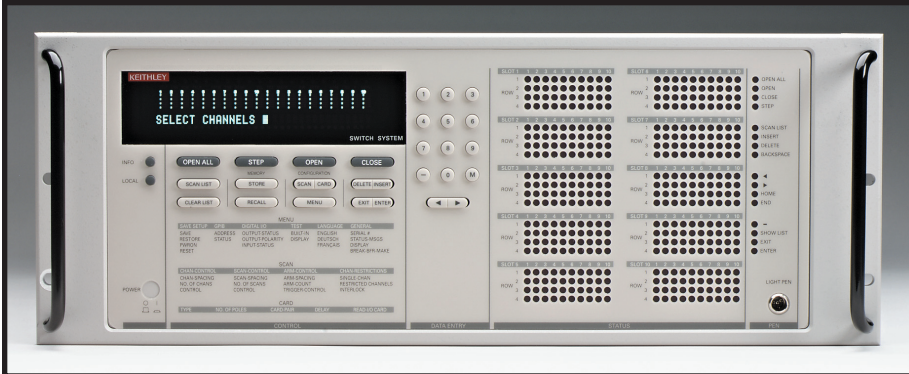


System 41

RF/Microwave Signal Routing Mainframe



Mainframe Optimized for Controlling RF/Microwave Switches and Components

The System 41 builds upon the technology behind a System 40 to create a system optimized solely for microwave signal routing applications. We've integrated the ability to control up to 240 RF/microwave channels within the chassis that houses the switches to provide an optimum combination of price and performance in just seven inches of rack space. The System 41 can be configured with the customer's choice of three standard switch modules or a custom module for special requirements.

- Integrated solution, including **both** controller and microwave components in 4U (7") package
- Add one of three standard microwave switch modules or a custom-designed signal routing module
- Unique front panel enables interactive control as well as real-time status display
- DC-40GHz solutions
- Pre-programmed, turnkey solutions

Ordering Information

Contact a Keithley representative for design assistance and pricing.

Accessories Supplied
Programming light pen

Fully Integrated, Turnkey Solutions

Keithley can provide a standard or customized turnkey signal routing system, complete with an optimized Keithley controller, system power supply, all power and control cables, rack mount assembly, low-loss microwave cables, and a wide variety of microwave components—in one integrated chassis.

Superior RF/Microwave Performance

The System 41 integrates relays and other components from the leading suppliers in the industry, enabling us to offer the lowest insertion loss, VSWR, and crosstalk performance specifications available. All internal connections between the components are implemented using low-loss, semi-flex, or semi-rigid RF cables for high signal integrity.

Standard Microwave Switching Modules

For applications requiring cost-effective and quickly-deliverable solutions, Keithley provides three standard microwave switching modules: an 18GHz 10 × 10 non-blocking matrix, an 18GHz 6 × 6 non-blocking matrix, and an 18GHz 1 × 72 multiplexer that can be configured as two independent 1 × 36 multiplexers. Contact the factory for module specifications.

Get Up and Running Quickly

To begin using the System 41, simply install it in a rack and connect the input and output lines. All RF input/output connections are easily accessible, making system set-up and maintenance fast and uncomplicated.

The control unit's front panel display provides continuous, real-time information on the status of all controlled components. This makes it possible to operate the system manually, not just automatically, speeding and simplifying test verification and troubleshooting. Both start-up time and downtime are minimized, which helps maximize production time.

Phase Matching Capability

The System 41 offers two standard "off-the-shelf" solutions for systems that need phase matching: a phase matched 1 × 72 multiplexer and a differential 1 × 36 multiplexer. These solutions provide equal length, phase matched paths of both the RF cabling and the switching topology. Only high performance switches are used to ensure contact resistance reliability over time.

