

# VisioWave Evolution 4FX/8/28



Industrial Digital Video Equipments for security applications

Fault tolerant, flexible and modular Digital Video Equipment for video security applications over IP or ATM networks. Up to twenty-eight simultaneous, high quality and independent analog video ports.

VisioWave is offering complete and integrated security solutions inclusing centralized configuration and management, high quality and high performance distributed video switching through an effective and optimized usage of any IP or ATM network, intelligent storage features, support for telemetry, alarm management and high level graphic user interfaces.

VisioWave Evolution Digital Video Equipment is an industrial fault tolerant rack-mounted video encoder/decoder designed for the VisioWave CPCI-4 Video Codec Boards, providing PAL or NTSC professional quality video. Three different form factors are available to fit any appropriate number of video ports and video networked architecture.

Running the VisioWave Video Operating System™, VisioWave EVOLUTION 4FX/8/28 are the best industrial solutions to fit any requirement for security applications.



# **Product highlights**

# VisioWave Evolution 4FX/8/28

- Industrial 1U, 4U and 9U-19" rack-mounted enclosures
- Up to sevenslots for VisioWave CPCI-4 video codec boards or optional modules
- Redundant and hot-swappable power supplies with system monitoring module
- Powerful CPU motherboard with dual Ethernet 10/100 base TX ports
- Support for Ethernet/IP or ATM networks Quality of Service
- Integrated serial ports for PTZ camera remote control
- Two EIDE interfaces for embedded storage hard disks
- Mouse, keyboard, VGA and double USB port
- Remote Web based administration tools
- Integrated security through login and password
- Total compatibility with VisioWave Security Software modules
- Optional ATM 155, serial, and digital I/O modules
- SCSI interface for connection to VisioWave HQI RAID Storage Module (optional for Evolution 4FX)

# VisioWave CPCI-4 Video Codec Board

- Four totally independent video codec channels
- Each video channel can be configured as video input or video output
- Led display for video and on board status
- Twelve BNC connectors for composite video interfaces (switching capabilities)
- VisioWave 3-D Wavelets compression technology for extremely low bandwidth (0.5 Mbps to 10Mbps) and latency
- Real-time compression/decompression of CCIR-601 full motion analog video
- PAL, NTSC full field and frame resolutions
- Visually loss-less compression at 2 Mbps
- Flexible and dynamic bandwidth control

### Physical

CompactPCI standard with aluminum frame and galvanized sheet steel

# Power supply

 2 redundant, hot-swappable power supply units (except for Evolution 4FX)

# **Cooling device**

- 3 hot-swappable fans for Evolution 28
- 2 hot-swappable fans for Evolution 8

#### **Dimensions**

- Evolution 28: 19"-9U with 7 slots 440(W) x 400(H) x 342(D) mm Weight: 16 kg
- Evolution 8: 19"-4U with 4 slots 440(W) x 177(H) x 342(D) mm Weight: 10 kg
- Evolution 4FX: 19"-1U with 1 slot 440(W) x 44(H) x 342(D) mm Weight: 4 kg

#### **Temperature**

- Operating: 0°C 50°C
- Storage: -20°C 60°C

# Conformity

- EMC 89/336/EEC
- Low Voltage 72/23/EEC
- Safety EN60950 IEC950
- FCC Class A Subpart B of part 15

MTBF 100.000 hours @ 70% load

# System administration

### Administration software

- Web based remote administration application, password protected.
- Total compatibility with VisioWave Security Software Modules and SDKs (See product brief)

#### System monitoring and alarm module

 Audible, relay or serial notification for system status classified as minor, major or critical (power, fan speed, temperature) with LED Status display (except for Evolution 4FX)

# CPU Control Board

- Intel® Pentium III processor
- Microsoft® Windows 2000
- Dual Ethernet 100 BaseTX ports
- SCSI interface for storage devices
- 2 EIDE interfaces for local disks
- 2 RS232 serial ports for PTZ camera remote control functions
- Double USB port
- SVGA output for display
- Mouse and keyboard connectors
- Rear I/O board for CPU board

# VisioWave CPCI-4 Video Board

# Video format and resolution

- Full motion CCIR-601 analog video
- PAL (720x576 @ 50fps)
- NTSC (720x486 @ 60fps)

#### Input/Output

- 4 totally independent video channels
- 12 composite video BNCs 75  $\Omega$
- Possible switching between ports
- On Screen Display facilities

### Bus

- CPCI 64 bits / 66MHz @ 5V or 3.3V
- 6U form factor
- 5.5V and 3.3V power supply

# Video compression

- 3-D Wavelets compression technology
- Low latency: 100 250 ms
- Adjustable bandwidth: 0.5 10 Mbps
- Visually loss-less at 2 Mbps

# Networking - Quality of Service

- Embedded dual Ethernet 10/100 BaseTX ports
  - IP multicast and UDP unicast support
- Ethernet/IP Class of Service support (802.1p, RSVP and DiffServ)
- ATM 155 OC-3 optional module (MMF or UTP)
  - ATM SVC multicast UBR/CBR
  - SVC unicast UBR/CBR/VBR-nrt

### Hardware optional modules



ATM 155 OC-3 (MMF or UTP)



Serial RS232/RS422 and RS485 board



I/O board for alarm handling with 16 opto-isolated inputs and 8 relays output



EIDE embedded storage hard disk:

- Evolution 4FX: 1 disk max.
- Evolution 8: 2 disks max.
- Evolution 28: 3 disks max.



SCSI-RAID storage unit up to 8 hard disks

# Contact and ordering information



#### VisioWave Headquarters

Victoria House Route de la Pierre, 22 1024 Ecublens Switzerland Tel. +41 (0)21 695 00 00

Fax +41 (0)21 695 00 01

# Internet

www.visiowave.com

# E-Mail info@visiowave.com