



ONE RACK UNIT HIGH 1:1 REDUNDANT SWITCHOVER UNIT



FEATURES

- Fully redundant power supplies
- Local or remote control (RS485)
- Automatic/manual control from both local and remote mode
- Remote status
- Off-line output

OPTIONS

- Remote RS422, IEEE-488, RS232, or contact closure
- 50 ohm impedance level (IF connectors)

The 1:1 Redundant Switchover Unit is used with two units, one on-line (Unit A) and the second in a standby mode (Unit B). A fault condition in the on-line Unit A, or an operator generated command, will switch the standby Unit B to the on-line position and remove Unit A from the transmission path. The unit is equipped with fully redundant power supplies.

The 1:1 Redundant Switchover Unit is designed to ensure continuous operation allowing a unit fault to be repaired and/or routine maintenance to be performed without disruption of signal transmission.

MODEL NUMBERS

1:1 SWITCHOVER UNIT, SINGLE TRANSFER SWITCH MODELS

Model	Frequency Range	Connectors
RSU-B RSU-S	50–180 MHz 0.95–18.4 GHz	BNC SMA

1:1 SWITCHOVER UNIT, DUAL TRANSFER SWITCH MODELS

Model	Switch 1 Frequency Range	Switch 2 Frequency Range	Switch 1 Connectors	Switch 2 Connectors
RSU-B/B	50–180 MHz	50–180 MHz	BNC	BNC
RSU-B/S	50–180 MHz	0.95–18.4 GHz	BNC	SMA
RSU-S/S	0.95–18.4 GHz	0.95–18.4 GHz	SMA	SMA

RF SPECIFICATIONS

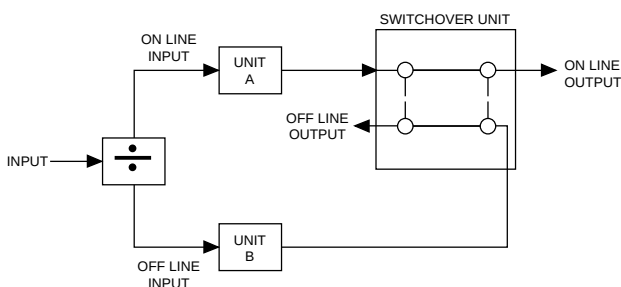
Frequency	Insertion Loss (Max.)	Amplitude Flatness/40 MHz (Max.)	Return Loss (Min.)	Isolation (Min.)
50–180 MHz	0.2 dB	0.2 dB	23 dB	80 dB
0.95–6.5 GHz	0.3 dB	0.2 dB	18 dB	60 dB
6.5–8.4 GHz	0.4 dB	0.2 dB	18 dB	60 dB
8.4–14.8 GHz	0.45 dB	0.2 dB	16 dB	60 dB
14.8–18.4 GHz	0.6 dB	0.4 dB	12 dB	55 dB

Notes: RF specifications apply to a single switch.

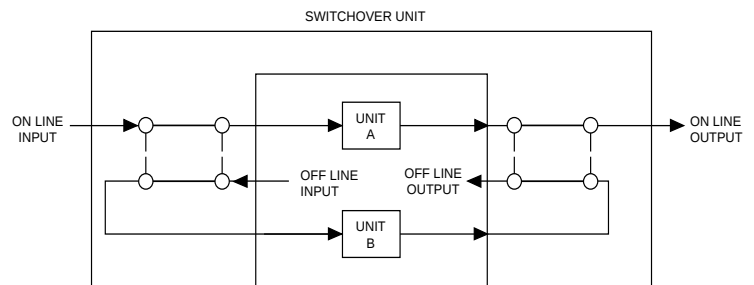
IF switch (50–180 MHz) is 75 ohm impedance. 50 ohm IF impedance is available with Option 15.

TYPICAL CONFIGURATIONS

SINGLE TRANSFER SWITCH MODELS



DUAL TRANSFER SWITCH MODELS



GENERAL SPECIFICATIONS

MODES OF OPERATION

Local mode	Commands are received from the keys on the front panel.
Remote mode	Commands are received from a remote system controller via the remote interface connector. All front panel keys are disabled with the exception of local/remote mode selection.
Automatic mode.....	Switchover occurs if a fault is detected in the on-line unit.
Manual mode.....	Switchover may be executed either via the front panel keys (local mode) or the remote interface (remote mode).

FRONT PANEL FUNCTIONS

Commands	Unit A: On line/standby Unit B: On line/standby
Mode selection	Local/remote Auto/manual

ALARMS (LED INDICATORS)

Unit A
Unit B
Power supply A
Power supply B
RSU

REMOTE

Commands.....	Unit A: On line Unit B: On line Auto Manual
Status.....	Unit A: On line Unit A: Standby Unit B: On line Unit B: Standby Remote Local Auto Manual RSU normal RSU fail Unit A: Normal Unit A: Fail Unit B: Normal Unit B: Fail

OPTIONS

- 15.** 50 ohm IF impedance (50–180 MHz switches only).
- 17.** Remote control.
- A.** RS422.
 - B.** RS485 (standard).
 - C.** RS232.
 - D.** Contact closure.
 - F.** IEEE-488.

Note: Missing option numbers are not applicable to this product.

ONE RACK UNIT HIGH 1:1 REDUNDANT SWITCHOVER UNIT

PRIMARY POWER REQUIREMENTS

Voltage	90–250 VAC
Frequency	47–63 Hz
Power consumption.....	25 W typical steady state, 75 W peak during switchover

SWITCH SPECIFICATIONS

Switch type	Coaxial, four-port transfer
Switch contacts	Break-before-make, wiping
Switch drive	Latching, sector motor
Switching speed	150 ms maximum

PHYSICAL

Weight	20 pounds nominal
Overall dimensions.....	19" x 1.75" panel height x 22" maximum (chassis depth 20" excluding protrusions)
Rear panel connectors	
Signal connectors	
IF	BNC female
RF.....	SMA female
Remote interface connectors	DE-9S for RS485 and RS422, DB-25P for RS232, DB-25S for contact closure, IEEE-488 receptacle for IEEE-488
DC voltage test points	Jack receptacle
Alarm input	DE-9P

ENVIRONMENTAL

Operating	
Ambient temperature.....	0 to 50°C
Relative humidity	Up to 95% at 30°C
Atmospheric pressure	Up to 10,000 feet
Nonoperating	
Temperature.....	-50 to +70°C
Relative humidity	Up to 95% at 40°C
Atmospheric pressure	Up to 40,000 feet
Shock and vibration.....	Normal handling by commercial carriers

Note: For literature describing local control (front panel) and remote control (bus protocols), refer to MITEQ's Technical Note 25T008.



100 Davids Drive, Hauppauge, NY 11788
TEL.: (631) 436-7400 • FAX: (631) 436-7431/436-7430
www.miteq.com