

## the i-Volution VSG 5000 Multi-Protocol Video Concentrator

The i-Volution Video Surveillance Gateway 5000 (VSG 5000) is a modular, chassis-based video concentrator providing multi-channel transport capability for advanced surveillance applications. The VSG 5000 accommodates a combination of up to 13 VSG 5000 encoder and decoder cards. This solution provides one of the highest density concentrators available on the market with up to 104 video channels each supporting up to D1 video quality.



### Applications

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

### Features

- Up to 104 video channels
- Multi-Protocol support
- Unrestricted combinations of VSG 5000-E and VSG 5000-D within the VSG 5000 chassis
- Combine VSG 5000-E and -D with existing VSG1000 in the same chassis

### High Resolution - Full Motion – Advanced Compression

The VSG 5000-E (encoder) and VSG 5000-D (decoder) cards provide high quality digitized video over standard IP Ethernet networks using H.264, MPEG-2 or MPEG-4. 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.

### High Density

The VSG represents one of the highest density MPEG concentrator systems in the industry. Within a compact 7RU chassis, up to 104 video / 104 serial data / 104 audio channels can be digitized & compressed using H.264, MPEG-4 or MPEG-2 for video transport over a standards-based IP network.

### Multi-Protocol Support

The VSG 5000-E and -D are available with support for multiple protocols including advanced H.264 and MPEG-4. The modules can also support MPEG-2 which provides compatibility for networks with existing Impath i-Volution MPEG-2 video encoders.

### Reliable Design

The VSG 5000 can be installed where video is typically concentrated like a network communications hub or in the control centre where video terminates. The chassis accepts redundant power supplies providing for maximum availability. Furthermore, the VSG 5000 and its cards are rated for operations at extended temperatures between -10C and 60C. The chassis uses passive backplane and each encoder and decoder module operates independently for additional reliability.

### Mid-Plane Construction / VSG1000 Compatibility

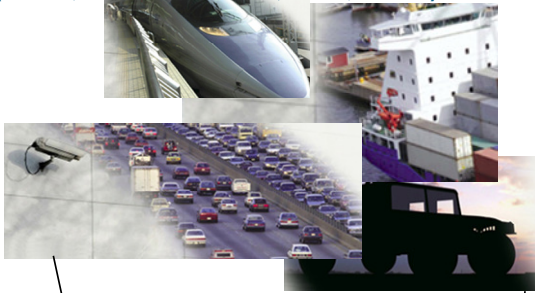
The VSG5000 mid-plane provides maximum versatility. VSG5000 cards are slotted in from the front with interface cards inserted via rear guides and mating with their respective VSG5000 card via mid-plane connections. In addition, existing stock of VSG1000 cards can be freely mixed with VSG5000 cards in the same chassis.

### Remote Management

The encoder and decoder modules can be managed locally or remotely WEB Browser interface (HTTP) and/or via 3rd Party SNMP network management systems.

# i-Volution VSG 5000 System

## Video Monitoring Application (Video, Camera Control, Data, Audio)

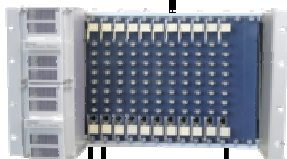


Video and Data Collection via Impath  
i1000, i4000, VSG1000 MPEG-2 series  
and Series 5000 MPEG-2, MPEG-4, H.264  
Multi-Protocol series

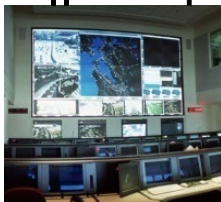


IP Network

MPEG-2  
MPEG-4  
H.264



VSG 5000  
Multi-Protocol  
Video  
Concentrators



Command and  
Control  
Monitoring Centre

Typical Application

## Capacity

Card Slots	13
Video Channels	104
Audio (Optional)	104
Data (Optional)	104
Network Connections	13

## Video Modules

Refer to data sheet for VSG 500-E and VSG 5000-D

## Environmental

Operating Temperature	-10 to +60C (14 to +140F)
Relative Humidity	5% to 95% Non-Condensing
Protection	PCB Conformal Coating
RoHS Compliance	EU Directive 20002/95/EC

## Power Requirements

Power Supplies	Hot Swappable PSU, chassis equipped with dual slots PSU slots and dual AC input for main and optional redundant PSU
Input Voltage	90 to 264 VAC
Power	Approx. 725W
Redundant PSU	Optional

## Physical

Dimensions (WxHxD)	48 x 31 x 33 cm (19" x 12.3" x 13")
Weight	Chassis and PSU Approx. 12Kg (26.4lbs). Cards 0.6 Kg (1.3lb) Approx.

## 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

## Modules and Accessories

Model	Features
VSG 5000	13 Slot Chassis for VSG 5000 encoder and decoder
VSG5000-E	(900-007581-502) 8 Video/8 Data Encoder* RS232/RS485
VSG 5000-D	(900-007590-501) 8 Video/8 Data Single Slot Decoder*
VSG 5000 Data card	(900-007601-501) 8 Data Interface Card 8 x RJ45 (OPTIONAL)
VSG 5000 PSU	(900-007579-501) Power Supply - Universal AC input
Fan Tray	(900-901000-000) Fan Tray 600 CFM order -001 for 230VAC

\* Requires optional interface card if data is required.

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