Optiva OTS-RSU-2 40 GHz Wideband RF Redundancy Switch Unit

PRELIMINARY DATASHEET | JUNE 2014 SATCOM

The Optiva OTS-RSU-2 40 GHz Wideband RF Redundancy Switch Unit is optimized to perform in the 2 GHz to 40 GHz frequency range. The OTS-RSU-2 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.

Applications

- RF Redundant Link

Features

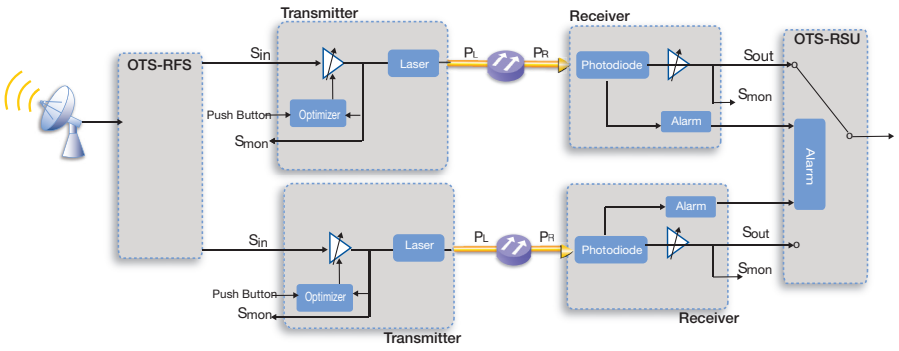
- 2 GHz to 40 GHz Satellite Signals
- 1x1 Switch Configuration
- 50 Ohm K
- Automatic and Manual Redundancy Modes
- Manual Position/Enable Select Button
- Channel Status and Switch Position LED
- SNMP Monitoring and Control
- Fits in Optiva Enclosures Which Support Daisy Chain Video, Audio and Data Links
- Hot Swap Redundant Power Supplies Virtually Eliminate Downtime
- 16, 6, 2, & 1 Slot Enclosures Available
- CE & CSA Certified Device, RoHS Compliant

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

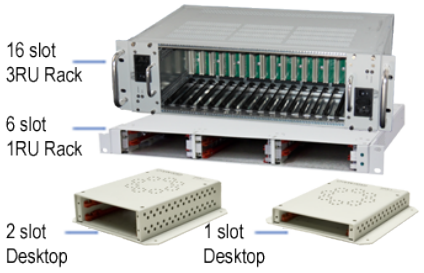
Parameter	Min	Typical	Max	Units
Frequency Range	2000	-	40000	MHz
Insertion Loss				
2 - 6 GHz	-	-	0.3	dB
6 - 12 GHz	-	-	0.4	dB
12-18 GHz	-	-	0.5	dB
18-26.5 GHz	-	-	0.7	dB
26.5-40 GHz	-	-	0.8	dB
Isolation				
2 - 6 GHz	80	-	-	dB
6 - 12 GHz	70	-	-	dB
12-18 GHz	65	-	-	dB
18-26.5 GHz	60	-	-	dB
26.5-40 GHz	55	-	-	dB
Return Loss				
2 - 3 GHz	-	-	-15	dB
3 - 18 GHz	-	-	-13	dB
RF Power Handling (CW)				
2 - 6 GHz	35	-	-	W
6 - 12 GHz	30	-	-	W
12-18 GHz	25	-	-	W
18-26.5 GHz	20	-	-	W
26.5-40 GHz	15	-	-	W

Ordering Information

Product Code	Specifications
OTS-RSU-1-K5-40	RSU, 2-40 GHz, K 50 Ohm
OTS-RSU-1-K5-SS-40	RSU, 2-40 GHz, K 50 Ohm, K-K Jumpers
OPv-CTLR-IC	NMS SNMP Controller Card and MIB for Optiva Family
OTP-1ETR-A2/A2	Optical Tcvr, 1Ch, Ethernet, SM, Dual LC
OT-CC-16F-XXX	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, 6 Slot, 1 RU -- See OT-CC-6 Data Sheets for Exact Models
OT-DTCR-1 / OT-DTCR-2	Chassis, Flange-Mount, w/Power Supply, 1 slot/2 slot -- See OT-DTCR Data Sheets for Exact Models

OTS-RSU-2

Enclosure Options



FCC PART 15 COMPLIANT RoHS COMPLIANT CE MADE IN USA