

PL7611: 1:1 RF Protection Switch

Features & Benefits:

- Automatic or manual switching
- Remote operation possible via SNMP manager
- DC to 3 GHz bandwidth
- Rapid switching to allow signal continuity
- Adjustable signal level detection for each channel separately
- Locking switch circuit



Product Description

The **PL7611** card provides 1:1 redundant switching for the *Sat-Light/Platinum* inter facility link products, including the IF and L-band families.

The **PL7611** can be controlled either locally or remotely. Foxcom's Platinum series MCP [PL700] can set the switching state (either remote or local) or the transmission path (channels A or 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 Sat-Light/Platinum MCP graphically displays the active path. Switching from the primary to redundant path can be performed by the **PL7611** manually or automatically. 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 the optical signal, or both. In addition the user can set the threshold level at which the **PL7611** switch detects loss of RF signals.

The PL7611 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 a Platinum RF splitter which transmits the RF signal to two transmitter cards. These cards are connected via single mode fiber optic cable to two receivers. Each receiver card connects to the **PL7611** via a supplied coaxial jumper cable. The **PL7611** then transmits the RF output signal to the end device.

Specifications

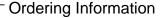
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RF Specifications	Units	Typical	Minimum	Maximum
Frequency Range - Bandwidth	MHz	DC - 3000		
Amplitude Response – Flatness DC – 950 MHz 950 - 2400 MHz 2400 – 3000 MHz	dB	±0.2 ±0.4 ±0.7		
Input/Output Impedance	Ohm	50 or 75		
Insertion Loss DC – 950 MHz 950 - 2400 MHz 2400 – 3000 MHz	dB	-0.6 1 -1.5		
Maximum input without damage	dBm	+20		
Channel A/B isolation DC – 950 MHz 950 - 2400 MHz 2400 – 3000 MHz	dB		60 40 30	
Switching speed On [active] Off [inactive]	msec	13 13		
Input/Output Return Loss - 50 Ohm DC – 950 MHz 950 - 2400 MHz 2400 – 3000 MHz	dB	18 15 12		18 15 12
Input/Output Return Loss - 75 Ohm DC – 950 MHz 950 - 2400 MHz 2400 – 3000 MHz		-18 -12 -9		-18 -12 -9
RF Connector Input / Output	Туре	F, SMA, BNC, N		
Electrical Specifications				
Supply Voltage	Vdc	12		
Supply Current	Amps	0.5		
EMI Rating		EMI Rating: FCC Class B CE Mark		
Physical Specifications				
Operating Temperature Range	°C		-10	+55
Storage Temperature Range	°C		-45	+85
Relative Humidity		95% non-condensing		
Altitude	ft / Km	10,000 [3.08] operating 14,000 [12.2] non-operating		
Dimensions [DxWxH]	ins/cm	12×0.8×4 / 30.5×2×10.2		

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Weight	lbs./Kg	1.0/ 0.46
Physical / Environmenta Specifications	I	
MTBF	Hours	456, 271
MTTR	Hours	0.083
Shock & Vibration		Designed for normal transportation environment per section 514.4 MIL-STD-810E. Designed to withstand 20G at 11 ms [½ sine pulse] in non-operating configuration.

All specifications are subject to change without notice.



Example: PL7230T-50SMA-SC

L-band, high RF input transmitter, 1310 nm laser, 50-Ohm SMA RF connector and SC/APC optical connector

PL7 Null - 50SMA - SC

A Platinum Product

00 - MCP 01 - Chassis & PS 0 - 5 MHz Tx/Rx 10 MHz Tx/Rx 2 - L-Band Tx/Rx

3 - IF Tx/Rx

4 - Wideband Tx/Rx 5 - Data XVCR 6 - Accessories

- Non-chassis mount products

B Tx RF Input/ Rx RF output

2 - Low power input 3 - High power input

C Product Series

Null - None [default] - 1stseries 2 - 2^{ld} series Etc.

D Module Type

Т = T× R = Rx S = Serial data E = Ethernet G = GigE

F RF Connector

75F = 75-Ohm F 75BNC = 75-0hm BNC 50BNC = 50-0hm BNC 50SMA = 50-0hm SMA = 50-0hm N 50N

E Laser for TX &

Optical budget for RX G Optical Connector

Tx: Null = 1310nm laser Null = FC/APC [default] 1550 = 1550nm laser SC XXXX = ITU option Rx: 4= 4dB 16=16dB 10=10dB 25= 25dB

= SC/APC E2 = E2000

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