



Patented

FNER Series
(front view)

Active Products

RF & L-Band Signal Routing Solutions:

General Features & Benefits:

- ▶ Expandable (modular) or fixed, unidirectional programmable RF & L-Band routing switches
- ▶ High performance & compact signal routing solution
- ▶ Ideal solutions for applications that require dynamic signal routing capabilities such as routing various signals to test & measurement equipment
- ▶ Easily remote monitored & controlled via rear panel communications interfaces (RS-232, RS-422, RS-485, SNMP, Telnet, or TCP/IP via customer supplied PC) allowing technicians to troubleshoot problems while off-site
- ▶ Local control is facilitated via a front panel interface on integrated or standalone (1RU) universal controller module (UCM)

RF & L-Band Expandable Routing Switches:

- ▶ Expandable from 16x1 up to 128x1 by adding additional input distribution 16x1, 1RU chassis
- ▶ First 16x1 unit is provided with 1RU 16x1 slave & 8x1 master with integrated universal controller module (UCM)
- ▶ Integrated universal controller module for switch control & external communications & control
- ▶ Offered in 950-2150 MHz & 5-1000 MHz versions in order to achieve optimum performance



1RU Chassis (front view)

RF & L-Band Switching Solutions

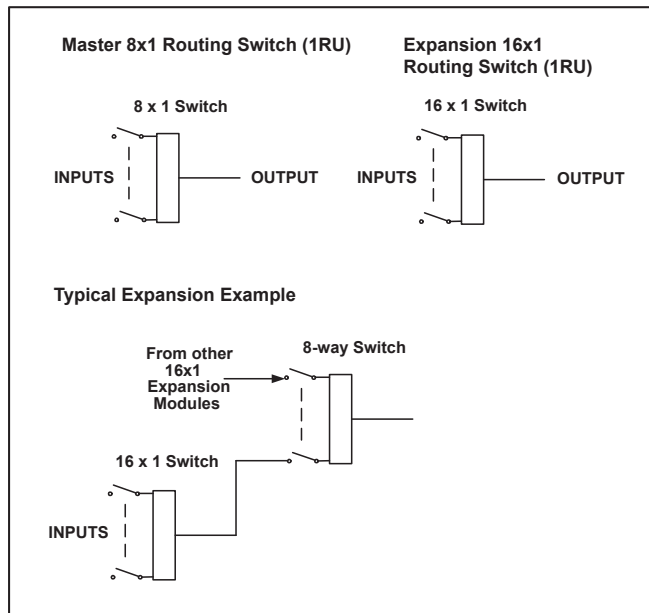
RF & L-Band Signal Routing Solutions:

RF & L-Band Modular Routing Switches (cont'd):

RF Modular Routing Specifications

SPECIFICATIONS	L-BAND		RF	
	8x1 Control Module	16x1 Slave	8x1 Control Module	16x1 Slave
OPERATING FREQUENCY	950-2150 MHz	950-2150 MHz	5-1000 MHz	5-1000 MHz
INPUTS/OUTPUTS	16x1 to 128x1	16x1 to 128x1	16x1 to 128x1	16x1 to 128x1
MAX. TOTAL OPERATING INPUT POWER (Each Input)	10 dBm	10 dBm	50 dBmV	50 dBmV
GAIN	0 +/- 2 dB	0 +/- 2 dB	0 +/- 1 dB	0 +/- 1 dB
FREQUENCY RESPONSE	+/- 4 dB	+/- 4 dB	+/- 2 dB	+/- 2 dB
RETURN LOSS	> 10 dB	> 10 dB	> 12 dB	> 12 dB
IMPEDANCE	75 ohm	75 ohm	75 ohm	75 ohm
ISOLATION	> 40 dB	> 40 dB	> 40 dB	> 40 dB
INPUT POWER	110/220 VAC, 50/60 Hz			
LOCAL CONTROL	Front panel keypad and LCD Screen			
REMOTE CONTROL	RS-232, RS-422, RS-485, SNMP, Telnet or TCP/IP via customer supplied PC			
SOFTWARE	Basic PC-compatible operating software and system protocol included with system			
SIZE	First 16x1 slave and master 8x1 and integrated UCM is 2 RU / Each additional 16x1 slave is 1RU			

Functional Schematics



Ordering Information

Part Number	Description
RF	
FNERR8/1CONRFF	5-1000 MHz, 8x1 Controller Module, F
FNERR16/1SLRFF	5-1000 MHz, 16x1 Slave Module, F
FNERRF16/1F	5-1000 MHz 16x1, 1RU, F
FNERRF48/1F	5-1000 MHz 48x1, F
FNERRF64/1F	5-1000 MHz 64x1, F
FNERRF128/1F	5-1000 MHz 128x1, F
L-BAND	
FNERR8/1CONLB	950-2150 MHz, 8x1 Controller Module, BNC
FNERR16/1LB	950-2150 MHz, 16x1 Expandable, BNC
FNERR16/1MODLB	950-2150 MHz, 16x1 Slave Module, BNC
FNERR32/1LB	950-2150 MHz, 32x1 Expandable, BNC
NOTE:	
Please inquire about part numbers for various higher input/output configurations.	

