

# SFM 2150

## Modular Full Fan-In RF Matrix Switching System (950-2150 MHz)

### General Description:

The **SFM 2150** is a full fan-in matrix switch and switching subsystem that allows any or all of 16 to 128 inputs carrying RF signals to be routed to a single output. The system utilizes patented stack-and-tier technology which offers ultra-reliable, high-performance, in a compact, modular design. This greatly reduces the size and complexity of the system while greatly enhancing the system's reliability by eliminating the need for patch panels and repetitive mechanical connections. The system is controllable either locally via the front panel keypad or remotely via computer and is compatible with most monitoring and control systems. The rear panel design facilitates structured cable routing, thereby eliminating confusing tangles and bundles of cables.

### Specifications:

<b>Frequency:</b>	950-2150 MHz
<b>Impedance:</b>	75 $\Omega$
<b>P1dB:</b>	-5 dBm (each Input)
<b>Insertion Loss:</b>	1 $\pm$ 2 dB @ 1550 MHz
<b>Frequency Response:</b>	$\pm$ 3 dB
<b>Isolation (input-to-input):</b>	45 dB
<b>Isolation (output-to-output):</b>	45 dB
<b>Isolation (input-to-output):</b>	40 dB
<b>Input Return Loss:</b>	10 dB
<b>Output Return Loss:</b>	10 dB
<b>Noise Figure:</b>	25 dB
<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>Power Consumption:</b>	Controller-UCM 9W Input Distribution Module-SRD 13W Matrix Switch Module-SFM 40W Output Combining Module-SFO 13W
<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>	System protocol included
<b>Available Sizes:</b>	Any configuration up to and including 128 inputs x 128 outputs