



The SRM Series RF matrix routers allow any of 16 to 128 inputs carrying RF signals to be routed to any of 16 to 128 outputs. The systems utilize patented stack-and-tier technology which offer ultra-reliability and high-performance in a compact, modular design. This greatly reduces the size and complexity of the systems while greatly enhancing reliability by eliminating the need for patch panels and repetitive mechanical connections. The systems are controllable either locally via the front panel keypad or remotely via computer and are compatible with monitoring and control systems.

## FEATURES:

- Operating frequency ranges for Broadband IF (5-1000 MHz), Intermediate Frequency (5-200 MHz) & Satellite L-band (950-2150 MHz)
- Modular designs allows for easy system installation and expansion
- Controllable locally via front panel keypad or remotely via computer and are compatible with most monitoring and control systems, freeing up staff to attend to more critical tasks
- Permit immediate routing of alternate signal sources
- Solid-state switches provide seamless (nanoseconds) switching speeds
- Maximize use of existing equipment with automated switching and scheduling; no need for duplicate equipment
- The rear panel design facilitates structured cable routing, eliminating confusing tangles of cable

## **SRM 200 Series Modular RF Matrix Switching System Specifications**

|                                      | <u>70 MHz</u>  | <u>140 MHz</u>                 | <u>200 MHz</u>                 |
|--------------------------------------|--|--------------------------------|--------------------------------|
| <b>Frequency:</b>                    | 70 $\pm$ 20 MHz  | 140 $\pm$ 40 MHz               | 5-200 MHz                      |
| <b>Insertion Loss:</b>               | 0 $\pm$ 0.5 dB   | 0 $\pm$ 0.5 dB                 | 0 $\pm$ 1.5 dB                 |
| <b>Impedance:</b>                    | 75 $\Omega$ (50 $\Omega$ opt.)   | 75 $\Omega$ (50 $\Omega$ opt.) | 75 $\Omega$ (50 $\Omega$ opt.) |
| <b>P1dB:</b>                         | +5 dBm   | +5 dBm                         | +5 dBm                         |
| <b>Frequency Response:</b>           | $\pm$ 1 dB   | $\pm$ 1 dB                     | $\pm$ 1 dB                     |
| <b>Isolation (input-to-input):</b>   | 60 dB  | 60 dB                          | 60 dB                          |
| <b>Isolation (output-to-output):</b> | 60 dB  | 60 dB                          | 60 dB                          |
| <b>Isolation (input-to-output):</b>  | 65 dB  | 65 dB                          | 65 dB                          |
| <b>Return Loss:</b>                  | 14 dB  | 14 dB                          | 14 dB                          |
| <b>Control Response Time:</b>        | 1.26 msec.   | 1.26 msec.                     | 1.26 msec.                     |
| <b>Switching Speed:</b>              | 40 nsec.   | 40 nsec.                       | 40 nsec.                       |
| <b>RF Connectors:</b>                | Type "F", 75 $\Omega$ (BNC, SMA, or N optional)  |                                |                                |
| <b>Power Requirements:</b>           | 100-240 VAC, 50/60 Hz. Dual AC inputs and dual internal PSUs for redundancy.                   |                                |                                |
| <b>Local Control:</b>                | Front panel keypad with LCD display  |                                |                                |
| <b>PC Remote Control:</b>            | RS-232, RS-422/485, IEEE 488 (GPIB), or TCP/IP 10 BaseT via customer-supplied PC, SNMP, TELNET |                                |                                |
| <b>Inter-Module Control Data:</b>    | Synchronous serial   |                                |                                |
| <b>Mechanical:</b>                   | 3 RU (5.25" H x 19" W x 20" D)   |                                |                                |
| <b>Software:</b>                     | Basic IBM-compatible operating software and system protocol included with system               |                                |                                |
| <b>Available Sizes:</b>              | Any configuration up to and including 256 x 256 outputs  |                                |                                |

# ***SRM 1000 Series Modular RF Matrix Switching System (5-1000MHz) Specifications***

|  |  |
|--|--|
| <b>Frequency:</b>                        | 5-1000 MHz   |
| <b>Impedance:</b>                        | 75 $\Omega$  |
| <b>Max. Total Operating Input Power:</b> | 0 dBm  |
| <b>Insertion Loss:</b>                   | 0 $\pm$ 2 dB   |
| <b>Frequency Response:</b>               | $\pm$ 3 dB   |
| <b>Isolation (input-to-output):</b>      | >45 dB   |
| <b>Isolation (output-to-output):</b>     | >55 dB   |
| <b>Isolation (input-to-output):</b>      | >50 dB   |
| <b>RF Connectors:</b>                    | Type "F", 75 $\Omega$ (BNC, SMA, or N optional)  |
| <b>Power Requirements:</b>               | 100-240 VAC, 50/6. Hz. Dual AC inputs and dual internal PSUs for redundancy.   |
| <b>Power Consumption:</b>                | Controller-UCM 10W<br>Input Distribution Module-SRD 45W<br>Matrix Switch Module-SRM 130W<br>Output Switch Module-SRO 45W |
| <b>Local Control:</b>                    | Front panel keypad with LCD display  |
| <b>PC Remote Control:</b>                | RS-232, RS-422/485, or ETHERNET via customer-supplied PC   |
| <b>Inter-Module Control Data:</b>        | Synchronous serial   |
| <b>Mechanical:</b>                       | 3 RU (5.25"H x 19"W x 20"D)  |
| <b>Software:</b>                         | Basic IBM-compatible operating software and system protocol included with system   |
| <b>Available Sizes:</b>                  | Any configuration up to and including 256 x 256 outputs  |

## **SRM 2150 Series Modular RF Matrix Switching System (950-2150MHz) Specifications**

|                                      |   |
|--------------------------------------|---|
| <b>Frequency:</b>                    | 950-2150 MHz  |
| <b>Impedance:</b>                    | 75 $\Omega$   |
| <b>P1dB:</b>                         | -7 dBm  |
| <b>Insertion Loss:</b>               | 0 $\pm$ dB  |
| <b>Frequency Response:</b>           | $\pm$ 3 dB  |
| <b>Isolation (input-to-input):</b>   | $\geq$ 45 dB  |
| <b>Isolation (output-to-output):</b> | $\geq$ 45 dB  |
| <b>Isolation (input-to-output):</b>  | >40 dB  |
| <b>Return Loss:</b>                  | >10 dB  |
| <b>Noise Figure:</b>                 | 15 dB   |
| <b>RF Connectors:</b>                | Type "F", 75 $\Omega$ (BNC, SMA, or N optional)   |
| <b>Power Requirement:</b>            | 100-240 VAC, 50/60Hz. Dual AC inputs and dual internal PSUs for redundancy.   |
| <b>Power Consumption:</b>            | Controller-UCM 10W<br>Input Distribution Module-SRD 13W<br>Matrix Switch Module-SRM 39W<br>Output Switch Module-SRO 24W |
| <b>Local Control:</b>                | Front panel keypad with LCD Display   |
| <b>PC Remote Control:</b>            | RS-232, RS-422/485, or ETHERNET via customer-supplied PC  |
| <b>Inter-Module Control Data:</b>    | Synchronous serial  |
| <b>Mechanical:</b>                   | 3 RU (5.25"H x 19"W x 20"D)   |
| <b>Software:</b>                     | Basic IBM-compatible operating software and system protocol included with system  |
| <b>Available Sizes:</b>              | Any configuration up to and including 256 x 256 outputs   |