



## Transmit L-Band Signals for a Variety of Applications over one Singlemode Fiber

Optiva® L-band fiber optic intra-facility links are a high-performance, cost-effective alternative to coaxial cable. They provide much longer transmission distances than copper cables, which 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 Ortel technology and combines them into a compact package compatible with the Optiva® OT-CC-16 chassis. 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.

### System Design

Optiva® is a completely modular hot-swappable insert card based platform. Both 19" rack mount and compact tabletop or wall-mountable enclosures are available. The 19" rack-mount enclosure (Model: OT-CC-16-100) can support up to 16 insert cards and comes with a single power supply (Model: PS-100). It also supports a dual-redundant hot-swappable power supply option (OT-CC-16-100-RPS) utilizing two PS-100 power supplies. Additionally, for Optiva® systems that have a greater power requirement the PS-200 power supply is used in place of the PS-100.

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 enclosure (OT-DTCR-4) uses the standard PS-100 or PS-200 power supply. If you would like more information and specifications about our enclosure and power options please reference the catalog sections "Enclosures & Racks" and "Power Supplies & Accessories".

- Fits in Optiva® enclosures, which support a wide range of "Daisy Chained" video, audio and data links.
- 16 Slots Per Chassis + 2 Redundant Power Supplies
- LNB Power (off or 17V)
- High-dynamic-range, optically-isolated DFB lasers
- 50 Ohm and 75 Ohm versions available
- One-button NPR peak optimizer
- Automatic Smart Gain Control (SGC) mode
- Manual Gain Control (MGC) mode
- Tx & Rx RF Power Monitors – Panel LED, SMA & remote
- SNMP monitoring and control

Performance Highlights

	Min	Typical	Max	Units
Frequency Range	950	--	2150	MHz
Optical Distance	0	--	2	Km
	0	--	3	dB
Total RF Input Power	--	-40 to 0	--	dBm
Wavelength Options, single channel	1300	1310	1320	nm
Optical Output Power	2	3	5	dBm
Temperature Range	0	--	50	°C

Models Available

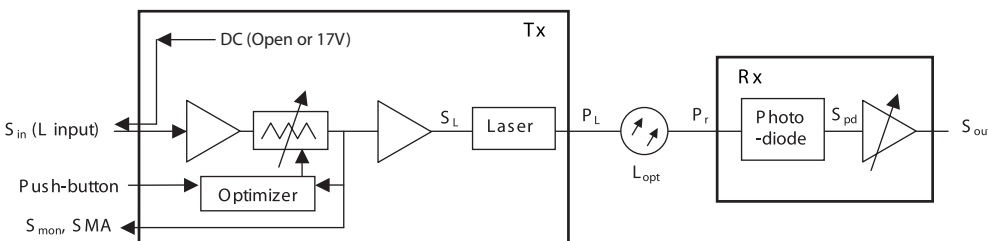
Transmitter Model Numbers and Options

Model Number	Description
OTS-1LT/B5-1303-SA-IC	Tx, L-band, 50 Ohm BNC, 1310nm, 3dBm, SC-APC
OTS-1LT/B7-1303-SA-IC	Tx, L-band, 75 Ohm BNC, 1310nm, 3dBm, SC-APC

Receiver Model Numbers and Options

Model Number	Description
OTS-1LR/B5-SA-IC	Rx, L-band, 50 Ohm BNC, SC-APC
OTS-1LR/B7-SA-IC	Rx, L-band, 75 Ohm BNC, SC-APC

System Diagram



OPTIVA® PLATFORM

NETWORK MANAGEMENT

SDI & HD-SDI

COMPOSITE VIDEO, AUDIO & DATA

RGB/VGA/DVI

AUDIO/FSK/INTERCOM

ETHERNET/SERIAL DATA/USB

CATV/RF & L-BAND

OPTICAL SWITCHING,  
ROUTING & REDUNDANCY

MULTIPLEXING SOLUTIONS

ENCLOSURES & RACKS

POWER SUPPLIES & ACCESSORIES