



# FiberLink 3518/3519 4 Channel Bidirectional 3G/HD/SD-SDI (4K/UHD) Series

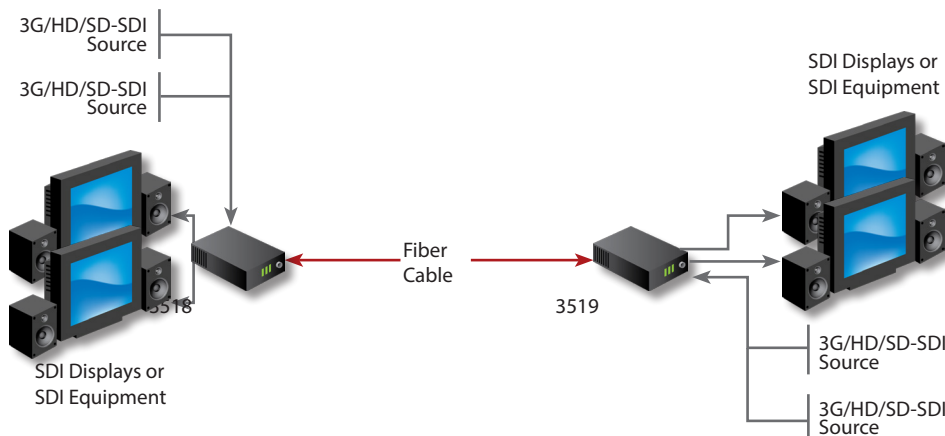


## 4 Channels of 3G/HD/SD-SDI or DVB-ASI Over One Fiber with 4K/UHD Resolution Support

The FiberLink 3518 series supports 4 channels of independent, bidirectional 3G/HD/SD-SDI or DVB-ASI, with or without embedded audio and data, and transmits it over one single mode fiber. Now, you can send two 3G/HD/SD-SDI signals upstream and two 3G/HD/SD-SDI signals downstream!

non-inverting BNC outputs. The 3518 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.

All SMPTE compliant signals are equalized and relocked. Each unit features two relocked,



## FEATURES

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

Supports 4 Channels: two upstream, two downstream

Signals are equalized and re-clocked prior to fiber optic transmission

Re-clocked SDI output

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

Available in Single Mode

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

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

### FiberLink® 3518 & 3519 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	2
Power	9-24 volts, AC or DC 3518: 5.0 watts, 17.66 BTU/Hr 3519: 4.0 watts, 13.64 BTU/Hr
Operating Temperature	-10° C to +50° C
MTBF:	72,000 Hours

### FiberLink® 3518/3519 Transmitter Specifications

#### 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	1510, 1530, 1550, 1570 (nominal)
Emitter Type	DFB Laser
Output Power (nominal)	+2 dBm
Re-clocking	At 270 Mbps, 1.485 Gbps & 2.97 Gbps

### FiberLink® 3518/3519 Receiver Specifications

#### Fiber Optic Input

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	-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

### Operating Loss Budget & Maximum Usable Distance\*

#### High Power, Longer Distance Version

Fiber Type	Loss(dB)	Data Rate	Distance
Single Mode	3-19	2.97 Gbps	60 km
	3-20	1.485 Gbps	65 km
	3-20	270 Mbps	70 km

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



UPDATED 11/11/2017

All specifications subject to change without notice. ©2017



Schedule  
Contract GS-03F-016CA

### Ordering Information

Part Number	Description	Fiber Cores
3518-x9S	Single Mode Transceiver	1
3519-x9S	Single Mode Transceiver	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

### Sales



T: +1 978-263-5775  
sales@artel.com  
customer@artel.com  
www.artel.com