



5096

Features

Input/Output ports	16x32 expandable to 32x64 unidirectional
Configuration	Non-blocking Full Fan-Out
Operating Frequency	3.4-4.2 GHz (C-band)
Manual Control	LCD Touch Screen
Remote Control	RS-422
Impedance	50-Ohm

Part Numbers

5096 (32x64)	5263 (16x64)
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Application

The C-band non-blocking fan-out solid state switch model is ideal for SATCOM applications with a narrow band operating frequency of 3.4-4.2 GHz. It can be configured to maximum 16 inputs and 64 outputs and is a fully integrated 19" rack 34U modular system using (8) sub-modules (32x64):

1x Controller module	(3U)
2x 16x64 Input modules	(3U ea.)
4x 32x16 Output modules	(6U ea.)
1x Fan Control module	(1U)

The system is fully controlled through the Controller module, which is equipped with a MS Windows based PC, removable SATA hard drive and multiple power supplies. Locally it can be controlled via an LCD touch screen and remotely with RS-422.

On the rear panel, the Input and the Output Modules are interconnected using 9-pin CAN bus D-sub connectors to create a full 16x64 or 32x64 matrix.

RF Characteristics (5096 & 5263)

VSWR (max)	1.3:1 input & output
Isolation (min)	60 dB input/input
	60 dB input/output
	60 dB output/output (different input)
	20 dB output/output (common input)
Gain, any path	-14 dB \pm 2 dB @ 3.8 GHz, 20°C
Gain, bal. btw. ch. (max)	\pm 1.5 dB @ 3.8 GHz, 20°C
Gain Stability	\pm 0.2 dB over \pm 5°C
Gain, variation vs. freq.	\pm 0.5 dB over any 40 MHz segment
	\pm 0.5 dB over any 80 MHz segment
	\pm 1.5 dB over 3.4-4.2 GHz segment
1dB Compression (min)	-5 dBm output
3rd Order Intercept (min)	+4 dBm output
Noise Figure (max)	17 dB
Spurious Outputs (max)	-100 dBm signal dependent
	-70 dBc signal related

Specifications

Relay Type	Solid State
Other Components	Amplifiers, Power Dividers
I/O Connector Type	SMA female
Dimensions (max)	19" wide full rack
	21" Depth
	34U Height (59.5")
Operating Temperature	0 °C to +50 °C
Storage Temperature	-40 °C to +50 °C
Operating Humidity	10-80% non-condensing
Weight (typ)	295 lbs (32x64)

Local Control	6.5" LCD Touch Screen
	USB port for keyboard or mouse
Remote Control	RS-422 with DB9 male
Commands/Syntax	Dow-Key SCPI commands
Operating System	Microsoft Windows
Hard drive	160 GB (min) SATA HD / removable
CPU/ Memory	Embedded Intel processor / 2G RAM (min)
Power Supply	120-240 VAC, 50-60 Hz, 1200 W (max)
	(multiple power supplies are included)
Fuse	Accessible/replaceable on the rear
Cooling / Venting	1x 1U Fan Module