Optiva OTS-RFS-1
2.3 GHz Wideband RF Splitter

DATASHEET | OCTOBER 2013 SATCOM

Applications

- RF Redundant Link

Features

- 5 to 2.3 GHz Optimized for IF and L-Band Satellite Signals
- 75 Ohm BNC
- SNMP Monitoring and Control
- Fits in Optiva Enclosures Which Support Daisy Chain Video, Audio and Data Links
- Hot Swap Redundant Power Supplies Virtually Eliminate Downtime
- 16, 6, 2, & 1 Slot Enclosures Available
- CE & CSA Certified Device

The Optiva OTS-RFS-1 2.3 GHz Wideband RF Splitter is designed to provide RF signal distribution for satellite antenna applications up to 2.3 GHz. It provides RF signal distribution to support 1x1 RF fiber link redundancy applications.

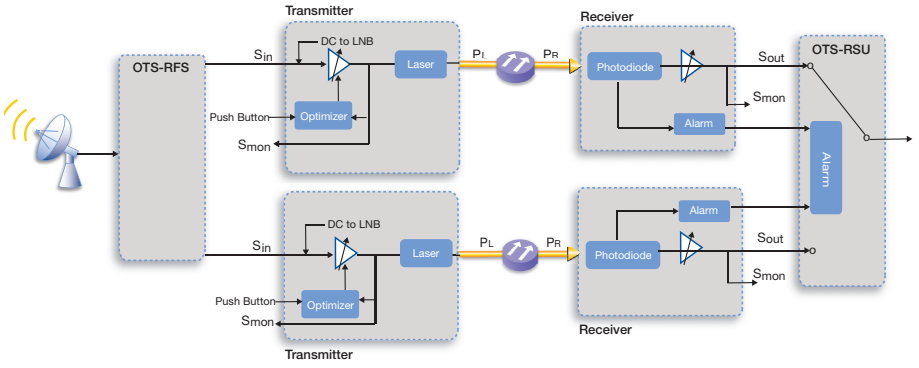
Optiva Wideband RF Splitters are SNMP compliant. They can be housed in the same chassis and monitored by the same Network Management System (NMS) as Optiva HD video, audio, serial data, and USB extension / distribution cards to support transport of multiple signal formats and frequency bands in a single flexible platform.

System Design

The Optiva platform includes a wide range fiber optic transport products for satellite and microwave communications from 1 MHz to 40 GHz. These units can be used to construct transparent inter- and intra-facility links from 1 meter to >100 km for RF and microwave signal transport, antenna remoting, video transport, electronic warfare systems and other high-dynamic-range applications.

Optiva is a completely modular, hot-swappable platform. Both 19" rack-mount and compact tabletop, or wall-mountable enclosures are available. The 3 RU 19" rack-mount, fan-cooled enclosures (Model OT-CC-16 and OT-CC-16F) can support up to 16 insert cards and utilize two dual-redundant, hot-swappable, 100 or 200 watt power supplies. The 1 RU 19" rack-mount, fan-cooled enclosure (Model: OT-CC-6-1U) can accommodate 6 insert cards and utilizes two hot-swappable 60 watt power supplies. Compact one-slot (OT-DTCR-1), or two-slot (OT-DTCR-2) enclosures are also available that use an external wall-mount power supply.

Block Diagram



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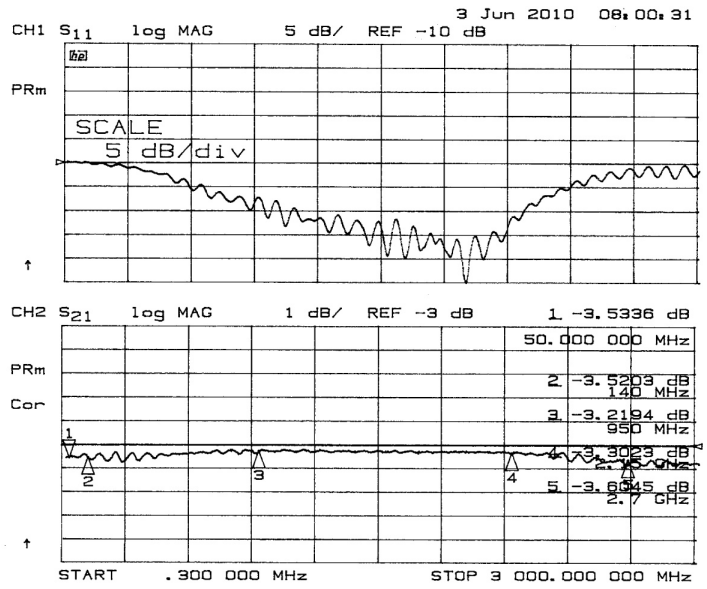
Performance Highlights

Parameter	Min	Typical	Max	Units
Frequency Range	5	-	2500	MHz
Insertion Loss				
95 - 2050 MHz	-	3.4	3.6	dB
5 - 2500 MHz	-	4.3	4.5	dB
Isolation	12	15	-	dB
Input Return Loss	-13	-	-	dB
Output Return Loss	-13	-	-	dB
Forward RF Power Handling (CW)	-	-	1	W
Reverse RF Power Handling (CW)	-	-	1	W

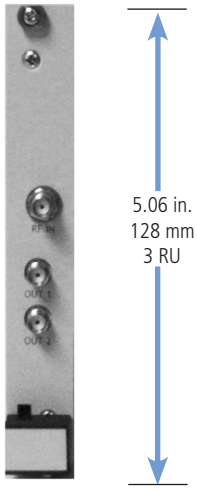
Ordering Information

Product Code	Specifications
OTS-RFS-1-B7	RFS 5-2300 MHz, BNC 75 ohm
OTS-RFS-1-B7-BB	RFS 5-2300 MHz, BNC 75 ohm, with 2 BNC to BNC cables
OPV-CTLR-IC	NMS SNMP Controller Card & MIB for Optiva Family
OTP-1ETR-A2/A2	Ethernet Transceiver, 10 / 100
OT-CC-16F-XX	Chassis, Rack-Mount, 16-Slot, 3 RU -- See OT-CC-16F Data Sheet for Exact Models
PS-200F-XX	Power Supply, 12 VDC, 100 to 240 VAC, 50/60 Hz, (Specify power cord (NA, EU, UK))
OT-CC-6-XX	Chassis, Rack-Mount, 16-Slot, 3 RU -- See OT-CC-16F Data Sheet for Exact Models
OT-DTCR-1 / OT-DTCR-2	Chassis, Flange-Mount, w/Power Supply, 1 slot / 2 slot

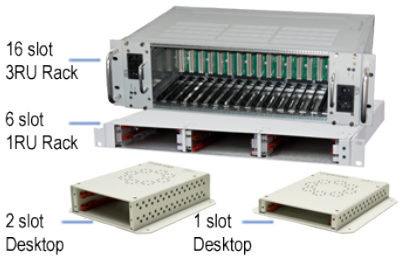
Typical S11 and S21



OTS-RFS-1



Enclosure Options



RoHS COMPLIANT CE MADE IN USA

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