



## Applications

- RF Redundant Link

## Features

- Optimized for L-Band Satellite Signals
- 50 Ohm SMA, 75 Ohm BNC
- Fits in Optiva Enclosures
- 16, 6, 2, & 1 Slot Enclosures Available
- CE & CSA Certified Device, RoHS Compliant

The Optiva OTS-RFS-1 3 GHz and OTS-RFS-2 2.5 GHz Wideband RF Splitters are designed to provide RF signal distribution for satellite antenna applications up to 3 GHz. It provides RF signal distribution to support 1x1 RF fiber link redundancy applications.

Optiva Wideband RF Splitters can be housed in the same chassis and monitored by the same Network Management System (NMS) as Optiva SATCOM 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

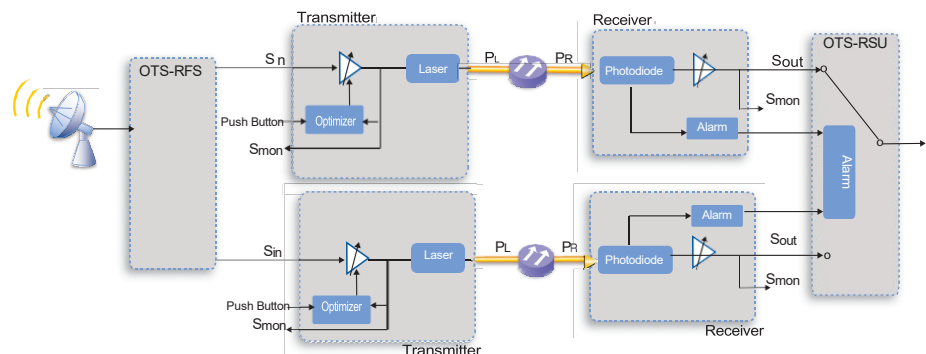
The Optiva platform includes a wide range fiber optic transport products for satellite and microwave

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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



# Optiva OTS-RFS-1 3 GHz Wideband RF Splitter

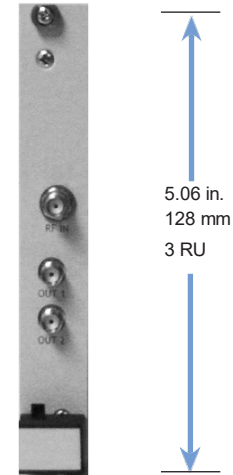
## Performance Highlights

Parameters	Min	Typical	Max	Units
<b>Output Return Loss</b>				
OTS-RFS-1				
50 Ohm SMA	20	-	3000	MHz
75 Ohm BNC	20	-	2500	
OTS-RFS-2				
50 Ohm SMA	20	-	2500	MHz
75 Ohm BNC	20	-	2500	
<b>Insertion Loss</b>				
OTS-RFS-1				
50 Ohm SMA	-	-	5.5	dB
75 Ohm BNC	-	-	6.5	
OTS-RFS-2				
50 Ohm SMA	-	-	7.5	dB
75 Ohm BNC	-	-	6.5	
<b>Isolation</b>				
	12			dB
<b>Input Return Loss</b>				
OTS-RFS-1				
50 Ohm SMA	9	-	-	dB
75 Ohm BNC	8	-	-	
OTS-RFS-2				
50 Ohm SMA	10	-	-	dB
75 Ohm BNC	10	-	-	
<b>Output Return Loss</b>				
OTS-RFS-1				
50 Ohm SMA	9	-	-	dB
75 Ohm BNC	6	-	-	
OTS-RFS-2				
50 Ohm SMA	10	-	-	dB
75 Ohm BNC	10	-	-	
<b>Forward / Reverse RF Power Handling (CW)</b>				
OTS-RFS-1	-	-	1	W
OTS-RFS-2	-	-	.02	W

## Ordering Information

Product Code	Specifications
OTS-RFS-1-S5-3	RFS, Optiva, 20-3000 MHz, 50 Ohm SMA
OTS-RFS-1-S5-3-SS	RFS, Optiva, 20-3000 MHz, 50 Ohm SMA, two SMA-SMA cables
OTS-RFS-1-B7	RFS, Optiva, 20-2500 MHz, 75 Ohm BNC
OTS-RFS-1-B7-BB	RFS, Optiva, 20-2500 MHz, 75 Ohm BNC, two BNC-BNC cables
OTS-RFS-2-S5	RFS, Optiva, 20-2500 MHz, 50 Ohm SMA
OTS-RFS-2-S5-SS	RFS, Optiva, 20-2500 MHz, 50 Ohm SMA, two SMA-SMA cables
OTS-RFS-2-B7	RFS, Optiva, 20-2500 MHz, 75 Ohm BNC
OTS-RFS-2-B7-BB	RFS, Optiva, 20-2500 MHz, 75 Ohm BNC, two BNC-BNC cables
OPV-CTLR-IC	NMS SNMP Controller Card, MIB, OrtelView GUI for Optiva Family
OTP-1ETR-A2/A2	Ethernet Transceiver, 1 Channel, 10/100 Ethernet -- See OTP-1ETR Data Sheet
OT-CC-16F-XX	Chassis, Rack-Mount, 16-Slot, 3 RU -- See OT-CC-16F Data Sheet
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, 6-Slot, 1 RU -- See OT-CC-6-XX Data Sheet
OT-DTCR-1 / OT-DTCR-2	Chassis, Flange-Mount, with Power Supply, 1 slot / 2 slot -- See OT-DTCR Data Sheet

## OTS-RFS-1, OTS-RFS-2



## Enclosure Options

