MX8400
Multiplexer

A wide choice of cost-effective designs together with integration of any new technology is strived for by all broadcasters and operators. The introduction of IP interconnectivity offers a means to reduce infrastructure costs, increase flexibility and offer a choice of system architectures.

The TANDBERG MX8400 revolutionizes IP multiplexing technology. Providing up to 8 independent multiplexed transport streams from a single enclosure, with built-in support for DVB Common Scrambling Algorithm for content protection, it facilitates numerous system architectures. Suitable for a wide range of multiplexing and re-multiplexing applications, its designed to offer system level redundancy and ease of operations. MX8400 is a feature rich product that also supports ASI input and output, ProMPEG FEC and Reflex™ statistical multiplexing. Fully integrated with nCompass, MX8400 takes full advantages of the IP technology to provide a cost effective, highly reliable and flexible solution.

PRODUCT OVERVIEW

Ideal for Primary Multiplexing in Central Head-end

The MX8400 is a new generation of multiplexer that is suitable for a wide range of multiplexing and re-multiplexing applications - including primary multiplexing in head-ends for DTH satellite, cable and terrestrial, contribution systems and re-multiplexing applications in cable and terrestrial regional head-ends.

Multiple Multiplexed Transport Stream Outputs

MX8400 offers a unique design concept that offers up to 8 independent multiplexed transport streams to reduce costs and simplify designs, enabling systems to grow as the need demands.

IP Statistical Multiplexing

TANDBERG Reflex™ statistical multiplexing is implemented to work over IP networks to provide the maximum utilization of available bit-rate. Supports both MPEG-2 SD and HD and MPEG-4 AVC SD and HD.

Enabling Cost-Effective Redundant and Resilient System Architectures

In combination with nCompass Control, the MX8400 offers a fully redundant architecture that enables implementation of cost-effective system designs. Redundant IP inputs and outputs provide data path redundancy. Support of IGMPv3 allows MX8400 to perform a multicast join and leave to further simplify system design.

Advanced Control and Monitoring Features

With nCompass Control, the MX8400 offers advanced control and monitoring features that allows for ease of use and maintenance - leading to savings through operational costs, time and labor.

Increased Reliability

The highly integrated unit facilitates the need for fewer units and thus increases the overall system reliability.

BASE UNIT FEATURES

MX8400/BAS

- MX8400 model – 2RU, 8 option slots
- Up to 8 independent multiplexed outputs
- Up to 250 Mbps for an output transport stream
- Maximum utilization of output gigabit bandwidth
- Simultaneous availability of output transport streams via IP and ASI
- Highly efficient multiplexing algorithms
- Advanced re-multiplexing
- Reflex™ statistical multiplexing
- Onboard ASI input and output as standard
- Port redundancy for Data, CA, Control and HSYNC
- Redundant HSYNC Input and output clock
- Control via TANDBERG nCompass Control system management V5.1 onwards
- SNMP remote monitoring
- IGMP v3 support

SOFTWARE OPTIONS

Additional Multiplexed Output (MX8400/SWO/MUX)

- Software license to enable each additional independent multiplexed output transport stream

DVB CA Simulcrypt Base Option (MX8400/SWO/DVBCA)

- Software license to enable the base DVBCA Simulcrypt support

Additional DVB CA System Support (MX8400/SWO/DVBCA/EXT)

- Software license to enable DVBCA Simulcrypt scrambling on each additional multiplexed output transport stream

ProMPEG FEC Option card (MX8400/SWO/PROFEC/EXT)

- Software license for each additional ProMPEG FEC stream support
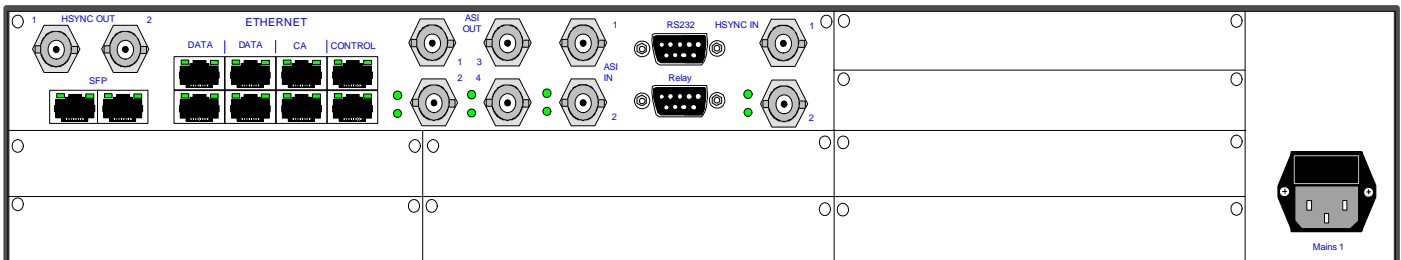
HARDWARE OPTIONS

ASI Option cards (MX8400/HWO/4ASI or MX8400/HWO/8ASI)

- Provides 4 or 8 ASI option ports respectively. Each option card can be configured as either input or output

ProMPEG FEC Option Card (MX8400/HWO/PROFEC)

- Provides ProMPEG FEC for either a single input or output transport stream

SAMPLE CONFIGURATION

SPECIFICATIONS

Inputs

Transport Stream Inputs (Standard)

Dual port Gigabit Ethernet input with 2 Electrical Ethernet and 2 SFP ports

ASI transport stream, 2 inputs

Reference Inputs

HSYNC: 2 redundant inputs

Outputs

Transport Stream Outputs (Standard)

Gigabit Ethernet: 2 Electrical Ethernet ports

ASI transport stream, 4 outputs

Reference Outputs

HSYNC, 2 redundant outputs

Multiplexing

From 1 to 8 independent multiplexed outputs from a single unit

Multiple input and output data ports

Transport stream rates up to 250 Mbps

Up to 16384 PIDs supported

Full PID remapping

Input PID tracking

MPTS and SPTS support

Removal of +/- 60mS of network jitter

Support for IGMP v3 protocol

Reflex™ statistical multiplexing of MPEG-2 SD and HD

Reflex™ statistical multiplexing of MPEG-4 AVC SD and HD

Supports up to 8 different Simulcrypt DVBCA

Control

10/100 BaseT Ethernet Control (2 ports) and CA (2 ports) interfacing

Control and set-up via nCompass Control

Diagnostics

Monitoring and redundancy via nCompass Control

Remote monitoring and diagnostics via SNMP

Physical and Power

Dimensions (W x D x H)

440 x 543 x 89mm (17.5" x 21.5" x 2RU)

Approximate Weight

9Kg (20lb)

Power Input

AC wide ranging 100 -120 VAC or 220 -240 VAC 50 - 60Hz nominal

Power Consumption

80W nominal (without any options fitted)

Environmental Conditions

Operating Temperature

0°C to +45°C (32°F to 113°F)

Relative Humidity

5 – 90%

03-2008-v5