# Optiva OTS-RFS-1 18 GHz Wideband RF Splitter



DATASHEET | JANUARY 2024

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#### **Applications**

RF Redundant Link

#### **Features**

- 2 GHz to 18 GHz
- 50 Ohm 3.5 mm
- Fits in Optiva Enclosures
- 16, 6, 2, & 1 Slot Enclosures Available
- CE & CSA Certified Device, RoHS Compliant

The Optiva OTS-RFS-1 18 GHz Wideband RF Splitter is designed to provide RF signal distribution for satellite antenna applications up to 18 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**

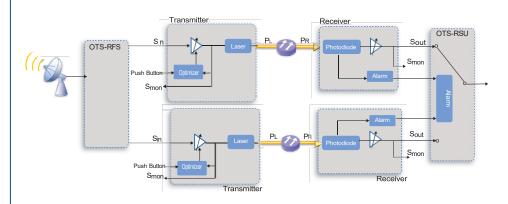
The Optiva platform includes a wide range fiber optic transport products for satellite and microwave



communications from 1 MHz to 40 GHz. These units can be used to construct trans parent 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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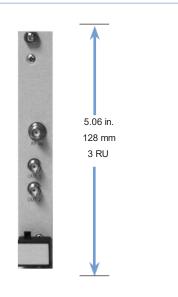
## **Performance Highlights**

Parameter	Min	Typical	Max	Units
Frequency Range	2000	-	18000	MHz
Insertion Loss	-	-	6	dB
Isolation	12	-	-	dB
Input Return Loss	9	-	-	dB
Output Return Loss	9	-	-	dB
Forward RF Power Handling (CW)	-	-	10	W
Reverse RF Power Handling (CW)	-	-	3	W

# **Ordering Information**

Product Code	Specifications
OTS-RFS-1-S5-18	RFS 2000-18000 MHz, 50 ohm 3.5 mm
OTS-RFS-1-S5-18-SS	RFS 2000-18000 MHz, 50 ohm 3.5 mm, two 3.5 mm-3.5 mm cables
OPV-CTLR-IC	NMS SNMP Controller Card, MIB, OrteleView 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 with Power Supply 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



# **Enclosure Options**

