

# MDP3040 – IP Media Gateway WITH 4K UHD TICO COMPRESSION

**Compact half rack 4K UHD Encoder/Decoder with Optical Interface**

### Key facts:

- Two 12G-SDI In/Out ports
- Visually lossless TICO video compression at 3Gbps
- Frame Synchronization (Genlock)
- Compatible with MDX switches & MD8000 configured as a switch
- Pass-through audio and ancillary data
- BB (or Tri-sync – future feature) external timing source
- Low latency
- TICO over 3G-SDI encode output
- Dual 10GbE trunk interfaces
- QoS Traffic prioritization (VLAN Priority)
- Redundant power supplies
- Supports:
  - Two 4K UHD video Tx or Rx services
  - Hitless video, SMPTE 2022-7
  - Forward Error Correction, SMPTE 2022-5
  - RTP encapsulation, SMPTE 2022-6

### Key Features:

- Compact and portable - small footprint
- 12G-SDI and HDMI output interfaces
- High capacity 10G trunk interfaces
- Micro-BNC (future feature) rear module for 12G-SDI In/Out
- Internal ID text/Color Bar generator

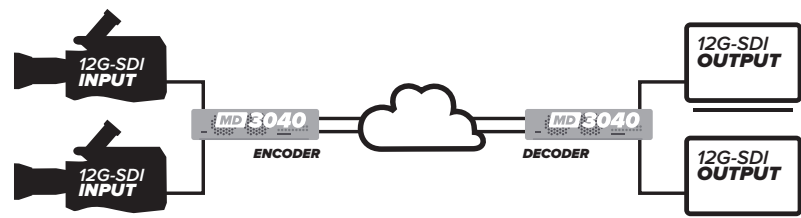


The Media Links MDP3040 is a dual channel 4K UHD edge broadcast encoder/decoder that breaks new ground in the areas of performance, portability, and price.

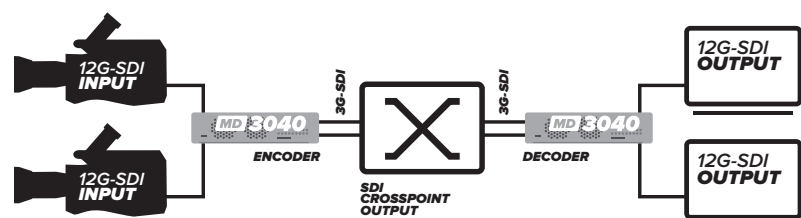
Using advanced and efficient TICO compression, the MDP3040 converts incoming 12G-SDI video signals into IP encapsulated 3G-SDI streams that can be sent over WAN or studio LAN's for decoding at the far end.

Visually lossless video quality and low latency add to the unit's appeal for demanding broadcast applications. As with all of Media Links' products, the unit is built for high reliability and features robust Hitless protection over dual 10 Gbps trunks, Forward Error Correction, and dual power supplies.

The MDP3040 can also convert 12G-SDI feeds into TICO compressed 3G-SDI outputs, making it ideal for sending high bandwidth 4K signals over SDI baseband studio networks. The unit's small form factor and portability make it ideal for smaller venues and short run events as well as space constrained locations such as OB trucks and broadcast studios.



4K Contribution WAN or Local Point-to-Point



4K UHD to 3G-SDI Conversion using TICO



## SERVICE SPECIFICATIONS & SUPPORTED PARAMETERS

### Video

- 2x 12G-SDI 4K inputs or outputs, frame rate auto-detection
- TICO 4:1 compression, Profile 2, visually lossless, 2160p59.94 / 2160p50
- 4:2:2, 10 bits
- Frame synchronization
- Internal color bar generator
- ID Text generator

### Audio

- Pass-through audio, up to 16 channels
- Internal audio test generator (1 KHz tone)
- Ancillary data pass through

### Transport

- TICO-over-IP transport, SMPTE RDD35
- SMPTE 2022-6 RTP encapsulation, transparent mode
- SMPTE 2022-5 Tx FEC
- Constant Bit Rate (CBR)
- Data transport is not supported

### Interfaces

- 2x 4K 12G-SDI Video input or output ports, micro-BNC (electrical), 75 ohm
- Dual 10Gbps trunks, SFP+ (MSA)
- BB (or Tri-sync – future feature)
- Genlock timing, 1PPS (future feature)
- Built-in HDMI output port, supports HDMI 2.0/HDCP 2.2
- Front panel micro-USB serial port
- RJ45 Ethernet console port (MGMT)

### Management

- Configuration and log message storage on SD memory card
- Self-diagnostics (future feature)
- LLDP for auto-discovery
- Front panel status and error LEDs
- Rapid profile-based configuration and service provisioning

### Protocols

- IPv4
- HTTP for web management
- SSH
- SNMPv1, including traps
- Syslog
- NTP and Time Setting

### Physical

- Form Factor – 1RU, Half-rack width; 2 units per standard 19" rack width
- Dimensions – 215 mm(W) x 42mm (H) x 300 mm (D); 8.46" (W) x 1.6" (H) x 11.81" (D)
- Weight – 2.7Kg / 5.95 lbs
- Power Consumption – 96VA or less
- Supports dual power supplies for redundancy
- 1RU rackmount kit for two side-by-side units
- 1RU multi unit power supply available

### 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, 2nd edition
- CSA 60950-1-07, 2nd edition
- IEC 60950-1:2005(Second Edition) +Am 1:2009+Am2:2013
- RoHS compliant

### Applications

- Local access 4K Point-to-Point
- Contribution Quality Broadcast Feeds
- Portable, low cost network edge device
- 4K UHD to 3G-SDI conversion for SDI baseband transport and switching
- Trunk/backbone bandwidth conservation

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