8^2
8x8 L-Band RF Matrix Switch

Telemeter Electronic

8^2

General Description:

The 8^2 RF matrix switch features up to 8 inputs and 8 outputs in a compact 1 RU chassis. The 8^2 is a full fan-out, non-blocking RF matrix switch where an input can be routed to any or all outputs. Designed for high reliability and uptime, the switch features redundant power supplies. The flexible backplane allows the user to choose between 75 Ω and 50 Ω connectors, or a combination of both. Input connectors have the option for fiber optic receivers. The 8^2 has the option to provide 13/18 VDC LNB power and 22 kHz tone to remotely switch between LNB polarities and bands. Manual gain and tilt control allows the user to adjust power levels for optimum signal performance, and RF sensing with optional signal level recording helps diagnose signal quality.

Features & Benefits:
- Compact modular design 8x8 in 1 RU
- Up to 35 dB variable gain and 8 dB of tilt control
- Redundant hot-swap power supplies
- Additional output monitoring port
- Optional input fiber optic receivers
- Input channel redundancy
- LNB power 13/18 VDC and 22 kHz tone

Specifications:*	8^2
Operating Frequency:	950-2150 MHz
Configuration:	4x8, 8x4, 8x8
Gain Range:	0 to +35 dB in 1 dB Steps
Impedance:	75 Ω or 50 Ω
OP1dB:	0 dBm
OIP3:	< -40 dBc (two tones @-8 dBm)
Max RF Input Power, No Damage:	+25 dBm Max.
Frequency Response:	± 3.0 dB (over entire band)
Isolation (input-to-input):	60 dB Typ.
Isolation (output-to-output):	60 dB Typ.
Isolation (input-to-output):	60 dB Typ.
Input Return Loss:	>14 dB
Noise Figure:	<14 dB
RF Connectors:	F-Type, BNC 75 Ω, SMA
Optical Input Connectors:	Groups of 4
Fiber Type:	SMF
Optical Connector Type:	LC/APC
Wavelength Range:	1100 to 1650 nm
AC Input Power:	Autoranging 100 to 240 VAC
Power Consumption:	<40 W
Local Control:	Front Panel 2.2" Display with Rotary Switch Joystick
Remote Control:	TCP/IP SNMP, Web Browser GUI
Mechanical:	8x8 in 1 RU: 1.75" H x 19" W x 18.5" D
Weight:	13.2 lbs

*Specifications may vary with connector type. See individual specification sheet for specific performance data.