ERICSSON 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 MX8400 revolutionizes IP multiplexing technology. Providing up to eight independent multiplexed transport streams from a single enclosure and with built-in support for DVB Common Scrambling Algorithm for content protection and BISS, MX8400 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, SFN Adaptation, SMPTE 2022 Pro-MPEG FEC and Reflex™ Statistical Multiplexing. Fully integrated with nCompass Control by Ericsson, the MX8400 takes full advantage of the IP technology to provide a cost-effective, highly reliable and flexible solution. Dual hot swap PSUs option available for additional resilience.

PRODUCT OVERVIEW

Ideal for Primary Multiplexing in Central Headend

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 headends for DTH satellite, cable and terrestrial, contribution systems and re-multiplexing applications in central and regional headends.

Multiple Multiplexed Transport Stream Outputs

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

Statistical Multiplexing

Ericsson's 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

MX8400 offers a fully redundant architecture in combination with nCompass Control that enables implementation of cost-effective and resilient system architectures; MX8400 supports redundant external clocks, Data, CA and Control ports. Support of IGMPv3 allows MX8400 to perform multicast joins and leaves 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 (FAZ 101 0114/1) and MX8400/BAS/DPS (FAZ 101 0114/31)

- MX8400 model – 2RU, eight option slots
- Up to eight independent multiplexed outputs enabled through s/w licenses
- 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 remultiplexing
- 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 nCompass Control system management V5.1 onwards
- SNMP remote monitoring
- IGMP v3 support
- BISS Scrambling

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SOFTWARE OPTIONS

Additional Multiplexed Output (MX8400/SWO/MUX, FAZ 101 0114/8)

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

DVB CA Simulcrypt Base and Additional TS (MX8400/SWO/DVBCA (FAZ 101 0114/6), MX8400/SWO/DVBCA/EXT (FAZ 101 0114/7))

- Software licenses to enable the DVBCA Simulcrypt support

SFN Adaptation (MX8400/SWO/SFN, FAZ 101 0114/10)

- Software license to allow each output transport streams configured as ETSI TS 101 191 v1.4.1 compliant SFN adaptor

SMPTE 2022 Pro-MPEG FEC (MX8400/SWO/PROFEC/EXT, FAZ 101 0114/9)

- Software license to insert SMPTE 2022-1 and SMPTE 2022-2 Pro-MPEG FEC on each output stream support

HARDWARE OPTIONS

ASI Option Cards (MX8400/HWO/4ASI (FAZ 101 0114/2) or MX8400/HWO/8ASI (FAZ 101 0114/3))

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

SMPTE 2022 Pro-MPEG FEC Option Card (MX8400/HWO/PROFEC, FAZ 101 0114/5)

- Provides SMPTE 2022-1 and SMPTE 2022-2 Pro-MPEG FEC compliant receiver for error correction on up to 32 input transport streams

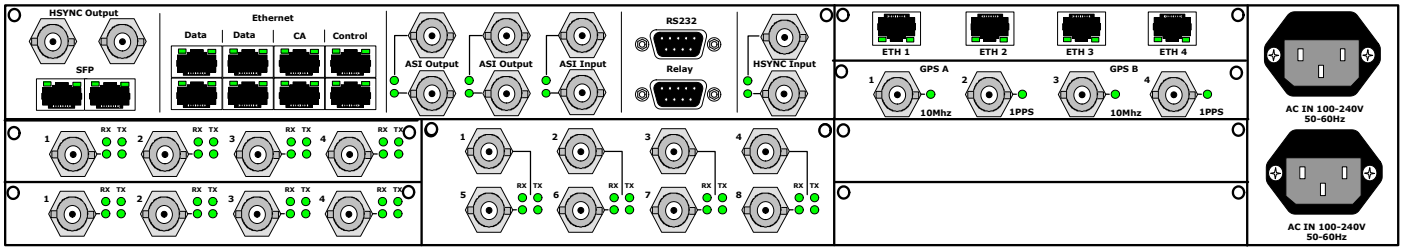
GPS Option Card (MX8400/HWO/GPS, FAZ 101 0114/4)

- For multiplexer clock synchronization with an external GPS reference and providing of 1 PPS reference to SFN adapter

Additional Power Supply (MX8400/HWO/DPS, FAZ 101 0114/34)

- Additional power supply for MX8400/BAS/DPS

SAMPLE CONFIGURATION



SPECIFICATIONS

Inputs

Transport Stream Inputs (Standard)

Dual port Gigabit Ethernet input with two Electrical Ethernet ports (RJ45)

ASI transport stream, two input ports

Reference Inputs

HSYNC: two redundant input ports

Outputs

Transport Stream Outputs (Standard)

Gigabit Ethernet: two Electrical Ethernet ports

ASI transport stream, four output ports

Reference Outputs

HSYNC, two redundant output ports

Control

Two 10/100 BaseT Ethernet ports for Control and additional two 10/100 BaseT ports for CA interfacing

Control and set-up via nCompass Control

Multiplexing

From one to eight independent multiplexed outputs from a single unit

Multiple input and output data ports

Transport stream rates up to 250 Mbps

Up to 8192 PIDs supported per output TS

Full PID remapping

Input component tracking

PID monitoring

MPTS and SPTS support

Removal of ±60 mS of IP network jitter for each incoming TS

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 24 different Simulcrypt DVBCA

Diagnostics

Monitoring and redundancy via nCompass Control by Ericsson

Remote monitoring and diagnostics via SNMP

Physical and Power

Dimensions (W x D x H)

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

Approximate Weight

9 kg (20 lbs)

Power Input

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

Power Consumption

80 Watt nominal (without any options fitted)

Environmental Conditions

Operating Temperature

0°C to 45°C (32°F to 113°F)

Relative Humidity

5% to 90%

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