



MX/HD-SDI-3G

Transmit HD-SDI-3G signals over Fiber

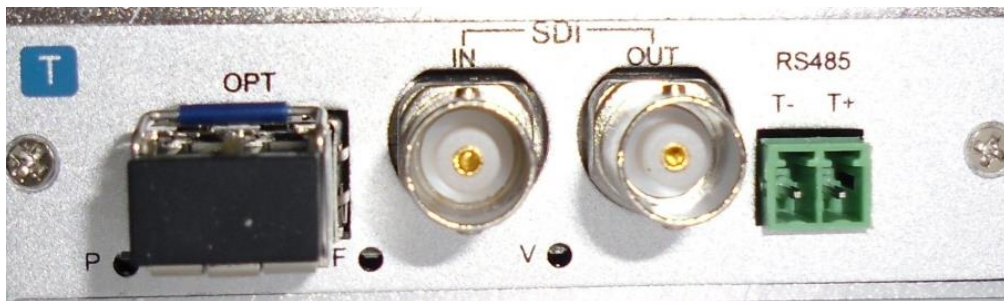
Key Features

- Transmit ASI or SDI signal over one single-mode Fiber
- Support data rate from 19.4Mb/s to 3Gb/s
- SMPTE 424M, SMPTE 292M, SMPTE 344M and SMPTE 259M compliant
- Support SMPTE 259M, SMPTE297M, SMPTE305M, SMPTE310M format and up to 1.485Gbps, and DVB-ASI (270Mb/s) formats for HD-SDI
- Transmitter and Receiver link status LED indicators
- Plug and Play, Easy to use, no configuration needed
- Loop Through SDI connector included for monitoring
- Available in 1550nm and standard ITU CWDM wavelengths providing efficient use of fiber bandwidth
- Transmission distance on the fiber is up to 40Km without relay (40Km standard, 80km available)
- Convenient 19" 1RU Rack Mount Chassis Dimensions 17.25" X 9.5" X 1.75" with AC Power Supply. Holds up to 4 cards. A combination of up to 4 transmitter or receiver cards may be installed into chassis.



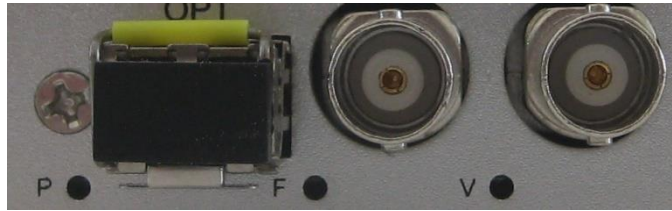
The MX/HD-SDI-3G Transmitters and Receivers are used to transport High Definition Digital signals over fiber optic cable. These units support DVB-ASI, HD-SDI, SD-SDI and 3GHD-SDI signals with nominal data rates up to 3 Gbps.

All units have SFP based optics, and come standard with SFP's supporting 40km fiber distances (80km available). Various wavelength CWDM SFP's are available as well.



High Definition Serial Digital Interface (HD-SDI) is standardized in SMPTE 292M and provides a nominal data rate of 3.0 Gbps. Video formats supported are 720p ,1080i and 1080p. Full 1080p 50/60 Hz formatting is supported by SMPTE 424M.

SMPTE 424M is also commonly referred to as 3G-HD.



Indicates the unit is powered on

Indicates sufficient optical input level is present (not functional on transmitter)

Indicates digital video signal is present

Transmitter will only have optical output when a compliant digital video signal is present (ASI, SDI, SMPT..) Transmitter will have red light "P" when powered on, and red light "V" when video signal is present ("F" light not used on transmitter)

Receiver should have between -3 to -18 dBm optical input level for proper operation *applies to 40km SFP's Receiver will have green light on "P" when powered on, green light on "F" when proper optical level is present, green light on "V" when digital video signal is detected

Features:

- * Equalized serial digital video from 143 Mbps to 2.97 Gbps
- * Reclocked serial digital video from 270 Mbps to 2.97 Gbps
- * Support SD/HD/3G-SDI and ASI signals
- * Supports multistream ASI signals
- * Plug-and-play
- * Available in eight CWDM wavelengths 1470, 1490, 1510, 1530, 1550, 1570, 1590, and 1610nm
- * Long transmission capability, standard 40 km, up to 80 km available
- * SFP modules offer easy product maintenance and configuration flexibility
- * SFP modules are fully hot swappable
- * CLASS1 laser safety product

Specification

Video I/O Interface

Signal: SD / HD / 3G-SDI, ASI
 Cable length: 3G: 35m @2.97 Gbps/RG7
 HD: 130 m @ 1.5 Gbps/RG7
 SD: 380 m @ 270 Mbps/RG7
 Return loss: >10 dB up to 2.97 GHz
 Connector: 75Ω BNC

