



MEDIA LINKS®

Media Defined Networking

Description

Now with 4K JPEG-XS, MDP3020 MAX is a compact (half rack) IP media gateway for the network edge, ideal for portable, protected, remotely configurable applications.

Examples include Local Access Point to Point connections, Contribution quality broadcast feeds, remote production environments, intra studio TV exchange networks and more.

Features & Benefits

With its small footprint, the MDP3020 MAX can be used in simple pairs or as a modular building block that can be combined and recombined in any arrangement with other Media Links transport products to suit your network need. The device offers multi format support for 4K, 3G, HD, DVB-ASI and SD-SDI video, plus audio and data.

The MAX features multiple SDI inputs/outputs, high capacity dual trunk interfaces and upgradable functionality.

Technical overview

- Compatible with Xscend, MD8000 and MDX platforms
- Standards based (including 2022-2/6/7, TR-01/07)
- Simultaneous video, audio and data services
- Two 10GbE / 1GbE trunk interfaces
- In/Out Band Management
- Up to two 10Gb/1Gb Data ports
- Resolutions up to 4K (depending on configuration)
- On board provisioning interface

Supports:

- Seamless (Hitless) Protection Switching of Video, Audio and Data
- 10GbE x 2 w/ Hitless Protection
- 1 GbE x 2 w/Auto and Hitless Protection
- 12G-SDI and Quad Link 3G-SDI
- Frame Synchronization

Related Products

Xscend®, MD8000, MDX Switches,
ProMD EMS Software

DATASHEET

MDP3020 MAX

IP Media Gateway

The MDP3020 MAX is an advanced, customizable, and remotely configurable standalone IP media gateway for video, audio, and data transport applications.

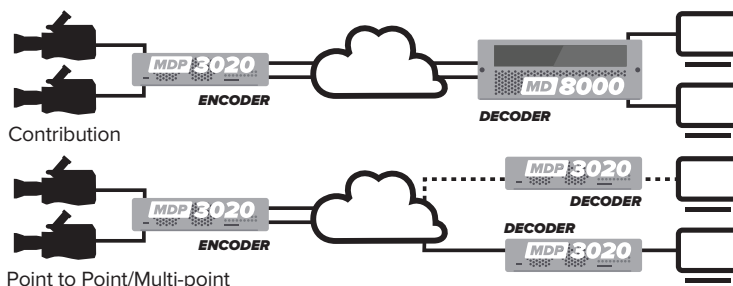
Highly configurable, easy to deploy

With a compact half-1RU form-factor the MAX is engineered to deliver the widest range of re-configurable application workflows with support for up to 4K as well as uncompressed 3G, HD, and SD video, 16 channel 8 pair AES audio, and protected data connectivity and transfer. The device is available with either optical or electrical interfaces, and is supported by a range of capabilities that focus on quick and efficient install, turn-up and modification.

JPEG2000 2K Electrical or Optical	JPEG-XS 2K Electrical or Optical	JPEG-XS 4K Electrical
2x JPEG2000 or Uncompressed Video plus 2x Data	4x JPEG-XS or Uncompressed Video plus 1x Data	2x JPEG-XS or Uncompressed Video plus 1x Data
3G/HD/SD-SDI/DVB-ASI	3G/HD/SD-SDI/DVB-ASI (Uncompressed SD-SDI only)	4K UHD (12G-SDI or Quad Link 3G-SDI)
Dual 10G/1G Trunks	Dual 10G/1G Trunks	Dual 10G/1G Trunks

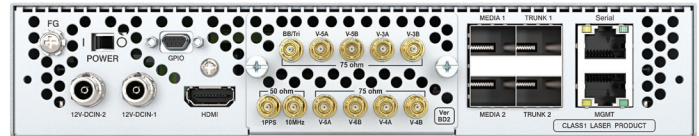
MDP3020 MAX example applications

The MDP3020 is ideally suited to smaller scale remote production, MD8000 edge, TV distribution, or any local point-to-point application where economical IP media transport/conversion is required.

