



# MA5400 IP Video Gateway

The MA5400 IP Video Gateway is a market leading solution, enabling transmission of real-time video over Internet Protocol (IP) networks. The design provides flexible configurations allowing carriage of up to sixteen MPTS/SPTS transport streams with Gigabit Ethernet network connectivity within a 1RU chassis.

The MA5400 is a high quality real-time MPEG-2 Transport Stream to IP encapsulator. Based on open standards, the MA5400 has been designed to meet the demanding requirements of post production distribution and contribution applications where multiple Transport Streams are transported through a single connection over an IP enabled network.

The MA5400 is fully bi-directional in both ASI and IP and can be software configured to enable transmit, receive or a combination of both. The product has been equipped with the latest advances in error correction for maximum reliability through the implementation of SMPTE 2022 ProMPEG FEC. The state-of-the-art processing power and extremely compact design enable new system architectures to be created allowing content to be freely distributed around a network.

## BUSINESS BENEFITS

### Cost Effective

The MA5400 enables operators to take advantage of the associated cost savings in using IP networks such as increased flexibility, triple play of real-time video, voice and data over a single network infrastructure.

### Reliable Transmission

Reliable broadcast quality transmission of content over IP networks is achieved through the implementation of SMPTE 2022 ProMPEG Forward Error Correction at the IP layer.

### Space Efficient

The RU chassis provides a compact solution for encapsulation/ de-encapsulation of MPEG-2 Transport Stream while enabling up to sixteen ASI SPTS/MPTS transport streams to be handled.

### Control & Monitoring

The MA5400 can operate standalone through the use of the native integrated web interface or through TANDBERG nCompass providing unit configuration and redundancy control in addition to high level monitoring. The MA5400 can provide a single point of presence on the network by providing data and in-band control via a single network connection.

## OPTIONS

The MA5400 can be enhanced with the following options:

- Four port ASI input card (MA5400/HWO/4ASI)
- Optical interface (SFP) (MA5400/HWO/GIGE/OPT)
- Two port Bi-directional (MA5400/SWO/2+2BI)
- Four port Bi-directional (MA5400/SWO/4+2BI)

## BASE UNIT FEATURES

### MA5400 Base Unit (MA5400/SOLOBAS)

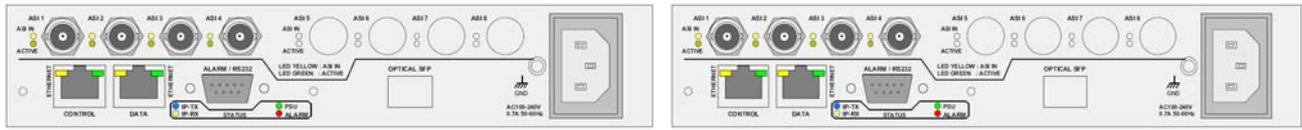
### MA5400 Double Base Unit (MA5400/DUOBAS)

### MA5400 Base Unit with 48 VDC (MA5400/SOLOBAS/48V)

The MA5400 base unit has been designed with four ASI and a Gigabit Ethernet port as standard and can be customized to meet the operator's exact needs.

- ASI to IP encapsulation or IP to ASI de-encapsulation
- Electrical gigabit (GigE) RJ45 Ethernet data interface
- Dedicated fast Ethernet control interface
- IP transmission using unicast or multicast per ASI port
- Web page control
- In or Out of band control
- Alarm relay contact
- IEEE 802.Q VLAN Tagging per ASI to IP mapping
- Multicast IGMPv2 per ASI port

**SAMPLE CONFIGURATION**



Two 1/2 width 1RU mounted in provided 19" rack mount configuration.

**SPECIFICATIONS**

**Transport Stream Interfaces**

Four DVB ASI Interfaces (Copper) BNC, maximum eight using option module

**Network Interfaces**

- 100/1000BaseT Ethernet
- 802.6 Ethernet, ARP, IPv4, RTP/UDP
- 700 Mbps usable Ethernet
- Ethernet MTU Length < 1500 (IPv4)
- RJ45 electrical connector

**Features**

- Modular architecture
- Supports ProMPEG FEC CoP3 'Forward Error Correction' (Columns and Rows)
- IEEE 802.Q VLAN Tagging
- Alarm relay contacts

**Control**

- RS-232 port (IP Address Setting)
- Alarm relay contact, 9 way D type
- 10/100BaseT Ethernet (RJ45)
- Element control via HTTP/WEB
- Configuration import/export via XML
- In-band control
- Control applications (TANDBERG nCompass)

**Physical and Power**

- Dimensions (W x D x H)**
- 1RU unit, 1/2-width 19" 210 x 300 x 44.5mm
- Two units in 19" 1RU rack space
- 19" rack mounting kit supplied
- Input Voltage**
- 110 – 120 / 220 – 240 VAC
- 48 VDC option
- Approximate Weight**
- 10kg

**Environmental Conditions**

- Operating Temperature**
- 0°C to 50°C (32°F to 122°F)
- Storage Temperature**
- 20°C to 70°C (-4°F to 158°F)
- Humidity**
- 0–90% (non-condensing)

**Compliance**

- CE**
- CE marked in accordance with 93/68/EEC (22/07/03) Directive
- UL**
- Designed for UL approval
- Safety**
- IEC60950 and EN60950
- EMC**
- EN55022, EN55024, EN6100-3-2

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