



FiberLink® 3380 3G/HD/SD-SDI & Analog Audio Series

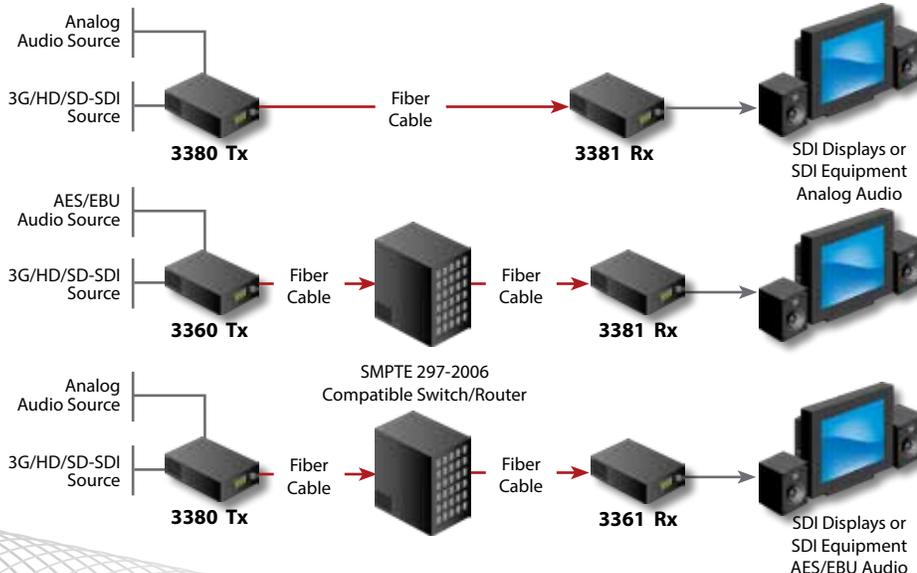


Broadcast quality 3G/HD/SD-SDI & line level analog audio transmission over one single mode or multimode fiber with full SMPTE compliance.

The FiberLink 3380 Series allows you to transmit 3G, HD or SD-SDI as per SMPTE 424M-2006, 292 and 259 with the ability to embed up to 4 channels (2 pairs) of analog line level audio. Convenient switches on the 3380 Series transmitter allow the operator to embed each of the two pairs of audio independently, to strip previously serialized audio, or to pass it through without modification. At the receive end of the fiber optic link, the operator can decide which audio pairs they need de-embedded.

Audio signals are not required to operate the FiberLink 3380 link and it can be used as a stand-alone 3G/HD/SD-SDI optical link. Previously serialized data is left intact throughout the entire transmission process and the 3380 Series is immune to pathological signals over the entire budget link and operating temperature range.

Signals are equalized and re-clocked prior to fiber optic transmission and the 3381 receiver features a re-clocked SDI output.



FEATURES

3G/HD/SD-SDI & 4 Channels of Analog Audio over Fiber

Ideal Applications: Broadcast or corporate studios, OB Vans, Rental & Staging, auditoriums, stadiums and theaters, airport or transportation hubs, distance learning, surgical or medical imaging and more!

Inserts up to 4 channels (2 pairs) of Analog Line Level audio

Balanced and unbalanced audio support
Transmitter can pass existing embedded audio or insert audio on a pair by pair basis

Compatible with FiberLink 3360 for conversion between digital and analog audio.

Signal is equalized and re-clocked prior to fiber optic transmission

Receiver features a re-clocked SDI output

Designed for fiber optic interoperability with other SMPTE 297-2006 fiber optic compliant devices up to 2.97 Gbps

Immunity to pathological patterns over entire link budget and operating temperature range

Compliant with SMPTE 259M-2006, 292-2006, 424M-2006, 297-2006, 272M, 291M, 299-2008

Supports both Single Mode and Multimode (62.5u & 50u) fiber types

Supports 3G/HD/SD-SDI inputs with or without embedded audio and data

14 dB Optical Link Budget @ 2.97 Gbps

Wide operating temperature range:
-10° C to +50° C

Available in box version only

Available XLR breakout cables

SPECIFICATIONS

General Specifications

Indicators	Power, Data Rate lock (3G, HD, SD), Audio Status
Box Version Dimensions	6.5 W x 1.15 H x 8 L (inches) 165 W x 29 H x 203 L (mm)
Weight	approx. 1 lb.; 0.45 kg
Power	9-24 volts DC or 24 volts AC 3380: 8.6 Watts, 29.3 BTU/Hr 3381: 10.3 Watts, 35.1 BTU/Hr
Operating Temperature	-10° C to +50° C
MTBF	39,000 Hours

