



OMS11

1:1 Outdoor Modem Redundancy System



HIGHLIGHTS

- ▶ 1:1 Redundancy Protection for the OM20
- ▶ Supports Redundant BUC and LNB Waveguide Switching
- ▶ Automatic or Manual Modes of Operation
- ▶ Redundant Power Supplies
- ▶ Manual Operation from Front Panel or Remote Control

OVERVIEW

The OMS11 1:1 Outdoor Redundancy System provides simple backup chain switching protection for the OM20 Rugged Antenna Mount Modem, BUC and LNB. The OMS11 drives the BUC and LNB Waveguide switches, activating the non faulted RF path online. The backup functions of the OMS11 may be performed automatically, manually or remotely.

Operating In the automatic mode, the OMS11 immediately places a non-faulted backup modem online in the event of a primary online modem failure. In the Manual Mode, the user may designate the selected online primary modem either from the interactive front panel or through a remote interface.

REDUNDANT POWER SUPPLIES

For highest reliability, the OMS11 is equipped with two internal power supplies. Each power supply is independent of the other, including their source of AC or DC power and fusing. The OMS11 remains fully operational as long as either power supply is providing a source of power.

FRONT PANEL CONTROLS

The front panel of the OMS11 provides front panel controls and LED indicators to provide the operator with status and control of the switch and modems.

POWER-UP DEFAULTS

During power-up, the OMS11 initializes itself to the last mode set by the front panel push buttons. For example, if the operator desires the OMS11 to operate in the Auto Mode set to Modem B, the operator places the OMS11 into this condition using the front panel pushbuttons and the OMS11 stores this configuration into nonvolatile memory. If the power source was then to fail and be restored, the OMS11 would again power-up in the Auto Mode with both Mod and Demod set to Modem B. Upon power failure, the OMS11 will default to Modem A.

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SPECIFICATIONS

Published specifications reflect the maximum OMS11 performance. Each OMS11 can be configured to customer requirements via hardware / software options applied at the factory or in the field.

General

Modes of Operation:	Auto, Manual, Remote
Configurations:	Chain Switching Only
Modem Switch Time:	50 msec Typical (Mod Fault) 1 sec Maximum (Demod Fault)
Tx Waveguide Switch:	48V, 200 Watts
Rx Waveguide Switch:	48V, 200 Watts

Monitor and Control

All operating parameters can be monitored and controlled via the front panel LED display or the RS-485 control channel in command modes. The following modem parameters may be controlled and/or monitored:

Parameters Monitored:	Power Supply Status, Auto/Manual, Select A, Select B
Parameters Controlled:	Auto/Manual, Select A, Select B

Terrestrial Interfaces

OM20:	EIA 530 & G.703 Balanced
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Front Panel LED Indicators

Unit:	Power Supply 1 Power Supply 2 Switch Fault Auto Manual
Modem:	Online A/B Fault A/B

Front Panel Controls

Enable
Select Auto
Modem Select A
Modem Select B

Options

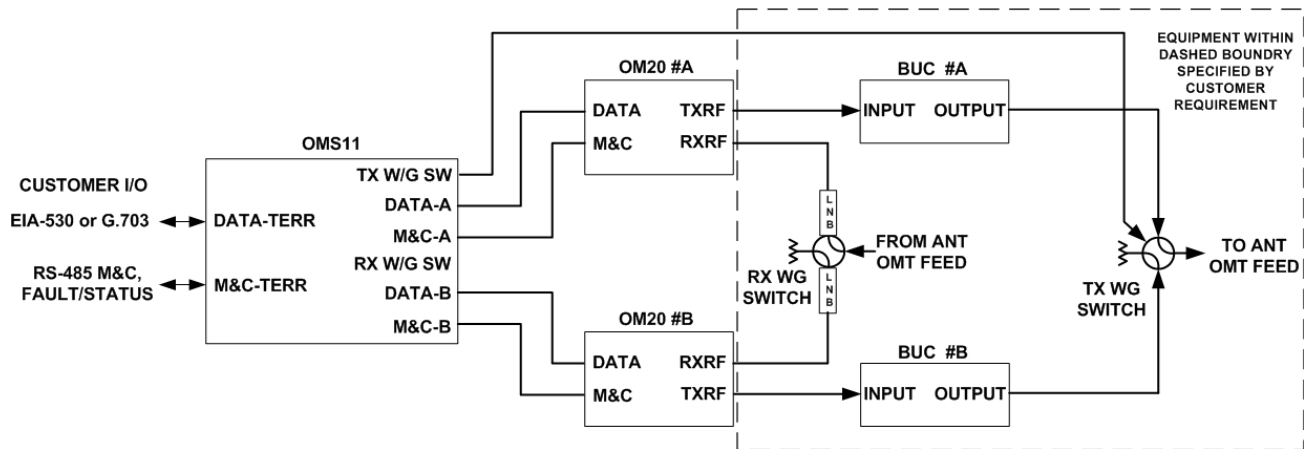
Cable Sets:	OM20
	C-Band TX & RX Waveguide Switch
	Ku-Band TX & RX Waveguide Switch
	5, 10, 20 W C-Band BUC's
	4, 8, 16 W KU-Band BUC's
	C-Band LNB's
	Ku-Band LNB's
	Interconnecting Waveguide
	IFL Cables
King Post Mounting Kit	

Power and Environmental

Prime Power:	100 to 240 VAC, 50 to 60 Hz, 40 Watts Nominal 240 Watts Maximum during Switching 48 VDC, 40 Watts Nominal 240 Watts Maximum during Switching
Operating Temperature:	-40 to 50°C, 95% Humidity, Noncondensing
Storage Temperature:	-50 to 70°C, 99% Humidity, Noncondensing

Physical

Chassis Size:	11.4" L x 15.4" W x 5.7" H (28.9 cm x 39.1 cm x 14.48 cm)
Weight:	16 Pounds (7.2 Kg)



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