



Switch Configuration

Window	Model Name	Frequency	Connectors	Description
1	MSP2TA-18XL+	DC to 18 GHz	SMA (f)	SPDT Switches (Absorptive) - Dual
2	MSP4TA-40+ (B81-41+)	DC to 40 GHz	2.92 mm (f)	SP4T Switch (Absorptive)
3	MSP4TA-40+ (B81-41+)	DC to 40 GHz	2.92 mm (f)	SP4T Switch (Absorptive)

Please contact testsolutions@minicircuits.com for full switch specifications

Product Overview

Mini-Circuits' RCM series multi-function switch systems offer flexibility and fast turnaround for compact test setups. The design consists of a small, light-weight chassis comprising up to three open hardware windows, supporting a flexible range of switch options up to 50 GHz.

The system can be controlled via USB or Ethernet (supporting both HTTP and Telnet network protocols). Full software support is provided, including our user-friendly GUI application for Windows and a full API with programming instructions for Windows and Linux environments (both 32-bit and 64-bit systems).

Mechanical Specifications

Dimensions	8.25" (W) x 4.25" (H) x 8.25" (D) feet add 0.28" additional height	
Case Drawing	99-01-2068	
Case Material	Aluminum (with protective coating to prevent corrosion)	
RF Connectors	SMA & 2.92 mm female	
	Front Panel	Rear Panel
Panel Marking	<ul style="list-style-type: none"> Mini-Circuits logo Model Name 	<ul style="list-style-type: none"> CE EAC Serial number / date code / model name
Panel Items	<ul style="list-style-type: none"> Mechanical switches with LED state indicators, as defined in Configuration 	<ul style="list-style-type: none"> Power on / off switch with LED +24V DC power input USB type B socket RJ45 (LAN) socket Cooling fan vent
Power Supply	110/240V AC/DC 24V Adapter	
Temperature	Operating: 0 to +50 °C	

Software Specifications

- Please contact testsolutions@minicircuits.com for support

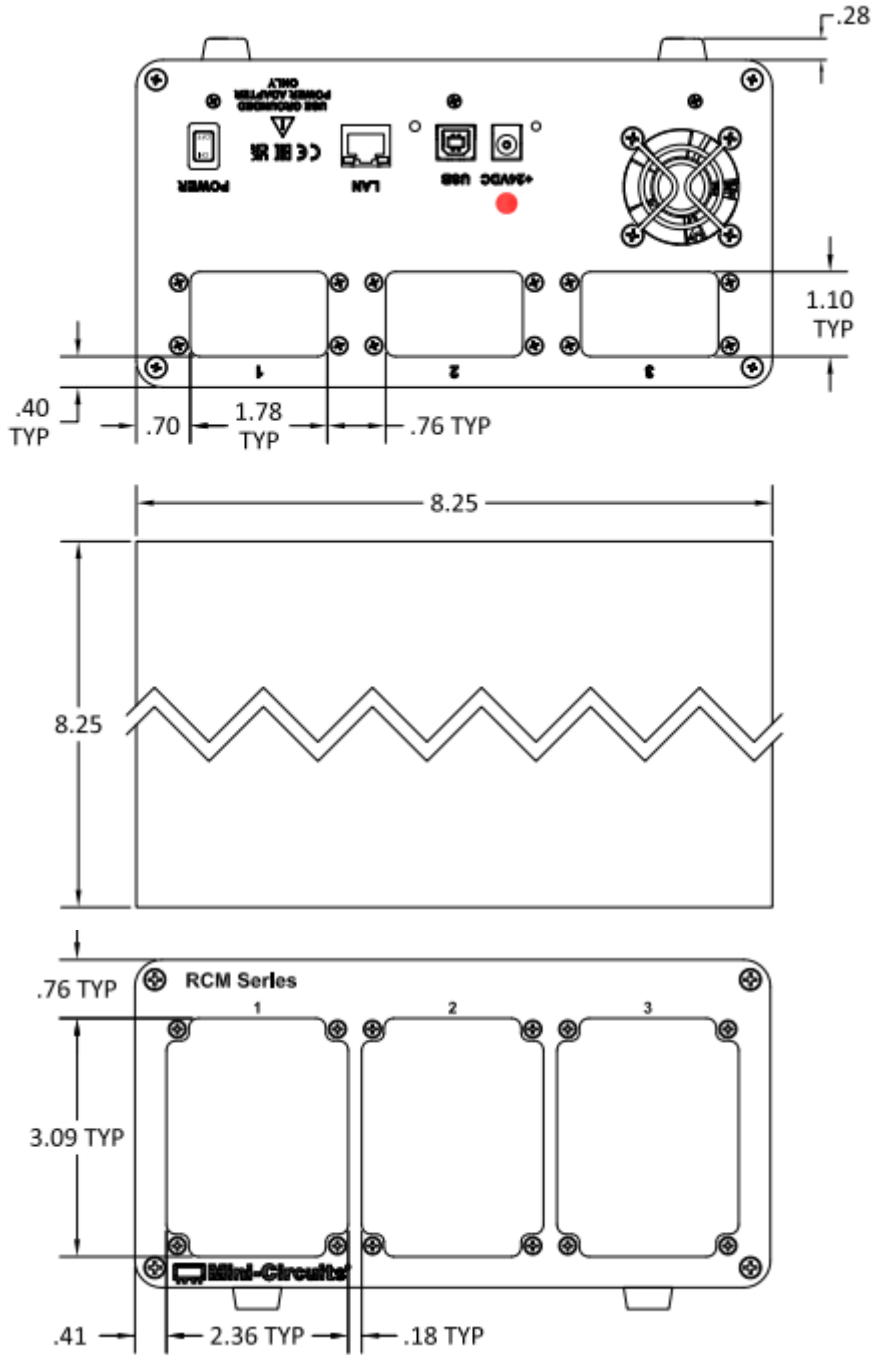
Ethernet Control	Supported Protocols	TCP / IP, HTTP, Telnet, DHCP, UDP
	Max Data Rate	10 Mbps (10Base-T Half Duplex)
USB Control	Supported Protocols	HID - Full Speed
	Min Communication Time	3 ms typ
Software Support	<ul style="list-style-type: none"> • Mini-Circuits' Universal GUI for USB & LAN control (Windows only) • ASCII / SCPI command syntax for LAN programming (all OS) • ActiveX / .Net DLL APIs for USB programming (Windows only) • Interrupt codes for direct USB programming (all OS) • Full programming instructions and examples for a wide range of languages 	
Downloads	Software & Documentation	https://www.minicircuits.com/softwaredownload/ztm_rcm.html