Optical Output

Signal: Uncooled DFB Laser Diode
 Wavelength: 1470, 1490, 1510, 1530, 1550, 1570, 1590, and 1610nm
 Output power: -3.0 to +2.0 dBm typical (for 40km units)
 Fiber type: Single mode
 Connector: LC/PC
 Processing delay: 15 ns

Optical Input

Signal: Optical Receiver
 Wavelength: 1200~1610nm
 Sensitivity: -18.0 dBm (for 40km units)
 Fiber type: Single mode
 Connector: Optical LC/PC
 Processing delay: 15 ns

General

Input Voltage: 120VAC
 Operating voltage: 5V DC
 Operating Current: 300mA
 Operating temperature: -20~65°C (-4~+149 °F)
 Operating Humidity: 0~95%

Applications

Digital Video Source:

- ASI
- HD-SDI- 3G
- HD-SDI
- SD-SDI

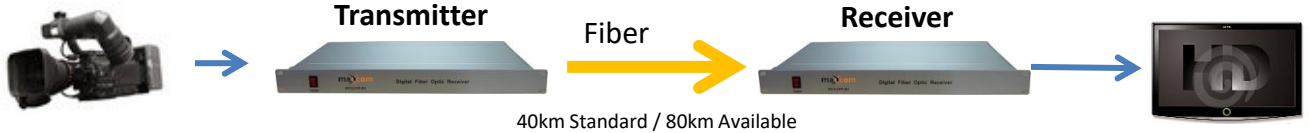
Automatically accepts, detects and transmits any of these sources

Transmit ASI or HD/SDI or SD/SDI Signals

Supports HD and SD, Multi-Stream ASI



Receiving Equipment Headend



- SFB Based Optics (included)
- Standard distance 40Km, 80Km Available
- 8 CWDM Wavelengths Available
- 1470nm to 1610nm

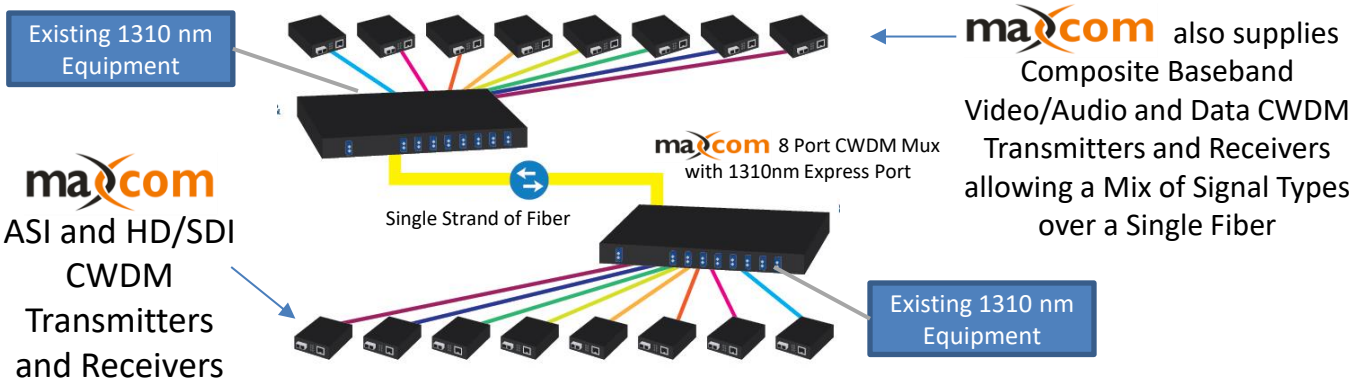


Comes with standard 4 slot chassis

Output:

- ASI
- HD-SDI- 3G
- HD-SDI
- SD-SDI

Upgrade your Existing PEG and Broadcast links to digital with out using additional fiber, and keep your existing equipment in place. Our ASI, HD-SDI , and Analog Video products come with CWDM Wavelengths, and our Fiber Muxes come with 1310nm express ports allowing you to keep your existing transport system in place while adding these services to the same fiber strand. Supports multiple ASI and/or SDI Streams.



maxcom also supplies Composite Baseband Video/Audio and Data CWDM Transmitters and Receivers allowing a Mix of Signal Types over a Single Fiber

maxcom ASI or SDI over Fiber

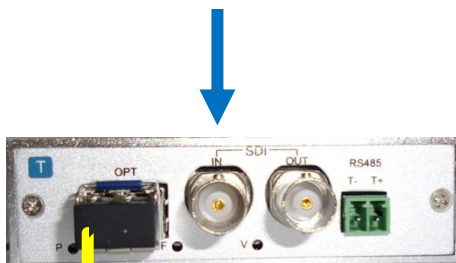
Video Source input:

- HD-SDI- 3G
- HD-SDI
- SD-SDI
- ASI



Video Source output:
(matches input type)

- HD-SDI- 3G
- HD-SDI
- SD-SDI
- ASI



Up to 110km fiber distance



Optics are SFP module based and are available in CWDM and DWDM Wavelengths

* A Mux and Demux may be added on each side of the fiber strand to add additional wavelengths

