

## Features

- IRIG B000
- 1 PPS
- 50 Ohm BNC
- Low Jitter
- Excellent Rise / Fall Time
- SNMP monitoring and control
- High-dynamic-range, optically-isolated 1310 DFB lasers
- Fits in Optiva® enclosures, which support Daisy Chain™ video, audio and data links.
- Hot swap redundant power supplies virtually eliminate downtime
- 16, 4, 2, & 1 slot enclosures available
- CE & CSA Certified Device

## IRIG B000 / 1PPS Link

Optiva® IRIG B000 / 1 PPS fiber intra-facility links are a high performance, cost effective alternative to coaxial cable. The unique features of the IRIG B000 / 1 PPS series is its low jitter, sharp rise and fall times. It also supports simultaneous transmission of both IRIG-B000 and 1PPS or two IRIG or two 1 PPS signals. As with all Emcore optical products, the highest quality components and modern production techniques insure that intra-facility links provide the highest performance as a cost-effective alternative to coaxial cable. They provide much longer transmission distances than copper cables, simplify network design, ease installation and even enhance immunity from EMI, RFI and lightning. These transmitters and receivers take the high RF performance and diverse features of Emcore's technology and combine them into a compact package compatible with the Optiva® OT-CC-16 chassis.

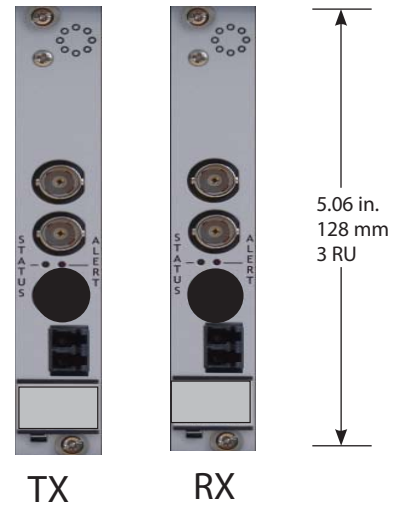


## System Design

Optiva® is a completely modular hot-swappable platform. Both 19" rack mount and compact tabletop or wall-mountable enclosures are available. The 19" rack-mount enclosure (Model OT-CC-16) can support up to 16 insert cards and provides a single power supply (Model PS-200), or a dual-redundant, hot-swappable power supply option. Compact enclosures are available with 1, 2 or 4 slots. The one slot (OT-DTCR-1) and two slot (OT-DTCR-2) enclosures both use an external power supply (PS-9012) and optionally have a standard 2-pin DC power connector for more custom applications. The four-slot 1 RU enclosure (OT-CC-4) uses an integrated power supply. The Optiva® family's existing wide range of video, audio and data transport products include a unique Daisy-Chain™ feature that multiplexes multiple electrical inputs onto a single fiber, thus resulting in an extremely capable, yet conveniently flexible, signal transport system.

## Performance Highlights

	Parameter	Min	Typical	Max	Units
Link	BNC Impedance	-	50	-	ohm
	Fiber Distance	0	-	10	Km
	Optical Loss		4		dBo
	Optical Output	-5.5	-2.0	-0.1	dBmo
	Optical Input	-20	-18	-	
IRIG	Temperature	-10	-	50	°C
	Format	-	IRIG-B000	-	
	Level - True	+2.4	-	5.0	V
	Level - False	0.0	-	+0.4	V
	Rise Time Leading Edge 10 - 90 %	-	1	-	μ-sec
	Fall Time Leading Edge 90 - 10 %	-	1	-	μ-sec
	Jitter	-	-	30	n-sec rms
	Tx + Rx Latency (does not include segment to segment fiber time travel)	-	30	-	μ-sec
1 PPS	Frequency	-	1	-	Pulse per Second
	Level - True	+2.4	-	5.0	V
	Level - False	0.0	-	+0.4	V
	Pulse Width	-	10	-	m-sec
	Pulse Width, min	20	-	-	μ-sec
	Rise Time Leading Edge 10 - 90 %	<50	-	-	n-sec
	Fall Time Leading Edge 90 - 10 %	<2	-	30	n-sec, rms
	Jitter	-	30	-	n-sec
	Tx + Rx Latency (does not include segment to segment fiber time travel)	-	30	-	μ-sec



## Ordering Information

Product Code	Specifications
OTP-1IRIG-Tx-B5-E2	Transmitter, IRIG-B000 & 1PPS, 50 ohm BNC, E2000
OTP-1IRIG-Rx-B5-E2	Receiver, IRIG-B000 & 1PPS, 50 ohm BNC, E2000
OPV-CTLR-IC	NMS SNMP Controller Card & MIB for Optiva Family
OTP-1ETR-A2/A2	Optical Tcwr, 1Ch, Ethernet, SM, Dual LC
OT-CC-16-01	Chassis, Rack Mount, 16 Slot, 3RU, Rear Access
PS-200-(xx)	Power Supply, 12 Vdc, 100 to 240 Vac, 50/60 Hz, (Specify power cord (NA, EU, UK))
OT-CC-4-1U-(xx)	Chassis w/ built-in Power Supply, 1 RU, 4 slots, 110- 240 AC input, Power Cord
OT-DTCR-1 / OT-DTCR-2	Chassis, flange-mount, w/ Power Supply, 1 slot / 2 slot

## Enclosure Options



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