

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.

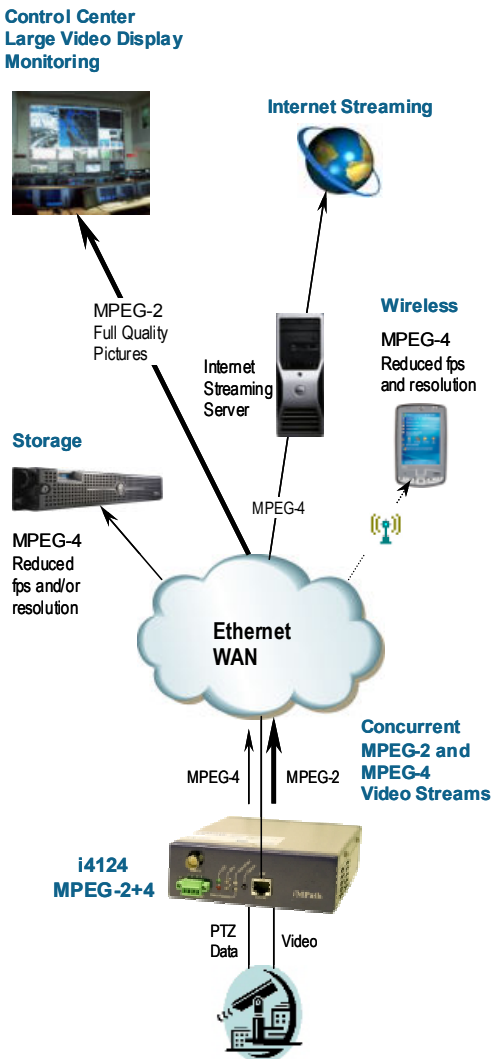
Network Managed

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



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

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

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