

Optiva OTS-RSU-1 18 GHz Wideband RF Redundancy Switch Unit



Applications

- RF Redundant Link

Features

- 10 MHz to 18 GHz Satellite Signals
- 1x1 Switch Configuration
- 50 Ohm SMA
- Dedicated Comm-Link for Rapid Switching Response
- 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 18 GHz Wideband RF Redundancy Switch Unit is optimized to perform in the 10 MHz to 18 GHz frequency range. The OTS-RSU-1 supports satellite signal transport link redundancy applications for 1x1 redundant switch configurations when integrated with 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.

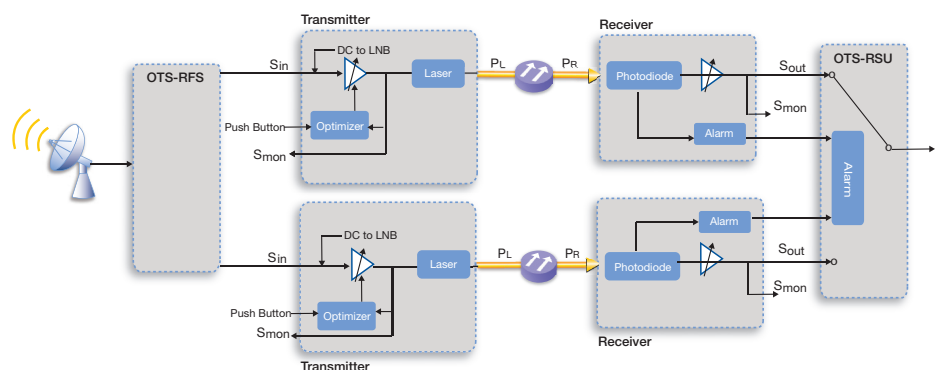
System Design

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

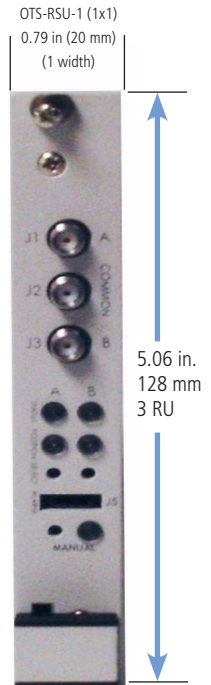


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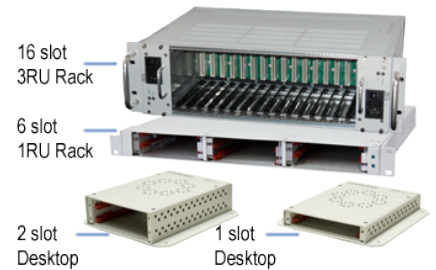
Performance Highlights

Parameter	Min	Typical	Max	Units
Frequency Range	2000	-	18000	MHz
Insertion Loss				
0 - 1 GHz	-	-	0.5	dB
1 - 3 GHz	-	-	0.9	dB
3 - 18 GHz	-	-	1.2	dB
Isolation				
0 - 1 GHz	80	85	-	dB
0 - 3 GHz	75	80	-	dB
3 - 18 GHz	55	60	-	dB
Return Loss				
0 - 1 GHz	-	-	-17	dB
1 - 3 GHz	-	-	-15	dB
3 - 18 GHz	-	-	-13	dB
RF Power Handling (CW)				
0 - 1 GHz	-	-	100	W
1 - 3 GHz	-	-	50	W
3 - 18 GHz	-	-	10	W

OTS-RSU-1



Enclosure Options



Information contained herein is deemed to be reliable and accurate as of the issue date. EMCORE reserves the right to change the design or specifications at any time without notice.