

MD8000 – Chassis Overview

Local Video Access Platform

KEY FUNCTIONS:

- Interfaces for DVB-ASI, SDI, HD-SDI, JPEG2000, E1 / T1, 10 / 100 / 1000 BaseT and Audio
- Supports multicast and multiple unicast of all video and data streams
- Supports SONET / SDH and IP / Ethernet Trunk interfaces

KEY FEATURES:

- 100% QoS
- Core SONET / SDH compatibility
- Integration with IP / MPLS transport systems
- Hitless / Seamless Switching
- SNMP control and management

APPLICATIONS:

- Carrier Class Media Networks
- High Performance Studio Interconnects
- Flawless Contribution Video Transport
- Reliable Content Delivery System
- Integrated Live, Recorded and File-Based Communications

GENERAL CHASSIS FEATURES:

- 10Gb connectivity per slot
- All modules are hot-swappable
- Mid plane design with no active components on rear connectors
- Cable management for all modules from behind
- Power consumption: 30W per board, 80W per SWCNT-board
- Add/Drop/Pass Capability
- One to any multicast capability
- Multiple Unicast for non multicast enabled networks
- SFP Modules support DDS

A powerful, cost effective video and data networking solution supporting all current and future MD8000 Line and Trunk cards. Services range from low rate multipoint DVB-ASI, JPEG2000 for SD/HD to uncompressed HD-SDI over 10G LAN/WAN PHY.MPTE 259M). The JPEG2000 video module is available in two different versions, a standard JPEG2000 version and a JPEG2000 2022 version which is compliant with the SMPTE 2022 standard.

The MD8000 system is based on existing Ethernet standards, as well as GFP/SONET/SDH Standards. In addition, all video interfaces are standards compliant to SMPTE's 2022 family of video over IP standards. This includes both encapsulation and FEC. SDI, HD-SDI, DVB-ASI and JPEG2000 encapsulated signals will all follow these standards.

Multicast to multiple destination transmission is supported and in cases with non-multicast enabled networks, multiple unicasts of the same stream can be initiated provided the bandwidth of the NIC port is not exceeded.

The MD8000 family sets the stage for convergence between SONET/SDH and IP based networks with the use of the ITU-T G.7041 Generic Framing Protocol. GFP provides a gateway between Legacy SONET/SDH infrastructure and next generation IP/Ethernet networks.

3 different available Chassis types offer a cost effective configuration:

The **MD8000EX** Chassis [7RU] providing redundant PSU and Switch Controllers and 24 non-blocking slots of 10Gb connectivity each.

- 240Gbps Non-blocking L2 Switch Fabric
- All 24 slots available for either Trunk or access modules



The **MD8000** Chassis [4RU] also equipable with redundant PSU and Switch Controllers having 9 non-blocking Slots of 10Gb connectivity each.

- 90Gbps Non-blocking L2 Switch Fabric
- 9 Slots available for access and trunk modules



The **MD8000SX** Chassis [2RU] with redundant PSU, single Switch Controller and 6 non-blocking Slots of 10Gb connectivity each.

- 60Gbps Non-blocking L2 Switch Fabric
- 6 Slots available for access and trunk modules



SPECIFICATIONS

	MD8000 SX	MD8000	MD8000 EX
DIMENSIONS	2 RU for 19" rack mount H: 3.5" / 8.89 cm W: 17.5" / 44.45 cm D: 22.0" / 55.88 cm	4 RU for 19" rack mount H: 7" / 17.78 cm W: 17.5" / 44.45 cm D: 22.0" / 55.88 cm	7 RU for 19" rack mount H: 12.25" / 31.12 cm W: 17.5" / 44.45 cm D: 22.0" / 55.88 cm
WEIGHT	33 lb. / 15 kg.	42 lb. / 19.2 kg.	60 lb. / 27 kg.
AMBIENT OPERATING TEMPERATURE	0ø C to +55ø C 32ø F to 131ø F		
SUBMINIATURE D	External Alarm Output		
POWER SUPPLY UNITS	2 slots for redundant PSU		
INPUT VOLTAGE	80 to 240 VAC (50/60 Hz)		
POWER CONSUMPTION	80W per SWNT-board 30W per module		
IP SWITCH CONTROLLER SLOTS	2 slots for redundant IP Switch Controllers (except 2 RU chassis)		
1 x RJ45	10/100 BaseT for Management Connection		
1 x BNC	Black Burst Signals Input Cable		
1 x Subminiature D	External Clock Input		

ORDERING INFORMATION

MD8000 EX - 7 RU Chassis	ORDER NUMBER	ORDER CODE
24 slot user interface (7RU)	MD80T002	MD8000EX Chassis (EU)
24+user interface with DC power input	MD80T006	MD8000EX Chassis (DC)
AC power supply	MDPS0010	MD6U1500-PS (EU)
48V DC power supply	MDPS0014	MD6U1000-PS (DC)
24 port x 10Gb switch module	MD803004	SWCNT24-F-SD
MD8000 - 4 RU Chassis		
9+3 user interface	MD80T001	MD8000 Chassis (EU)
9+3 user interface with DC power input	MD80T005	MD8000 Chassis (DC)
AC power supply	MDPS0011	MD-4U1000-PS (EU)
48V DC power supply	MDPS0015	MD-4U5000-PS (DC)
9 port x 10Gb switch module	MD803003	SWCNT9-F-SD
MD8000 SX - 2 RU Chassis		
6 user interface	MD80T009	MD8000SX Chassis (EU)
AC power supply	MDPS0016	MD-1U800-PS

Media Links (Headquarters)
Kawasaki Tech Center 18F
580-16 Horikawa-cho,
Saiwai-ku, Kawasaki-shi,
Kanagawa 212-0013 Japan
Phone: +81 44-589-3440
query@medialinks.co.jp

Media Links Americas
431-C Hayden Station Road
Windsor, CT 06095
USA
Phone: +1 860-206-9163
Fax: +1 860-206-9165
info@medialinks.com

Media Links Australia
2-12 Rokeby Street,
Collingwood, VIC 3066,
Australia
Phone: +61 3-9017-0175
Fax: +61 3-8456-6339
info@medialinksaustralia.com.au

Media Links EMEA
Suite 18242
PO Box 6945
London W1A 6US
United Kingdom
Phone: +44 (0)20 7096 9569
emea_info@medialinks.com