APPLICATIONS

- Cellular and cordless phones
- Specialized mobile radios
- Base stations
- Specialized antenna systems
- RF components, including RFICs
- Wireless peripherals, including Bluetooth devices
- Broadband wireless transceivers
- High speed digital communications, including SONET speeds 3Gbps and 10Gbps

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A GREATER MEASURE OF CONFIDENCE

Dedicated solution for RF/microwave signal routing

RF/MICROWAVE SWITCHING AND MEASUREMENT

System 41

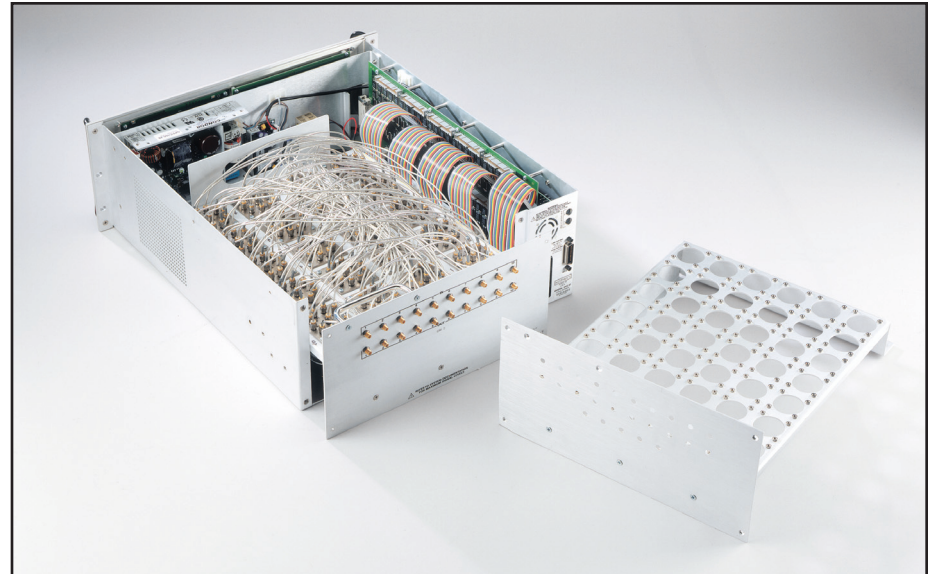
RF/Microwave Signal Routing Mainframe

Light Pen Programming

A light pen provides point-and-click programming from the front panel. By selecting the desired channels or range of channels, the scan list can be built, matrix patterns created, channels opened or closed, and patterns stored in memory.

Keithley Design Assistance

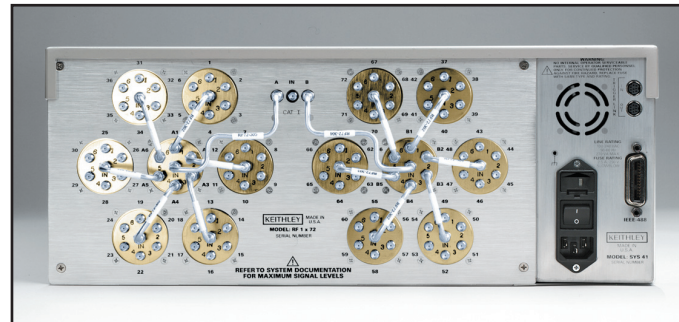
Keithley's Applications Engineering team provides system design assistance and can propose component layout alternatives to ensure optimum system performance. Most custom systems can be designed, assembled, and available for use within 6 to 10 weeks after ordering.



Removable RF tray allows easy access to RF/microwave components

ACCESSORIES AVAILABLE

S41/RF10x10	18GHz 10x10 Non-Blocking Matrix
S41/RF6x6	18GHz 6x6 Non-Blocking Matrix
S41/RF1x72	18GHz 1x72 Multiplexer
S41/CUSTOM	Custom Signal Routing Module
S41-RMK-1	Fixed Rack Mounting Kit



1x72, 18GHz RF Module



Rear panel bulkhead connectors

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