FiberLink 3380/3381 Series Audio Specifications

Number of Audio Channels	4; Input balanced or unbalanced Output: balanced, unbalanced loads supported with a 6 dB loss
Embedding (3380)	Selectable by group & pair; SMPTE compliant
SDI Pre-Embedded Audio	All channels supported for pass-through. Pairs may be passed or embedded and are selectable on pair by pair basis
De-Embedding (3381)	Selectable by group and channel Channels may be muted or outputted on a channel by channel basis
Frequency Response	20 Hz - 20 kHz, +0/-0.5 dB
Bits-per-Sample/Sampling Rate	24 bits; 48 kHz
Maximum Audio Level	+24 dBu
SNR (A-Weighted)	105 dB
THD+N	0.002%, 20 Hz - 20 kHz
Channel Phase Differential	+0.05o
Crosstalk	Min. 100 dB (1 kHz)
Input Impedance	600 Ohms terminated; >24 k Ohms unterminated
Output Impedance	50 Ohms
Switches	TX: Dip switches to select input termination TX/RX: Select one of four groups TX: Embed/Pass on a per-pair basis RX: Output/Mute on a per-channel basis
Connector	DB-25F, TASCAM Configuration, Channels 1-4

Operating Loss Budget and Maximum Usable Distance*

Fiber Type	Loss(dB)	Data Rate	Distance
Single Mode	0-14	2.97 Gbps	30 km
	0-17	1.485 Gbps	48 km
	0-20	270 Mbps	50 km
Multimode (62.5u)	0-14	2.97 Gbps	.8 km
	0-17	1.485 Gbps	1 km
	0-20	270 Mbps	2.5 km
Multimode (50u)	0-14	2.97 Gbps	1 km
	0-17	.485 Gbps	1.3 km
	0-20	270 Mbps	3 km

*Distance specifications are approximate, based upon connecting a 3380 Transmitter to a 3381 Receiver, and are not guaranteed. Artel cannot estimate or guarantee operating loss budgets when the 3380 Series is used with other, non-FiberLink devices. Operating loss budget must not be exceeded.

FiberLink 3380 Transmitter: Serial Video BNC Input

Number of Inputs	1
Data Rate Range	270 Mbps to 2.97 Gbps
Supported Standards	SMPTE 259M, 292, 424M-2006
Re-clocked Data Rates	270 Mbps (SMPTE 259M), 1.485 Gbps (SMPTE 292), 2.97 Gbps (SMPTE 424M-2006)

CS206-3380_B

FiberLink 3380 Transmitter: Serial Video BNC Input, Cont.

Equalization	Automatic up to 100m of Belden 1694A at 3.0 Gbps, 200m at 1.485 Gbps and 350m at 270 Mbps
Return Loss	>10dB up to 2.97 Gbps

FiberLink 3380 Transmitter: Optical Output

SMPTE 297-2006 Labeling	L-PC-ABCD-1310
Connector	ST
Wavelength	1310nm (nominal)
Emmitter Type	FP Laser
Output Power (nominal)	-3.5 dBm at 270 Mbps; -3.5 dBm at 1.485 Gbps; -3.5 dBm at 2.97 Gbps
Re-clocking	At 270 Mbps, 1.485 Gbps & 2.97 Gbps

FiberLink 3381 Receiver: Fiber Optic Input

SMPTE 297-2006 Labeling	PC-ABCD-1310-1550
Connector	ST
Wavelength	1100 - 1620 nm
Minimum Input Sensitivity	-17 dBm at 2.97 Gbps; -20 dBm at 1.485 Gbps -21 dBm at 270 Mbps;
Maximum Input Power	0 dBm

FiberLink 3381 Receiver: Serial Video BNC Output

Number of Outputs	1
Signal Level	800mV ± 10%
DC Offset	0V ± 0.5V
Rise/Fall Time	< 135 ps at 2.97 Gbps per SMPTE 424M-2006; < 270 ps at 1.485 Gbps per SMPTE 292; 0.4 ns to 1.5 ns at 270 Mbps per SMPTE 259M
Overshoot	< 10% of amplitude
Timing Jitter	< 0.2 UI at 270 Mbps; < 1.0 UI at 1.485 Gbps; < 2.0 UI at 2.97 Gbps with color bar signal
Alignment Jitter	< 0.2 UI at 270 Mbps; < 0.2 UI at 1.485 Gbps; < 0.3 UI at 2.97 Gbps with color bar signal
Re-clocking	At 270 Mbps, 1.485 Gbps & 2.97 Gbps



UPDATED 02/08/2018

All specifications subject to change without notice. ©2018



Ordering Information

Part Number	Description	Fiber Cores
3380-B7S	Transmitter	1
3381-B7S	Receiver	1
PDPS-2-pp	Power Supply	
1252	DB-25M to 4 XLR-M 10 Foot Cable	
1253	DB-25M to 4 XLR-F 10 Foot Cable	
Power Supply Suffix Codes (pp) for AC Line Cord:		
NA - North America	AU - Australia	EU - Europe
JP - Japan	UK - United Kingdom	

Sales



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