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Sat-Light Series

Model 2040 | 1:1 Redundancy Switch

Features & Benefits

- Local override switch
- Automatic or Manual Switching
- Remote operation possible via SNMP manager
- DC to 2.9 GHz bandwidth
- Rapid Switching to enable signal continuity
- Adjustable signal level detection
- Locking switch circuit

Product Description

Model 2040 provides 1:1 redundant switching for Sat-Light™ Interfacility Link products, including the IF and L-Band product lines. Model 2040 supersedes Model 2000 Switch and is backward compatible, integrating into existing systems. The Model 2040's many features enable the operator to configure the product to meet demanding system requirements.

Model 2040 can be controlled either locally or remotely. Global Foxcom's Apogee SNMP Management system set the switching state (remote/local) or transmission path (A/B). However, in the case of a fault in the SNMP manager, the user can override the SNMP manager and return to control locally via the front panel "override" switch.

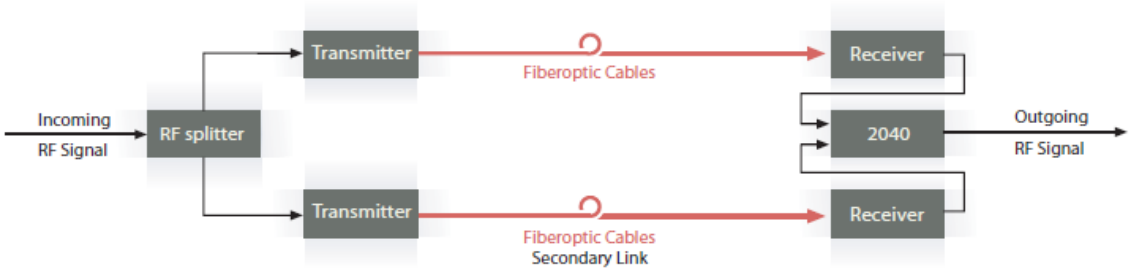
The Apogee manager graphically displays the active path. By activating a pin in the unit's interface 9-pin connector, the system operator can easily switch between Local and Remote control. Switching from the primary to redundant path can be performed by the Model 2040 manually or automatically. Note that when the unit switches to the redundant channel, it will lock and continue to transmit over that channel regardless of the input to the primary channel. The high reliability, high-frequency relay redundancy switch can be configured to detect faults in the RF signal, the optical signal, or both. In addition the user can set the threshold level at which the 2040 switch detects loss of RF signals.

Model 2040 provides two methods to detect which channel is operating:

1. Via a 3-pin Molex connector on the rear panel;
2. Through the chassis via the 9-pin connector.

Redundant paths are configured using an RF splitter (Global Foxcom P/N 2X012), which transmits the RF signal to two Sat-Light transmitter modules. These modules are connected via single-mode fiber optic cable to two Sat-Light receivers. Each receiver module connects to the Model 2040 via a supplied coaxial jumper cable. Model 2040 then transmits the RF output signal to the end device.

Typical Application



2040 System Specifications

RF Specifications			
Frequency Response	DC–950 MHz	950–2400 MHz	2400–2900MHz
Flatness @ Full Band (typ.)	± 0.2 dB	± 0.4 dB	± 0.7 dB
Insertion Loss (typ.)	- 0.6 dB	-1 dB	-1.5 dB
Input Impedance	50 or 75 Ohm		
Return Loss @50 Ohm (75 Ohm) (min)	18 dB (18dB)	18 dB (12dB)	12 dB (9dB)
Contact Resistance	100 milli-Ohm	100 milli-Ohm	100 milli-Ohm
Channel A/B Isolation (min)	60dB	40dB	30dB
Maximum RF Input	+20 dBm		
Switching Speed (max.)	10mSec on / 10mSec off		
Physical Specifications			
Operating Temperature	-20° C to +55° C		
Storage Temperature	-40° C to +85° C		
Maximum Humidity	85 %		
Size	5.1" X 4.9" X 1.6"		
DC Power	+15 VDC @ 100mA (max)		
Connectors			
RF In/Out	F type, 50 or 75 Ohm BNC, SMA, (user specified)		
DC Signals	9 D-Type Male		
Test Ports	Ø 2nm		
Monitoring Connector	3 Pin Molex (53048-0310)		

Ordering Information

Model Number	Description
2040	1:1 Redundancy Switch
50	50 Ohm BNC Connector
75	75 Ohm BNC Connector
F	F-Type Connector
SMA	SMA Connector
CD	Channel Detect via 9-pin connector