

## the i-Volution 5410-E

### Four Video Standalone Encoder

The 5410-E is a compact, four (4)-channel intelligent video server employing H.264 and MPEG-4 video compression with advanced video analytics from the leading vendors. As a standalone leading Edge Solution, the 5410-E transforms standard analog video surveillance cameras into proactive sentinels that deliver reliable high performance video streaming and content analysis. This video server is equipped with PTZ control, TTL inputs and relay outputs and is available in two build configurations, industrial (-ET) or commercial grade (-E).



#### Applications

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

#### Features

- Extended temperature range
- Standalone with four video channels
- Multi-streaming
- Optional ObjectVideo® OnBoard® video analytics
- Up to full D1, 25/30 fps per stream
- Dual Stereo Bi-Directional Audio
- Contact Sense / Contact Closure

#### High Resolution - Full Motion – Advanced Compression

The 5410-E provides high quality digitized video over standard IP Ethernet networks using MPEG-4 and H.264. Every image is encoded in real-time and transmitted up to 25/30 (PAL/NTSC) frames per second. This provides full motion quality video for digital video surveillance applications using one of the most powerful video compression schemes available today.

#### Multi-Streaming and Optional Protocols

The 5410-E multi- streams assuring that a high quality video can be streamed to large monitors for optimal viewing while another stream is encoded at lower frame rate and resolution for lower bandwidth applications such as recording, wireless or Internet Streaming. Optionally, the i5410 can stream H.264 or MPEG-4 video.

#### Four Video Channels, Data, and Audio

The 5410 encodes four (4) video inputs up to full resolution and full frame rate (i.e. up to DVD quality). The card is also equipped with RS232 and RS422/485 serial port and dual bi-directional stereo audio.

#### Optional OnBoard® Video Analytics

Optional OnBoard® module with powerful industry leading ObjectVideo® analytics with configurable detection zones and tripwires. Implement object detection and tracking with response control manager for start/stop streaming, TTL Output, and markup of JPEG images.

#### Network Managed

The 5410-E can be managed locally or remotely using the integral WEB Browser interface (HTTP) device manager.

#### Extended Temperature Range

The 5410-ET is designed to provide high availability. This industrial unit is environmentally rugged for operating over extended temperature ranges and is conformal coated to ensure maintenance free operation.

# i-Volution 5410-E Encoder

## Control Center Large Video Display Monitoring



## Internet Streaming



**Wireless**  
(Very Low Bandwidth)  
MPEG-4  
Reduced fps  
and resolution



Internet  
Streaming  
Server

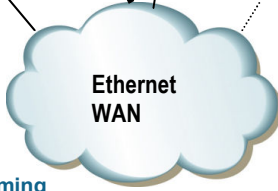
MPEG-4  
Full Quality Pictures

H.264

## Storage



MPEG-4  
Reduced  
fps and/or  
resolution



## Multi-Streaming MPEG-4 Video Streams

Up to 4  
Video, 2 Audio,



## Typical Application

Model	Features
5410-E-S	MPEG-4 + H.264 + MJPEG standalone
5410-ET-S	MPEG-4 + H.264 + MJPEG standalone with (Industrial temp range)

## Video

Protocol

MPEG-4(SP), and MJPEG

Resolution  
(D1/CIF/QCIF)  
Frame rate/Bit Rate

ITU H.264 (ISO MPEG-4 AVC Baseline)  
NTSC 720x480, 704x240, 352x240, 176x120  
PAL 720x576, 704x288, 352x288, 176x144  
Constant and Variable to 30/25 fps  
30kbps to 6Mbps

Multi-Stream  
Network Connections  
Video Input  
Video Output

Multi-Streaming up to D1, 30/25fps  
User Configurable Unicast and Multicast  
4 x Composite Video, 1.0Vp-p, 75 ohm, via BNC  
2 x Composite Video, 1.0Vp-p, 75 ohm, via BNC

## Network Interface

LAN Interface

Dual IEEE 802.3 Ethernet RJ-45, 10/100Base-T, Auto-Sensing  
TCP, UDP, IPv4, IGMPv2, RTP, RTSP, NTP/SNTP

Protocols

## Serial Data

Format  
Connectors  
Interface Protocol  
Data Rate

Serial, Asynchronous  
2 Ports via DB9  
RS232 and RS422/485  
300bps to 115kbps

## Audio

Interfaces  
Audio Standard  
Mode

Dual Line In/Out via 3.5mm mini-jacks  
MP1/2 L2, MP3 selectable  
Bi-Directional Single Stereo or Dual Mono  
8x TTL IN via 10 position TB  
8 x STDT Relay Out via 24 position TB

## I/O

## Time Synchronization

## On-Board Analytics

Video Analytics Events  
and Response  
Handling

(Optional)  
Multi-rule detection with response control manager for start/stop streaming, TTL Output, and markup of JPEG images.

## Management

Factory Reset  
Local Status  
Console  
Web Browser  
Security  
Firmware Upgrade

External Reset Button  
LED Status Display  
Local via serial port  
Microsoft IE ver. 6.0 or higher  
User Name & Password  
Remote Flash Upload

## Environmental

Operating Temperature  
  
Relative Humidity  
RoHS Compliance

Industrial-40 to +85°C (-40 to +185°F)  
Commercial 0 to +50°C (32 to +122°F)  
5% to 95% Non-Condensing  
EU Directive 20002/95/EC

## Power Requirements

Input Voltage

5 to 12 VDC / Approx 15W (Max)

## Physical

Dimensions (WxHxD)

22.3 x 4.7 x 12.8 cm (8.8" x 1.85" x 5.05")

Weight

Approx. 0.5 Kg (1.1lb)

## Regulatory Approvals

Emissions - EU

EN55022:1998 Class A, EN6100-3-2:1995 & EN6100-3-3:1995  
FCC47 CFR Part 15, Subpart B:1999 Class A  
AS/NZS 3548:1995 Class A  
EN55024

North America  
Australia/NZ  
Immunity



Impath Networks Canada Corporation 42 Payzant Avenue, Suite 100, Halifax, NS Canada B3B 1Z6  
T: 902-468-1010 F: 902-468-1044 [impathnetworks.com](http://impathnetworks.com)

Impath Networks Ltd. 9 Camelot Drive, Suite 100, Ottawa, ON Canada K2G 5W6  
T: 613-226-4000 F: 613-226-4602 [impathnetworks.com](http://impathnetworks.com)

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