

SMPTE SDI 3G-SDI HD-SDI Video SFP MSA

<b>Video SMPTE SFP, transceiver type</b>	<b>Type</b>	<b>Distance @ Worst condition</b>
EOLS-1330-10-D	Tranceiver, MSA	10km
EOLS-1330-35-D	Tranceiver, MSA	35km
EOLS-1330-50-D	Tranceiver, MSA	35km
EOLS-1530-50-D	Tranceiver, MSA	50km
EOLS-1530-80-D	Tranceiver, MSA	80km

<b>Video SMPTE SFP, CWDM transceiver</b>	<b>Type</b>	<b>Distance @ Worst condition</b>
EOLS-1630-18XD Series	CWDM Tranceiver, MSA	Link budget : 18dB

EOLS-1630-28XD Series CWDM Transceiver, MSA Link budget : 28dB

**Video SMPTE SFP, DWDM transceiver**Type Distance @ Worst condition

EOLS-1630-18XXD Series DWDM Transceiver, MSA Link budget : 18dB

EOLS-1630-28XXD Series DWDM Transceiver, MSA Link budget : 28dB

**Video SMPTE SFP, single TX** Type Distance @ Worst condition

EOLS-1330-T-10-D Single Transmitter, MSA 10km

EOLS-1330-T-35-D Single Transmitter, MSA 35km

EOLS-1530-T-50-D Single Transmitter, MSA 50km

**Video SMPTE SFP, single CWDM TX**      Type      Distance @ Worst condition

EOLS-1630-T-XD Series      CWDM Single Transmitter, MSA      35km

**Video SMPTE SFP, single RX**      Type      Distance @ Worst condition

EOLS-30-R-D      Single Receiver, MSA      10km

EOLS-30-RH-D      Single Receiver, MSA      80km

**Video SMPTE SFP, BIDI transceiver**      Type      Distance @ Worst condition

EOLS-BI1330-10-D      Transceiver, MSA      10km

EOLS-BI1630-10-LCD      Transceiver, MSA      10km

EOLS-BI1530-10-D      Transceiver, MSA      10km



## Fiber Optic Transport of HD/SD-SDI

It is becoming increasingly necessary and economically feasible to transport HD/SD-SDI signals over fiber instead of coaxial cable. The reasons are many including increased bandwidth, lower cabling cost, noise immunity and greater transmission distances. Prior to 2006, several standards were used to define how SDI signals were to be transported over fiber. Now, there is one standard to define the many aspects and parameters of the fiber optic interface for the transmission and reception of SDI over fiber.

**SMPTE 297-2006:** This standard defines the fiber optic interface for the transmission and

reception of SDI signals at various data rates:

**SMPTE 259M:** 143 through 360 Mbps

**SMPTE 344M:** 540 Mbps

**SMPTE 292:** 1.485 and 1.485/1.001 Gbps

**SMPTE 424M:** 2.97 and 2.97/1.001 Gbps

SMPTE 297-2006 defines many parameters of the optical interface for both a transmitting and receiving device with a fiber optic interface. The input to a fiber Transmitter can be any one of the SMPTE coaxial-based standards indicated above. On the Receiver, the output will be of the same coaxial interface type of the Transmitter. The significance of the new 297 standard is that it allows for interoperability between fiber optic devices from different manufacturers that comply with the standard.