FOXCOM
Complete RF-2-Fiber Solutions

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

1:1 RF Protection Switch: PL7611

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	Type	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	ºC		-10	+55
Storage Temperature Range	ºC		-45	+85
Relative Humidity		95% non-condensing		
Altitude	ft / Km	10,000 [3.08] operating 14,000 [12.2] non-operating		
Dimensions [D×W×H]	ins/cm	12×0.8×4 / 30.5×2×10.2		

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Weight	lbs./Kg	1.0/ 0.46
Physical / Environmental Specifications		
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.

Ordering Information

Example: PL7230T-50SMA-SC
L-band, high RF input transmitter, 1310 nm laser, 50-Ohm SMA RF connector and SC/APC optical connector

PL7	2	3	0	T	Null	–	50SMA	–	SC
	A	B	C	D	E		F		G

A Platinum Product

00	-	MCP
01	-	Chassis & PS
0	-	5 MHz Tx/Rx
1	-	10 MHz Tx/Rx
2	-	L-Band Tx/Rx
3	-	IF Tx/Rx
4	-	Wideband Tx/Rx
5	-	Data XVCR
6	-	Accessories
7	-	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]
1	-	1st series
2	-	2nd series
Etc.		

D Module Type

T	=	Tx
R	=	Rx
S	=	Serial data
E	=	Ethernet
G	=	GigE

E Laser for TX & Optical budget for RX

Tx:	Null	=	1310nm laser
	1550	=	1550nm laser
	XXXX	=	ITU option
Rx:	4= 4dB		16=16dB
	10=10dB		25= 25dB

F RF Connector

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

G Optical Connector

Null	=	FC/APC [default]
SC	=	SC/APC
E2	=	E2000

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