

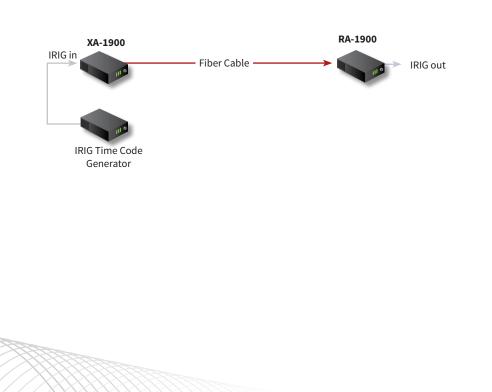
# FiberLink<sup>®</sup> XA/RA-1900 IRIG/NASA/ NBS Time Code Formats over Fiber





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

The FiberLink XA/RA-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.



### FEATURES

#### 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-tomultipoint

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.

## SPECIFICATIONS

Data Specifications	
Number of Channels	1
Number of Outputs per Channel	XA-1900 & RA-1900: 1
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:

Weight:

XA-1900 & RA-1900:

1 fiber

Approx. 1 lb; 0.45 kg

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)

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 exceeded.





the USA All specifications subject to change without notice. ©2020

	Ord	ering	Information	tion
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		Ordering information		
Optical Connectors:	ST: Multimode	Part Number	Description	Fibers
	ST: Single Mode	XA-1900-1	Transmitter, 850 nm, Multimode, Box, ST	1
Optical Wavelength:	850 nm or 1310 nm MM	XA-1900-C1S	Transmitter, 850 nm, Multimode, Card, ST	1
	1310 nm SM	XA-1900-3	Transmitter, 1310 nm, Multimode, Box, ST	1
Optical Fiber:	50 or 62.5 micron multimode fiber	XA-1900-C3S	Transmitter, 1310 nm, Multimode, Card, ST	1
	8/10 micron single mode	XA-1900-7-ST	Transmitter, 1310 nm, Single Mode, Box, ST	1
System Delay:	< 5 uSec; Measured from a Transmitter	XA-1900-C7S	Transmitter, 1310 nm, Single Mode, Card, ST	1
	input to a Receiver output with 1 meter	RA-1900-1	Receiver, 850 nm, Multimode, Box, ST	1
	of fiber. Does not include any additional	RA-1900-C1S	Receiver, 850 nm, Multimode, Card, ST	1
	length of fiber. Consult fiber cable	RA-1900-3	Receiver, 1310 nm, Multimode, Box, ST	1
	manufacturer for specific propagation	RA-1900-C3S	Receiver, 1310 nm, Multimode, Card, ST	1
	delay. An approximate fiber cable	RA-1900-7-ST	Receiver, 1310 nm, Single Mode, Box, ST	1
	propagation delay is approximately	RA-1900-C7S	Receiver, 1310 nm, Single Mode, Card, ST	1
	5 uSec/km.	XP-1000A	115 volts AC, 50/60 Hz plug-in adaptor	
MTBF:	XA-1900 series: 195,000 hours	XP-1001	230 volts AC, 50/60 Hz plug-in adaptor	
	RA-1900 series: 181,000 hours			

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.



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