Programming Commands

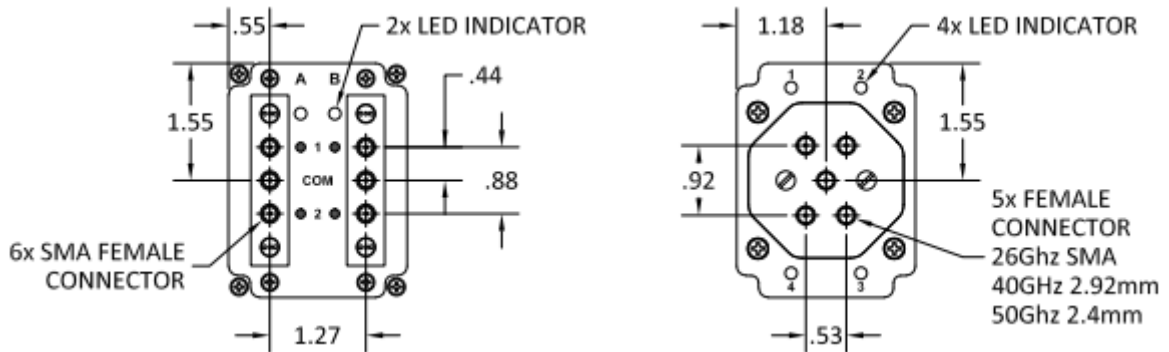
- The key ASCII / SCPI commands for control of the system are summarized below
- These can be sent via the USB or Ethernet API
- Please refer to the programming manual for full details

Command / Query	Description
:MN?	Read model name
:SN?	Read serial number
:FIRMWARE?	Read firmware version
:sw_type:sw_number:STATE:port	Set a single switch state: <ul style="list-style-type: none"> • sw_type = MTS or SPDT or SP4T or SP6T or SP8T • sw_number = 1 to n (refer to block diagram) • port = the switch state to set • Example: :SPDT:1:STATE:2 (set SPDT switch 1 to state 2)
:sw_type:sw_number:STATE?	Get the state of a single switch: <ul style="list-style-type: none"> • sw_type = MTS or SPDT or SP4T or SP6T or SP8T • sw_number = 1 to n (refer to block diagram) • Example: :SPDT:1:STATE? (get the state of SPDT switch 1)

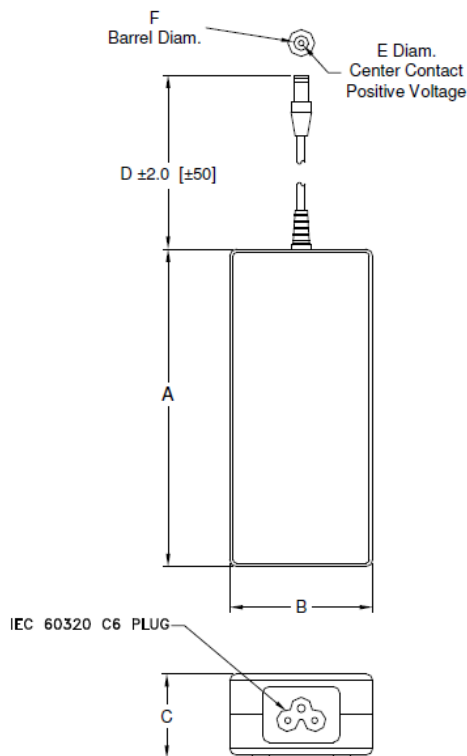
Case Drawings



Switch Panel Drawings



Power Supply Drawing



CASE#	A	B	C	D	E	F	WT. GRAMS
LR1590	4.72 (120)	2.13 (54)	1.26 (32)	72.8 (1850)	0.083 (2.1)	0.217 (5.5)	220

Ordering Information

Please contact Mini-Circuits' Test Solutions department for price and availability:

testsolutions@minicircuits.com

Included Accessories

Part #	Quantity	Description
CBL-3W1-xx*	1	AC mains power cord
AC/DC-24-3W1	1	AC / DC power supply adapter
USB-CBL-AB-7+	1	USB cable (6.8 ft)
CBL-RJ45-MM-5+	1	Ethernet cable (5 ft)
HT-4-SMA	1	SMA cable wrench

* Please specify 1 AC power cord option at time of order (no charge)

AC Cable Part #	Region
CBL-3W1-US*	USA
CBL-3W1-EU*	Europe
CBL-3W1-IL*	Israel
CBL-3W1-AU*	Australia / China
CBL-3W1-UK*	UK

Additional Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp