## MATRIX SWITCH

| Frequency Range | DC-18 GHz |
| :---: | :---: |
| Configuration | 6 x 6 Blocking Electro-Mechanical Matrix Switch (See block diagram 092-9263) <br> (Unused input ports are terminated) <br> (Unused output ports are terminated) <br> (all ports are bi-directional) <br> (the ADMIN password is located on rear panel) |
| Enclosure Type | 19 inch rack mount @ 3RU high |
| Impedance | 50 Ohms nominal |
| VSWR | Typical: <br> 1.1:1 typical DC-4GHz <br> 1.3:1 typical 4-8GHz <br> 1.5:1 typical $8-12.4 \mathrm{GHz}$ <br> 1.8:1 typical 12.4-18GHz |
|  | Maximum: <br> 1.5:1 maximum DC-8GHz <br> 2.0:1 maximum $8-18 \mathrm{GHz}$ |
| Insertion Loss | Typical: <br> 1.25 dB typical DC-4GHz <br> 1.75 dB typical $4-8 \mathrm{GHz}$ <br> 2.50 dB typical $8-12.4 \mathrm{GHz}$ <br> 3.00 dB typical $12.4-18 \mathrm{GHz}$ |
|  | Maximum: <br> 2.25 dB maximum $\mathrm{DC}-8 \mathrm{GHz}$ <br> 3.50 dB maximum $8-18 \mathrm{GHz}$ |
| Isolation | Typical: <br> 90dB typical DC-8GHz <br> 80 dB typical $8-18 \mathrm{GHz}$ |
|  | Minimum: <br> 70 dB minimum $\mathrm{DC}-4 \mathrm{GHz}$ <br> 65 dB minimum $4-8 \mathrm{GHz}$ <br> 60 dB minimum $8-18 \mathrm{GHz}$ |
| RF Input Power | 50 Watts average (cold switched) <br> 1 Watt average (hot switched) |
| Switching Speed | 20 milliseconds <br> (after command is received and processed) <br> (3 milliseconds typical processing time) |
| Remote Control | Ethernet (DHCP, TCP/IP, 10/100, up to 12 users) RS-232 (up to 115200 Baud) |

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| Remote Commands | Matrix Commands: <br> Matrix, Set Input, Set Output, Read Input, Read Output, Read All Inputs, Read All Outputs, Read Matrix Paths |
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|  | System Commands: <br> Help, Identification, Store, Recall, Pause, Net, Serial, Close, Disconnect, MOTD, Date, Message, Restrict, IDENT, Name, Show Users, Reboot, Uptime, Prompt |
| Startup/Default States (configurable) | ```All ports off at startup (see MATRIX command) DHCP enabled (see NET command) 4 \text { Ethernet users (see NET command)} Prompts off (see PROMPT command)``` |
|  | All of these default settings can be changed by user. Unit can be configured for up to 12 Ethernet users. |
| Manual Control | 20-Button Keypad and LCD display (IP Address configurable via keypad) (Net mask configurable via keypad) (Gateway configurable via keypad) (Baud rate configurable via keypad) |
| RF Connector | $N$ female or SMA female |
| AC Supply | 100-240 VAC @ 47-63 Hz |
| Operating Temperature Range | $0^{\circ}$ to $+70^{\circ} \mathrm{C}$ |
| Physical Size | See outline drawing 092-9262 |


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