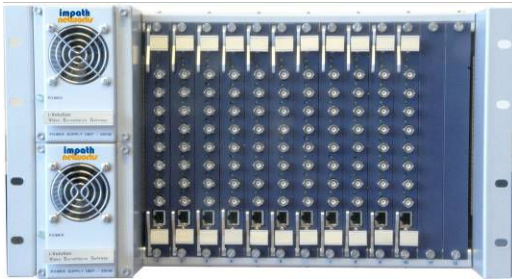


the i-Volution VSG 5000-E and VSG 5000-D Multi-Protocol Video Encoder and Decoder for VSG 5000 System

The i-Volution VSG 5000-E and VSG 5000-D encoder and decoder modules for the VSG 5000 system provides one of the highest density concentrators available on the market with up to 104 video channels each supporting up to D1 video quality. The VSG 5000-E is a multi-channel / multi-protocol video encoder module and the VSG 5000-D complements the encoder as a multi-channel / multi-protocol decoder module. The modules each occupy a single slot in the VSG 5000 for supporting up to 104 video channels in a fully equipped VSG 5000.



Applications

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

Features

- Unrestricted combinations of VSG 5000-E and VSG 5000-D
- Optional Redundant PSU
- Combine with VSG1000 in same chassis
- Extended temperature range
- Triple H.264 streaming
- Up to full D1, 25/30 fps
- Constant and Variable frame rate
- Contact Sense / Contact Closure
- Multi-Protocol support
- Bi-Directional audio

High Resolution - Full Motion – Advanced Compression

The VSG 5000-E (encoder) and VSG 5000-D (decoder) modules 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.

Scalable H.264 Video

The VSG 5000-E uses H.264, currently recognized as the most scalable compression available and capable of supporting video over a wide range of bandwidths from as low as 32kbps to full quality/full motion video at 2Mbps.

Triple Encoding H.264 Streaming

The VSG 5000-E supports triple streaming up to full D1 on each of its 8 channels. Full resolution video can be streamed to monitors for viewing high quality video while others streams are encoded at lower frame rate for servicing lower bandwidth applications such as recording, Internet Streaming and/or wireless.

Extended Temperature Range

The VSG 5000 modules are designed to provide high availability with environmentally rugged rating for operating over extended temperature ranges from -20C to +60C.

High Density

Within a compact 7RU VSG 5000 chassis, up to 104 video / 104 serial data / 104 audio channels can be digitized & compressed for transport over a standards-based IP network.

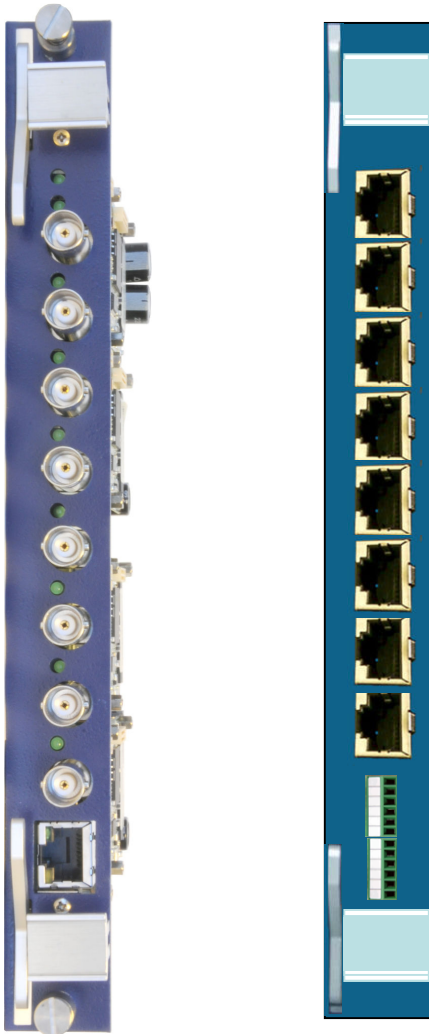
Reliability

The VSG 5000 modules operate independently. Network interface and management functions are self-contained in each module relying on no other common modules. This architecture results in one of the most reliable video concentrator systems available.

i-Volution

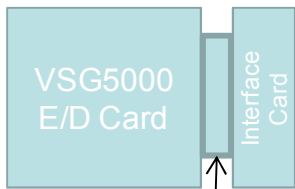
VSG 5000-E and -D

Multi-Protocol Encoder and Decoder



VSG 5000-E or
VSG5000-D

Data
Interface Card



VSG5000 Chassis
Mid-Plane Connector

Video

| | |
|------------------------|--|
| Compression Resolution | ITU H.264, MPEG-4, MPEG-2 and MJPEG Full (4CIF), 2CIF, CIF, QCIF |
| Bit Rate | NTSC 720x480, 352x480, 352,240, 176x144 PAL 720x576, 325x576, 352x288, 176x144 32kbps to 2Mbps (128kbps to 6Mbps MPEG-2) |
| Image Frame Rate | Constant and Variable 1 to 25/30 fps |
| Multi-Stream | Triple H.264 Encoding up to D1, 25/30 fps |
| Network Connections | User Configurable Unicast and Multicast |
| Video Input | Eight 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, HTTP, NTP, DHCP RTSP, RTP |
|-------------------------|--|

Serial Data (Optional)

| | |
|--------------------|----------------------------|
| Format | Serial, Asynchronous |
| Interface Protocol | RS232/RS422/485 |
| Data Rate | 300bps to 115kbps |
| Connectors | 8 Ports via RJ45 Connector |

Audio (Optional)

| | |
|------------|----------------------------|
| Mode | Bi-Directional Mono |
| Encoding | G.711 |
| Connectors | 1 Ports via Terminal Block |

Contact Sense & Closure

| | |
|------------------|---|
| Contact In / Out | 8 x TTL IN / 8 x Relay Out via Terminal Block |
|------------------|---|

Management

| | |
|--------------|---|
| Local Status | LED Status Display |
| Web Browser | Microsoft IE ver. 6.0 or higher |
| Security | Admin configured User Name & Password login |

Environmental

| | |
|------------------------------|--|
| Operating Temperature | -20 to +60C (-5 to +130F) |
| Relative Humidity Protection | 5% to 95% Non-Condensing EU Directive 20002/95/EC |
| RoHS Compliance | |

Power Requirements

| | |
|-------------------|-------------|
| Power Consumption | Approx. 33W |
|-------------------|-------------|

Physical

| | |
|------------|-------------------------------------|
| Dimensions | Single slot within VSG 5000 chassis |
| 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 |

| Model | Features |
|---------------|--|
| VSG 5000 | 13 Slot Chassis for VSG 5000 encoder and decoder |
| VSG 5000-E | 8 Video/8 Data/8 Audio Single Slot Encoder* |
| VSG 5000-D | 8 Video/8 Data/8 Audio Single Slot Decoder* |
| VSG 5000 DDIO | 8 Data + 8 Digital I/O Interface Card |
| VSG 5000 DA | Data + Audio Interface Card (Call) |

* Use optional interface card if data, DIO, or audio is required.

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