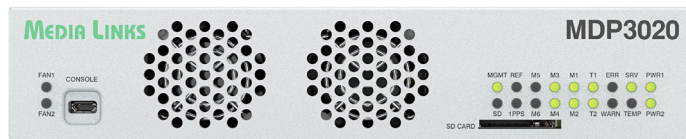


Service Specifications & Supported Parameters

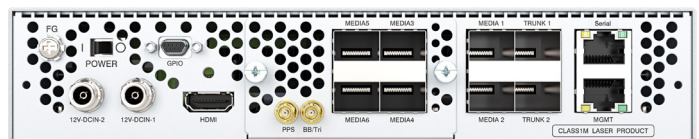
MDP3020 MAX™ Rear View with Electrical module
Optional configuration for JPEG2000 or JPEG-XS versions
4K JPEG-XS Video available only with Electrical module



MDP3020 MAX™ Front View



MDP3020 MAX™ Rear View with Optical module
Optional configuration for 2K JPEG2000 or JPEG-XS versions only



Video

- SDI or ASI inputs
- JPEG2000 – VSF TR-01 Compression or JPEG-XS – VSF TR-07 Compression
- SMPTE 2022-6 or 2022-2 RTP encapsulation
- SMPTE 2022-5 or 2022-1 Tx FEC
- Internal color bar generator

Audio

- 16 audio channels (8 AES)
- SDI input signal audio transmission (Transmits audio based on SMPTE302M)
- Internal audio test generator (1 KHz tone)
- Ancillary data transmission
- MADI using SFP's on Media ports 1 or 2

Transport

- MPEG2-TS streams transmission
- SDI Standard (SMPTE 259M/292M/424M)
- SDI over IP Standard (SMPTE 2022-5/6)
- Uncompressed and/or compressed transmission of two 3G/HD/SD-SDI or DVB-ASI video streams using the JPEG2000 2K version
- Uncompressed and/or compressed transmission of four 3G/HD/SD-SDI or DVB-ASI video streams using the JPEG-XS 2K version (Uncompressed SD-SDI only)
- Compressed transmission (only) of two 12G-SDI or one Quad-link 4K video stream using the JPEG-XS 4K version
- Hitless protection conforming to SMPTE 2022-7
- Frame Synchronizer function with JPEG-XS version (Black Burst or Tri-Sync Input)

Interfaces

- Available with either electric (BNC, up to 12G-SDI) or optical
- 2 x video input/output ports (Max 2 total) with J2K version / 4 x video input/output ports with JPEG-XS version including monitor ports for each service with latest BNC Rear
- Dual 10Gbps trunks
- Up to two 1G/10G Data Ports. 9.3 Gbps Total throughput using Hitless Data
- Built-in HDMI output port, supports HDMI 2.0/HDCP 2.2
- Front panel micro-USB serial management port @ 115,200bps
- RJ-45 Ethernet console port

Management

- Management and configuration files support on SD Card
- Self-diagnostics
- LLDP for auto-discovery
- Multi-level secure user access
- Front panel status and error LEDs
- Rapid profile-based configuration and service provisioning
- Operates under ProMD-EMS software control
- Built-in ETR 101290 monitoring

Protocols

- IPv4
- HTTP for web management
- SSH (Telnet) command line interface (CLI)
- SNMPv2c, including traps
- Syslog
- NTP
- Ping
- IGMP
- ARP

Media Links Ecosystem Compatibility

- MD8000 STTX/RX Video Cards
- MD8000 Multiport Ethernet data cards
- MDX Core and Aggregation Switches

Physical

- Form Factor – 1RU, Half-rack width; 2 units per standard 19" rack width
- Dimensions: 215 mm (W) x 42 mm (H) x 300 mm (D) / 8.46" (W) x 1.65" (H) x 11.81" (D)
- Weight: 2.7Kg / 5.95lbs
- Power Consumption: 108VA or less
- Supports dual power supplies for redundancy