RF & L-Band Signal Routing Solutions:

RF & L-Band Fixed Routing Switches:

- ▶ Fixed RF & L-Band routing switches offered in fan-in (16x1 or 8x1) or fan-out (1x16 or 1x8) configurations
- ▶ Integrated universal controller module for switch control and external communications & control
- ▶ Offered in 950-2150 MHz & 5-1000 MHz versions in order to achieve optimum performance



RF Fixed Routing Specifications

SPECIFICATIONS	L-BAND	RF
	FNFRLn/m*	FNFRRFn/m*
OPERATING FREQUENCY	950-2150 MHz	5-1000 MHz
INPUTS/OUTPUTS	8x1 or 16x1	8x1 or 16x1
MAX. TOTAL OPERATING INPUT POWER	-5 dBm	56 dBmV
GAIN	0 +/- 2 dB	0 +/- 2 dB
FREQUENCY RESPONSE	+/- 3 dB	+/- 2 dB
RETURN LOSS	> 10 dB	> 12 dB
IMPEDANCE	75 ohm	75 ohm
ISOLATION	≥ 45 dB	≥ 50 dB
INPUT POWER	110/220 VAC, 50/60 Hz	
LOCAL CONTROL	Front panel keypad and LCD Screen	
REMOTE CONTROL	RS-232, RS-422, RS-485, SNMP, Telnet or TCP/IP via customer supplied PC	
SOFTWARE	Basic PC-compatible operating software and system protocol included with system	
NOTES:		
n = 16 or 8 and m=1 for fan in routing and n=1 and m=16 or 8 for fan out routing		
* = F for F connectors and B for BNC connectors		

RF & L-Band Switching Solutions

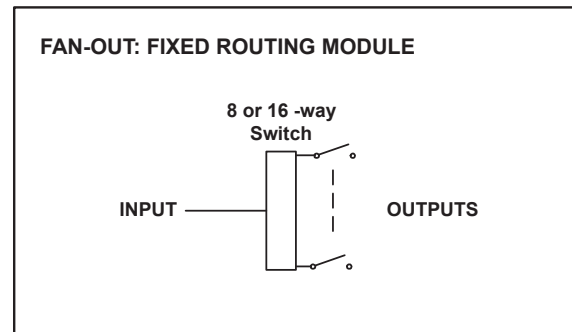
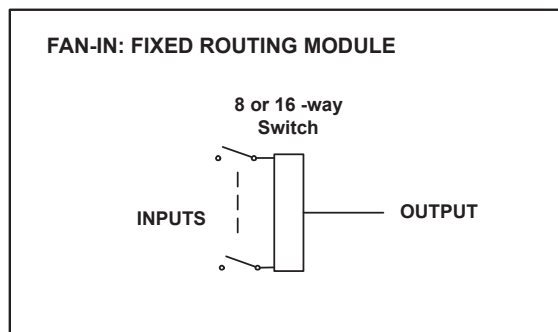
RF & L-Band Signal Routing Solutions:

RF & L-Band Fixed Routing Switches:

Ordering Information

Part Number	Description
RF FAN-OUT	
FNFRRF1/8F	Fixed Routing Switch, RF, 1x8, 1RU, F
FNFRRF1/8BNC	Fixed Routing Switch, RF, 1x8, 1RU, BNC
FNFRRF1/16F	Fixed Routing Switch, RF, 1x16, 1RU, F
FNFRRF1/16BNC	Fixed Routing Switch, RF, 1x16, 1RU, BNC
RF FAN-IN	
FNFRRF8/1F	Fixed Routing Switch, RF, 8x1, 1RU, F
FNFRRF8/1BNC	Fixed Routing Switch, RF, 8x1, 1RU, BNC
FNFRRF16/1F	Fixed Routing Switch, RF, 16x1, 1RU, F
FNFRRF16/1BNC	Fixed Routing Switch, RF, 16x1, 1RU, BNC
L-BAND FAN-OUT	
FNFRL1/8F	Fixed Routing Switch, L-Band, 1x8, 1RU, F
FNFRL1/8BNC	Fixed Routing Switch, L-Band, 1x8, 1RU, BNC
FNFRL1/16F	Fixed Routing Switch, L-Band, 1x16, 1RU, F
FNFRL1/16BNC	Fixed Routing Switch, L-Band, 1x16, 1RU, BNC
L-BAND FAN-IN	
FNFRL8/1F	Fixed Routing Switch, L-Band, 8x1, 1RU, F
FNFRL8/1BNC	Fixed Routing Switch, L-Band, 8x1, 1RU, BNC
FNFRL16/1F	Fixed Routing Switch, L-Band, 16x1, 1RU, F
FNFRL16/1BNC	Fixed Routing Switch, L-Band, 16x1, 1RU, BNC

Functional Schematics



Specifications subject to change without notice.

