

# Optiva OTS-RSU-1 3 GHz Wideband RF Redundancy Switch Unit



## Applications

- RF Redundant Link

## Features

- 20 MHz to 3 GHz Satellite Signals
- 1x1 Switch Configuration
- 50 Ohm SMA, 75 Ohm BNC
- Automatic and Manual Redundancy Modes
- Manual Position/Enable Select Button
- Channel Status and Switch Position LED
- SNMP Monitoring and Control
- LNB Power Pass-Through
- 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, RoHS Compliant

The Optiva OTS-RSU-1 3 GHz Wideband RF Redundant Switch Unit is optimized to perform in the 20 MHz to 3 GHz frequency range. The OTS-RSU-1 Supports satellite signal transport link redundancy application for 1x1 redundant switch configurations when integrated with the Optiva RF fiber optic transmitters and receivers.



Optiva Wideband RF Redundancy Switch Units 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.

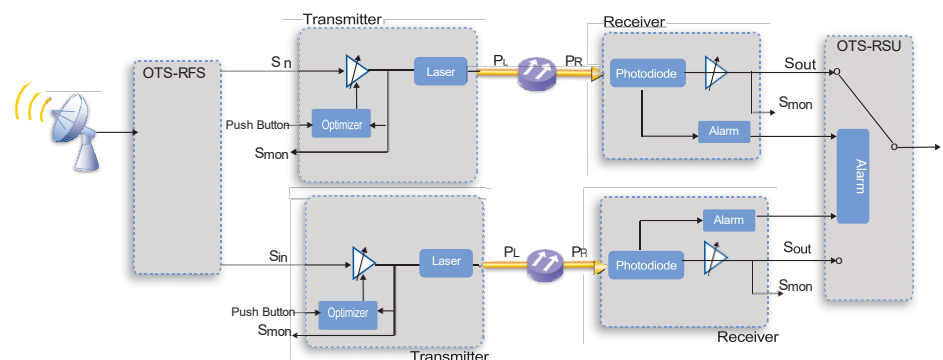
## System Design

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** PLATFORM

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-RSU-1 3 GHz Wideband RF Redundancy Switch Unit

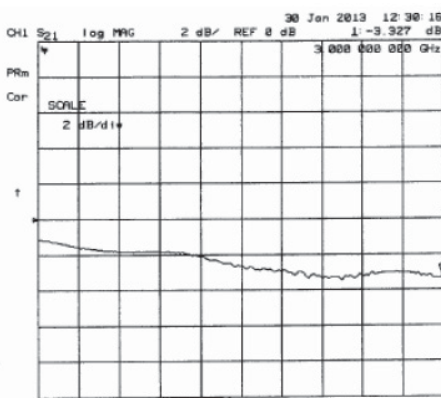
## Performance Highlights

Parameter		Min	Typical	Max	Units
Frequency Range	50 Ohm SMA	20	-	3000	MHz
	75 Ohm SMA	20	-	2300	MHz
Insertion Loss		-	-	0.9	dB
Isolation		60	-	-	dB
Return Loss		13	-	-	dB
RF Power Handling (CW)		-	-	50	W

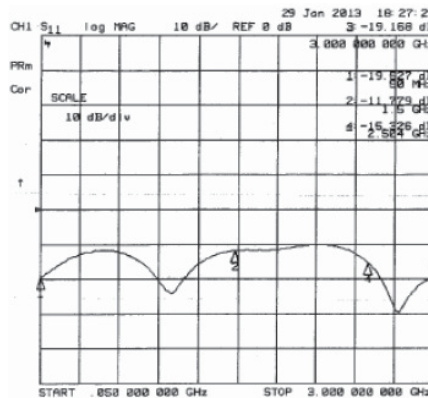
## Ordering Information

Product Code	Specifications
OTS-RSU-1-S5-3	RSU, 1x1, Optiva, 20-3000 MHz, 50 Ohm SMA
OTS-RSU-1-S5-3-SS	RSU, 1x1, Optiva, 20-3000 MHz, 50 Ohm SMA, two SMA-SMA cables
OTS-RSU-1-B7	RSU, 1x1, Optiva, 20-2300 MHz, 75 Ohm BNC
OTS-RSU-1-B7-BB	RSU, 1x1, Optiva, 20-2300 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	Optical Tcvr, 1 CH, 10/100 Ethernet over fiber, SM, Dual LC - See OTP-1E Data Sheet
OT-CC-16F-XXX	Chassis, Rack-Mount, 16 Slot, 3RU -- 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 Data Sheet
OT-DTCR-1/OT-DTCR-2	Chassis, Flange-Mount, w/Power Supply, 1 slot/2 slot -- See OT-DTCR Data Sheet

## S21 Plot



## S11 Plot



## OTS-RSU-1



## Enclosure Options

