

## **SPECIFICATION SHEET**

**JFW MODEL 50MS-463**

**8 X 8 NON-BLOCKING SOLID STATE MATRIX SWITCH**

JFW Industries, Inc.  
Phone: 317-887-1340  
sales@jfwindustries.com  
www.jfwindustries.com

Frequency Range	500-8400 MHz
Configuration	8 x 8 Non-Blocking Solid-State Matrix (See block diagram 092-2886) (Unused input ports are self-terminating) (Unused output ports are self-terminating) (all ports are bi-directional) (the ADMIN password is located on rear panel)
Startup/Default States (configurable)	All ports off at startup (see MATRIX command) DHCP enabled (see NET command) 4 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.
Enclosure Type	19 inch rack mount @ 4RU high
Impedance	50 Ohms nominal
VSWR	1.7:1 typical / 2.0:1 maximum
Insertion Loss	13.0 dB typical @ 500 MHz 15.4 dB typical @ 3000 MHz 20.2 dB typical @ 6000 MHz 21.2 dB typical @ 8400 MHz
Isolation	Output to Output - 23 dB typical (Set to same input) - 18 dB minimum  Output to Output (Set to diff inputs) - 75 dB typical - 60 dB minimum  Input to Output - 75 dB typical - 60 dB minimum  Input to Input - 75 dB typical - 60 dB minimum
RF Input Power	+30 dBm (input ports) +27 dBm (output ports)
Switching Speed	10 microseconds typical (after command is received and processed) (3 milliseconds typical processing time)
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)

**--CONTINUED--**

# SPECIFICATION SHEET

**JFW MODEL 50MS-463**

**8 X 8 NON-BLOCKING SOLID STATE MATRIX SWITCH**

JFW Industries, Inc.  
Phone: 317-887-1340  
sales@jfwindustries.com  
www.jfwindustries.com

Remote Control Ethernet (DHCP, TCP/IP, 10/100, up to 12 users)  
RS-232 (up to 115200 Baud)

Remote Commands Matrix Commands:  
Matrix, Set Input, Set Output, Read Input, Read  
Output, Read All Inputs, Read All Outputs, Read Matrix  
Paths

System Commands:  
Help, Identification, Store, Recall, Pause,  
Net, Serial, Close, Disconnect, MOTD,  
Date, Message, Restrict, IDENT, Name, Show Users,  
Reboot, Uptime, Prompt

RF Connector N or SMA female

AC Supply 100-240 VAC @ 47-63 Hz

Temperature Ranges Operating: 0°C to +70°C  
Storage: -55°C to +85°C

Physical Size See outline drawing 092-9845 (SMA)  
092-9846 (N)

ECR/ECN #	DATE	REV	APPR / DATE	ECR/ECN #	DATE	REV	APPR / DATE
	04/15/2024		BAC 04/15/2024				