Regulatory

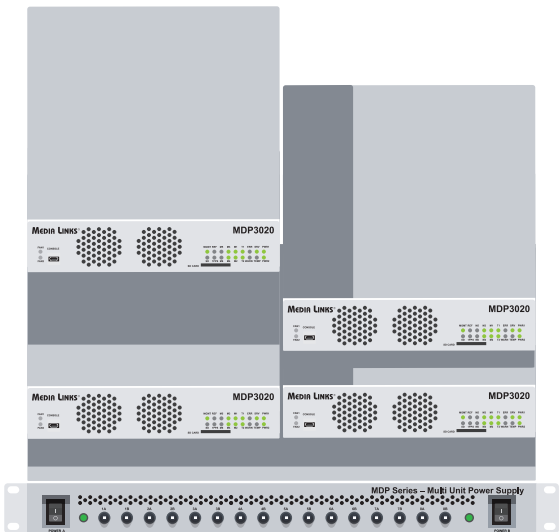
- CFR 47 FCC part 15 Subpart B Class A (USA)
- EN 55032:2012/AC:2013 Class A ITE (EU)
- NEBS Level 1
- ICES-003 Issue4 Class A (Canada)
- UL 60950-1-07, Second edition
- CSA 60950-1-07, Second edition
- IEC 60950-1:2005 (Second Edition)+Am 1:2009+Am2:2013
- RoHS compliant

Applications

- SDI/IP, IP/IP Media Conversions
- Contribution Quality Broadcast Feeds
- Studio-to-Studio Media Exchange
- Remote Production and OB Van Environments
- Transmission equipment for distribution networks w/extended reliability requirements & synchronization

About the MDPSeries of products

The MDPSeries offers a Modular System of encoders, decoders and accessories you can easily combine together to create transportable, quick and agile deployments at the edge that deliver Video, Audio and Data transport over IP-based networks. All MDP devices come with proven QoS including Hitless protection and redundant power supply support.

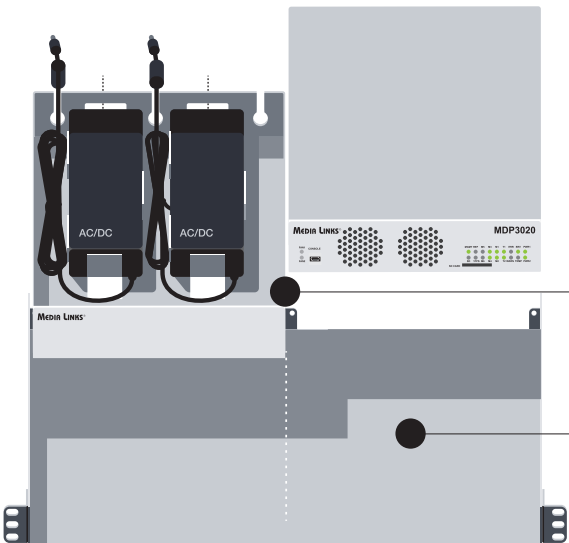


MDP 3020 MAX™

MDP3020 MAX™
Up to 4K Video, Audio or Data. Dual 10G Trunks

	Optical Rear Module	Electrical Rear Module	
JPEG2000 2K			3G/HD/SD-SDI/DVB-ASI 2x JPEG2000 or Uncompressed Video plus 2x data
JPEG-XS 2K			3G/HD/SD-SDI/DVB-ASI 4x JPEG-XS or Uncompressed Video plus 1x Data
JPEG-XS 4K			4K-UHD 2x 12G-SDI or 1x Quad Link 3G-SDI Video plus 1x Data (Electrical BNC only)

MDPSeries Multi-unit Power Supply Module
Power supply unit for up to 8 MDPSeries devices with redundancy



MDP Series Power Supply Holder Module
Mount 2x Power supplies alongside your MDP Series device for
power redundancy

MDPSeries Rack Mount Module
Mount your MDP Series devices to a traditional 19" rack enclosure.
Supports any module configuration and/or Power Supply Holder Module

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 EMEA
Suite 18242, PO Box 6945,
London W1A 6US
UK
Phone: +44 207 096 9569
emea_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

www.medialinks.com

MEDIA LINKS®
Media Defined Networking®