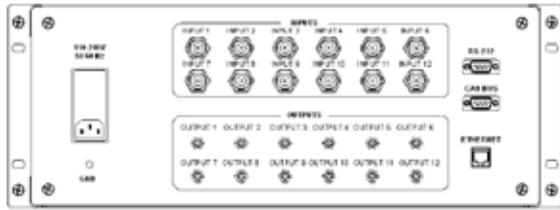




4701-12/12-ENET



Features

Input/Output ports	9x9 to 12x12 unidirectional
Configuration	Non-blocking Full Fan-Out
Operating Frequency	1-18 GHz
Manual Control	LCD Touch Screen
Remote Control	Ethernet
Power Supply	Redundant power supplies
Impedance	50-Ohm

Part Numbers

N= # of Inputs / M= # of Output

4701-N/M-ENET N=M: 9x9, 10x10, 11x11, 12x12

Application

The 4701 Model is an unidirectional 50-ohm Fan-Out switch matrix configured with a maximum of 12 inputs and 12 outputs. The RF inputs are first amplified with high linearity amplifiers (to compensate for the insertion loss) and then divided using 4-way and 3-way power dividers before being routed to terminated SP12T coaxial switches with 2W/50-ohm loads. Hence, the frequency band is limited to 1-18 GHz.

A fan-out matrix divides all the RF inputs such that it can switch any input to one or more (all) outputs simultaneously.

The 4701-series is equipped with MS Windows based PC, removable SATA hard drive, redundant power supplies with LED monitoring on the front panel. Locally it can be controlled via an LCD touch screen and remotely with Ethernet.

RF Specifications

9x9 to 12x12	
VSWR (max)	2.50:1 input & output
Isolation (min)	60 dB input/input
	60 dB input/output
	60 dB output/output (different input)
	18 dB output/output (common input)
Gain	0 dB $\pm$ 2.0 dB
Gain Flatness	0.5 dB max over any "rolling" 100 MHz span, 8.0 dB max across 1-18 GHz
Survivable Input Power	+15 dBm (max) do damage
1dB Compression (min)	+5 dBm input
3rd Order Intercept (min)	+10 dBm
2nd Order Intercept (min)	+20 dBm
Noise Figure (max)	11 dB

Specifications

Relay Type	Latching Terminated Coaxial
Other Components	Amplifiers, Power Dividers
I/O Connector Type	N (f) inputs / SMA (f) outputs
Switching Time (min)	300 ms (incl. control delay)
Operating Life (cold)	1,000,000 per position
MTBF	30,000-50,000 Hours
Dimensions (max)	19" wide rack mount 20" Depth 4U Height (7.00)
Operating Temperature	0 °C to +50 °C
Storage Temperature	-20 °C to +70 °C
Operating Humidity	10-80% non-condensing
Weight (max)	50 lbs

Local Control	6.5" LCD Touch Screen (640x480)
Remote Control	Ethernet TCP/IP, 10/100/1000 BASE-T
Commands/Syntax	Dow-Key SCPI commands
Operating System	Microsoft Windows 7 or later RS-232 gives access to the built-in PC
Hard drive	160 GB (min) SATA HD / removable
CPU/ Memory	Embedded Intel processor / 2G RAM (min)
Power Supply	120-240 VAC, 50-60 Hz, 2A-1A, 250W (max) Power switch with guard on the front and LED indicators for redundancy
Fuse	Accessible/replaceable on the rear
Cooling / Venting	2 Fans / Side-to-Side