

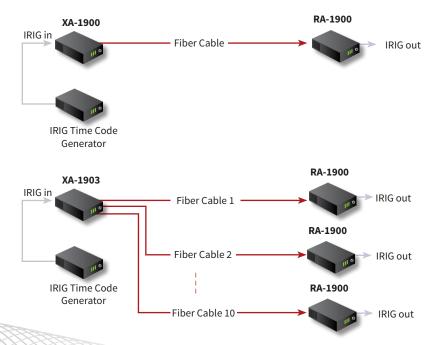
FiberLink® XA/RA-1900, XA-1903 IRIG/NASA/NBS Time Code Formats over Fiber





Fiber optic transmission of IRIG time-code signals, configured for point-to-point, point-to-multipoint signal distribution

The FiberLink XA/RA-1900A and XR-1900 fiber optic systems transmit IRIG and similar NASA and NBS standard instrumentation time-code formats over standard multimode or single mode fiber at 850 nm or 1310 nm.



FFATURES

Ideal applications for Military and the Aerospace Industries

Transmits IRIG and similar NASA and NBS standard instrumentation time-code formats up to 100 kHz

Combinations of three different units may be configured to provide point-to-point, point-to-multipoint

Built-in regulated power supplies allow operation from unregulated AC or DC sources

Transmits at 850 nm or 1310 nm over standard multimode or single mode fiber

XA/RA-1900 cards fit the 6000A card cage. The XA-1903 is provided in a 19" rackmountable enclosure

SPECIFICATIONS

Data Specifications	
Number of Channels	1
Number of Outputs per Channel	XA-1900 & RA-1900: 1, XA-1903: 10
IRIG Compatibility	A through H
System Bandwidth (+0, -3 dB)	20 Hz to 100 kHz
Input/Output Load Impedance	600 Ohms nominal
Input/Output Signal Voltage	1 volt rms
Signal/Noise Ratio	67 dB typical
Noise Floor (full bandwidth)	1.3 mv rms maximum

General Specifications		
Number of Fibers:		
XA-1900 & RA-1900:	1 fiber	
XA-1903:	10 fibers	
Operating Temperature:	-20 to +60o C	
Operating Power (per unit):	+15 to +25 volts DC @ 250 mA or	
	14 to 18 volts AC, 50/60 Hz	
Dimensions:		
XA-1900 & RA-1900:	5 W x 1.25 H x 2.5 L (inches)	
	127 W x 32 H x 64 L (mm)	
XA-1903:	19 W x 1.75 H x 6.5 L (inches)	
	483 W x 45 H x 165 L (mm)	
Weight:		
XA-1900 & RA-1900:	Approx. 1 lb; 0.45 kg	
XA-1903:	Approx. 3 lbs; 1.36 kg	
Optical Connectors:	ST: Multimode	
	ST or FCPC: Single Mode	
Optical Wavelength:	850 nm or 1310 nm MM	
	1310 nm SM	
Optical Fiber:	50 or 62.5 micron multimode fiber	
	8/10 micron single mode	
System Delay:	< 5 uSec; Measured from a Transmitter	
	input to a Receiver output with 1 meter	
	of fiber. Does not include any additional	
	length of fiber. Consult fiber cable	
	manufacturer for specific propagation	
	delay. An approximate fiber cable	
	propagation delay is approximately	
	5 uSec/km.	
MTBF:	XA-1900 series: 195,000 hours	
	RA-1900 series: 181,000 hours	
	XA-1903 series: 74,000 hours	

Operating Loss Budget & Maximum Usable Distance*				
Wavelength	Loss (dB)	Distance (km)		
850nm MM	0-10dB	0-3.5 (62.5u)		
850nm MM	0-10dB	0-4 (50u)		
1310nm MM	0-13dB	0-10 (62.5u)		
1310nm MM	0-13dB	0-12 (50u)		
1310nm SM	0-13dB	0-20		
For system to operate properly,	operating loss budget must not be excee	ded.		





UPDATED 11/01/2016

All specifications subject to change without notice. ©2016

Ordering Information				
Part Number	Description	Fibers		
XA-1900-1	Transmitter, 850 nm, Multimode, Box, ST	1		
XA-1900-C1S	Transmitter, 850 nm, Multimode, Card, ST	1		
XA-1900-3	Transmitter, 1310 nm, Multimode, Box, ST	1		
XA-1900-C3S	Transmitter, 1310 nm, Multimode, Card, ST	1		
XA-1900-7-ST	Transmitter, 1310 nm, Single Mode, Box, ST	1		
XA-1900-C7S	Transmitter, 1310 nm, Single Mode, Card, ST	1		
RA-1900-1	Receiver, 850 nm, Multimode, Box, ST	1		
RA-1900-C1S	Receiver, 850 nm, Multimode, Card, ST	1		
RA-1900-3	Receiver, 1310 nm, Multimode, Box, ST	1		
RA-1900-C3S	Receiver, 1310 nm, Multimode, Card, ST	1		
RA-1900-7-ST	Receiver, 1310 nm, Single Mode, Box, ST	1		
RA-1900-C7S	Receiver, 1310 nm, Single Mode, Card, ST	1		
XA-1903-1	Transmitter, 850 nm, Multimode, ST	10		
XA-1903-3	Transmitter, 1310 nm, Multimode, ST	10		
XP-1000A	115 volts AC, 50/60 Hz plug-in adaptor			
XP-1001	230 volts AC, 50/60 Hz plug-in adaptor			

Please note that the card versions of these products are compatible with the model 6000A card cage used with most FiberLink products and use 1 slot. Box versions require the XP-1000A power supply. Box versions can be adapted for use with the discontinued MCR-1000 rack by ordering the AP-1000 adapter plate. XA/ RA-1900-7 are available with FCPC optical connectors at no additional cost. The XA-1903 is provided in a 19" rackmountable enclosure.



T: 978-263-5775 sales@artel.com customercare@artel.com www.artel.com