

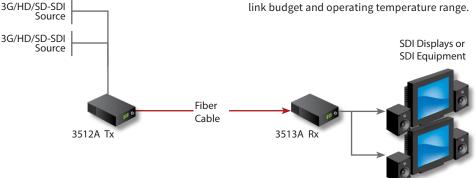
FiberLink® 3512A/3513A 2 Channel 3G/HD/SD-SDI (4K/UHD) Series



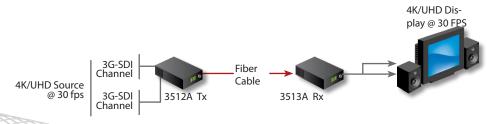
2 Channels of 3G/HD/SD-SDI or DVB-ASI Over One Fiber with 4K/UHD Resolution Support

The FiberLink 3512A series supports 2 channels of independent 3G/HD/SD-SDI or DVB-ASI, with or without embedded audio and data, and transmits it over one single mode or multimode fiber. When using all inputs, FiberLink 3512A supports 4K/UHD resolutions at 30 fps.

All SMPTE compliant signals are equalized and reclocked. Each receiver features two reclocked, non-inverting BNC outputs. The 3512A Series is compliant with SMPTE 259M-2006, 292-2006, 424M-2006, 305M-2005, 310M-2004, 344M-2000 and DVB-ASI. The series is immune to pathological patterns over entire link budget and operating temperature range.



FiberLink® 3512A can be used to transmit a single 4K/UHD sources at 30 fps over one Fiber!



FEATURES

2 Channel 3G/HD/SD-SDI (4K/UHD) over one Fiber

Broadcast or corporate studios, OB Vans, film & production, rental & staging, stadiums and theaters, surgical or medical imaging and more!

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

Receiver features two re-clocked SDI outputs

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

Compliant with SMPTE ST 425-3, 259M-2006, 292-2006, 424M-2006

Supports transmission of SMPTE 305M-2005, 310M-2004, 344M-2000, DVB-ASI

Operates on either Single Mode or Multimode (62.5u & 50u) fiber (standard power version)

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

Supports 4K/UHD resolutions up to 30 fps

14 dB Standard transmitter version 19 dB Optical Link Budget @ 2.97 Gbps for High Power, Longer Distance version

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

Compatible with all Artel SDI transmitters and receivers using Artel CWDM products

Available in Box and Card versions

Card version compatible with the FiberLink® 6000A Rack Card Cage

Designed and manufactured in the USA by Artel

SPECIFICATIONS

Fiberl ink® 3512A Transmitter Specifications

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Serial Video BNC Input	
Number of Inputs	2
Data Rate Range	19.4 Mbps to 2.97 Gbps
Supported Standards	SMPTE ST 425-3, 259M, 292, 424M-2006,
	305M, 310M, 344M, DVB-ASI
Re-clocked Data Rates	270 Mbps (SMPTE 259M, DVB-ASI-270),
	1.485 Gbps (SMPTE 292),
	2.97 Gbps (SMPTE 424M-2006)
Equalization	Automatic up to 100m of Belden 1694A at
	3.0 Gbps, 140m at 1.485 Gbps and 180m at
	270 Mbps
Return Loss	>10dB up to 2.97 Gbps

Optical Output	
Connector	ST
Wavelengths	CH1 = 1570nm, CH2 = 1550nm
Emitter Type	DFB Lasers
Output Power (nominal)	-3 dBm for Standard Power Version (3512A-x7z)
Re-clocking	At 270 Mbps, 1.485 Gbps & 2.97 Gbps

FiberLink® 3513A Receiver Specifications

Fiber Optic Input	
Connector	LC or 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	-1 dBm

Serial Video BNC Outputs	
Number of Outputs	2
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

FiberLink® 3512A & 3513A General Specifications		
4K / UHD Support	up to 30 fps using 2 inputs	
Link Timing Difference	0.3ns/km of Fiber	
Indicators	Power, Data Rate lock	
	(SD, HD/3G)	
	Alarm (Card Version Only)	
Box Version Dimensions	6.5 W x 1.15 H x 6 L (inches)	
	165 W x 29 H x 152 L (mm)	
Weight	12.3 ounces, 382 grams	
Slots in 6000A Card Cage	1	

General Specifications, Co	nt.
Power	9-24 volts/DC, 5 watts
	95-250 VAC, 50/60 Hz*
	3512A: 5.0 watts, 17.66 BTU/Hr
	3513A: 4.0 watts, 13.64 BTU/Hr
Operating Temperature	-10° C to +50° C
MTBF:	72,000 Hours

^{*} For operation from 95-250VAC, 50/60Hz, a PDPS-1 plug-in adapter is required.

Operating Loss Budget & Maximum Usable Distance*

Multimode Standard Power Version (3512A-x7S)			
Fiber Type	Loss(dB)	Data Rate	Distance
Multimode (62.5u)	0-14	2.97 Gbps	.8 km
	0-15	1.485 Gbps	1 km
	0-15	270 Mbps	2.5 km
Multimode (50u)	0-14	2.97 Gbps	1 km
	0-15	1.485 Gbps	1.3 km
	0-15	270 Mbps	3 km

 ${}^*\!Distance\ specifications\ are\ approximate,\ and\ are\ not\ guaranteed.\ Operating\ loss\ budget\ must\ not\ be\ exceeded.$

Single Mode Standard Power Version (3512A-x7z)			
Fiber Type	Loss(dB)	Data Rate	Distance
Single Mode	0-14	2.97 Gbps	30 km
	0-15	1.485 Gbps	48 km
	0-15	270 Mbps	50 km

*Distance specifications are approximate, and are not guaranteed. Operating loss budget must not be exceeded.





Fiber Cores

Ordering Information

Part Number Description

3512A-x7S	Multimode/Single Mode Transmitter (Standard Power)	1
3513A-x7S	Multimode/Single Mode Receiver	1
PDPS-1-pp	Power Supply	

Power Supply Suffix Codes (pp) for AC Line Cord:

NA - North America	AU - Australia	EU - Europe

JP - Japan UK - United Kingdom

Part Number Suffix Codes:

x: B - Box Version C - Card Version



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