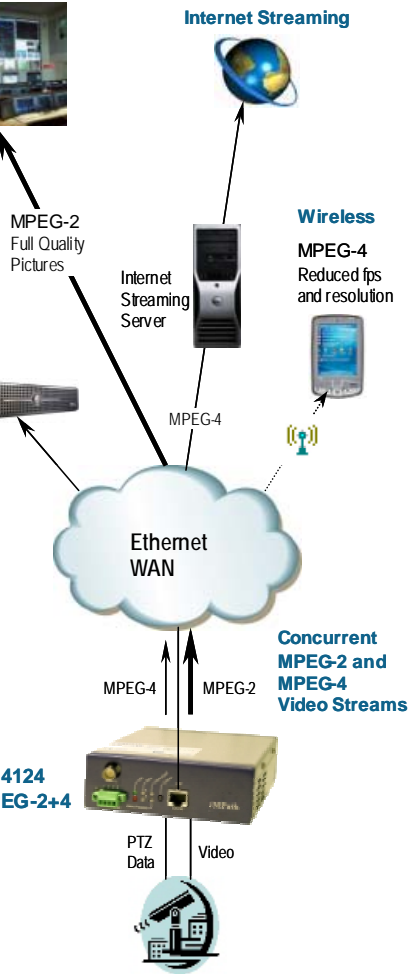
MPEG-4
Reduced fps
and resolution



Storage



MPEG-4
Reduced
fps and/or
resolution



Video

Compression	MPEG-4 ASP (ISO/IEC 14496) MPEG-1 (ISO/IEC 11172-2) and MPEG-2 (ISO/IEC 13818-1 Transport Stream or ISO/IEC 13818-2 Elementary Stream) MP@ML				
Resolution		MPEG-2		MPEG-4	
		NTSC	PAL	NTSC	PAL
	Full	720x480	720x576	720x480	720x576
	HHR	352x480	352x576	NA	NA
	SIF	352x240	352x288	352x240	352x288
QSIF	192x128	176x144	160x112	176x144	
Bit Rate	MPEG-2 256K – 12 Mbps / MPEG-4 28K – 3 Mbps				
Image Frame Rate	MPEG-2 30 fps at D1 (NTSC) and 25 fps D1 (PAL) MPEG-4 Variable 1 to 25/30fps				
Multi-Stream	Concurrent Full D1, 25/30 fps MPEG-2 + MPEG-4				
Video Input	One Composite Video, 1.0Vp-p, 75 ohm, via BNC Connector				

Network Interface

LAN Interface Protocols	IEEE 802.3 Ethernet RJ-45, 10/100Base-T, Auto-Sensing TCP, UDP, IPv4, IGMPv2, RTP, DiffServ, SNMPv2, HTTP
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Serial Data

Format	Serial, Asynchronous
Connections	Unicast and Multicast
Connectors	(2) DB9-F
Interface	RS232, RS422/485 2/4 Wire, Half/Full Duplex
Data Rate	300bps to 115kbps

Contact Sense & Closure

Connectors	Terminal Block
Contact Sense	Output Voltage: +5VDC, Max. Resistance 1.2k ohms
Dry Contact	Off Leakage: <1na, On Resistance: 1.5 ohms
Re-Arm Delay	User Selectable: 100ms to 25s

Motion Detection

Zones	Full Screen
Sensitivity	User Selectable: Low to High in 10 steps
Re-Arm Delay	User Selectable: 100ms to 25s

Alarms

Via SNMP	Video Loss detection Video Motion Detection Contact Sense & Closure Unit Configuration Change & Reset
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Management

Console	Local via serial port / remote via Telnet
Local Status	LED Status Display
Web Browser	Microsoft IE ver. 6.0 or higher
Security	Administrator configured User Name & Password login

Environmental

Operating Temperature	-34 to +74C (-29 to +165F)
Relative Humidity	5% to 95% Non-Condensing
Environmental Protection	PCB Conformal Coating
RoHS Compliance	EU Directive 20002/95/EC

Power Requirements

Input Voltage	11.4 to 13.2 VDC (AC Adapter Included)
Power Consumption	Approx. 16W

Physical

Dimensions (WxHxD)	12.7cm x 4.37cm x 19cm (5.0" x 1.72" x 7.5")
Weight	Approx. 0.6 Kg (1.32 lbs)

Regulatory Approvals

Emissions	
EU	EN55022:1998 Class A, EN6100-3-2:1995 & EN6100-3-3:1995
North America	FCC47 CFR Part 15, Subpart B:1999 Class A
Australia/NZ	AS/NZS 3548:1995 Class A
Immunity	EN55024



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