

# Active Splitter

Mini-Circuits

50Ω 900 to 2250 MHz Rack-Mount SMA Female

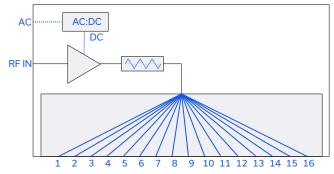
### **THE BIG DEAL**

- 16-way power division with high gain
- Convenient rack-mountable chassis
- AC mains power supply



Generic photo used for illustration purposes only

# FUNCTIONAL BLOCK DIAGRAM



## **APPLICATIONS**

- Benchtop and rack-mounted automated test systems
- GNSS (GPS, Galileo, GLONASS) signal distribution
- Test instrumentation time synchronization
- L-band satcom (satellite communications

# **PRODUCT OVERVIEW**

Mini-Circuits' ZT-161RS is a 16-way active power splitter covering L-band 900-2250 MHz, ideally suited for satcom and GNSS (GPS, GLONASS & Galileo) signal distribution applications. The splitter is powered from the AC mains input with more than 20 dB gain between input and each output port to compensate for path losses within a signal distribution system. The system is housed in a compact 19-inch rack chassis, 2U height, with the RF input on the rear and all 16 outputs on the front panel.

## **ELECTRICAL SPECIFICATIONS AT +25°C**

Parameter	Conditions	Min.	Тур.	Max.	Units	
Frequency Range		900		2250	MHz	
Coin	900-2250 MHz 22			ID		
Gain	1200-1600 MHz	20	23 dB		uв	
Isolation <sup>1</sup>	900-2250 MHz		22		dB	
	1200-1600 MHz	19	25			
Reverse Isolation <sup>2</sup>	Reverse path loss from 1-8 to RF IN		75		dB	
Input Return Loss	900-2250 MHz		18		dB	
	1200-1600 MHz		20		uв	
Output Batum Laga	900-2250 MHz		25		dB	
Output Return Loss	1200-1600 MHz		22		dB	
Input P1dB <sup>3</sup>	RF IN		-25		dBm	

1. Between output ports

2. Reverse path loss measured from any output port to RF IN

3. Input power level at which the internal amplifier would typically be expected to reach its output power 1 dB compression point. It is recommended to operate below this input level for linear performance.





# **16-WAY** Active Splitter

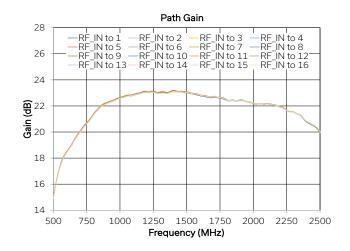


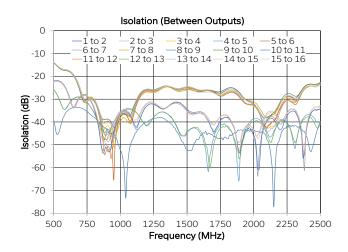
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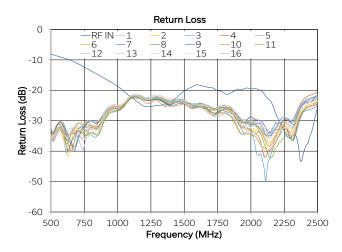
900 to 2250 MHz Rack-Mount 50Ω

**SMA** Female

# **TYPICAL PERFORMANCE GRAPHS**









# Active Splitter

# **ZT-161RS**

Mini-Circuits

50Ω 900 to 2250 MHz Rack-Mount

# **SMA** Female

#### **ABSOLUTE MAXIMUM RATINGS**

Parameter	Conditions	Limits	Units	
Temperature	Operating	0 to +50	°C	
	Storage	-20 to +60		
Input Power (No Damage)		-15	dBm	

Permanent damage may occur if any of these limits are exceeded. Operating in the range between operating power limits and absolute maximum ratings for extended periods of time may result in reduced life and reliability.

# **POWER SUPPLY**

Power Supply	AC mains input: 100-240 V, 50 / 60 Hz
Fuse	2A, 250V rating
Power Consumption	150W maximum

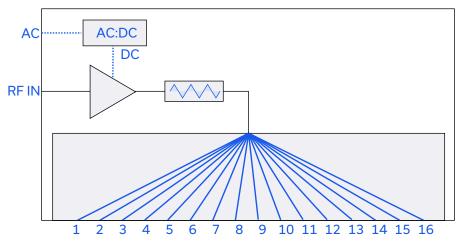
### **CONNECTIONS**

Port	Connector
RF IN & 1-16	SMA female
AC Input	IEC C14 inlet

RF IN = Input port

1-16 = Output port

## FUNCTIONAL BLOCK DIAGRAM





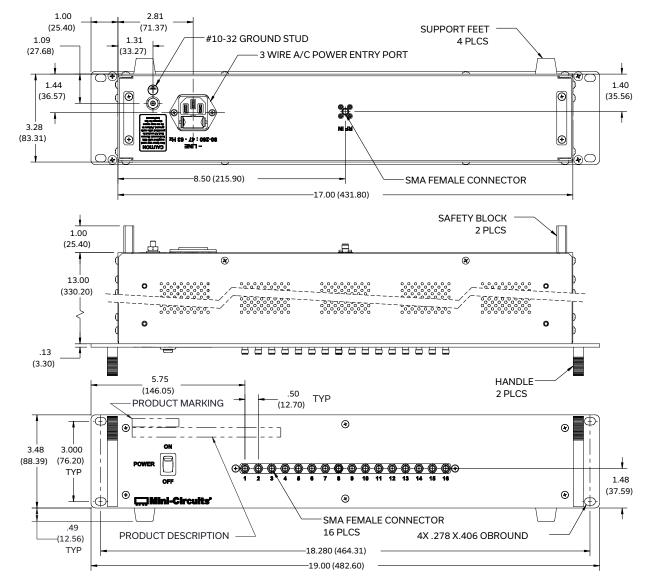


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900 to 2250 MHz Rack-Mount

**SMA** Female

#### **OUTLINE DRAWING**



Weight: 3170 grams. Dimensions are in inches (mm). Tolerances: 2 Pl. .03 inch; 3 Pl. .015 inch.

# **PRODUCT MARKING**

Product Marking: ZT-161RS Product Description: 16-Channel GPS Amplifier Distribution Rack Unit ID Label: Serial number and other identification marks Marking may contain other features or characters for internal lot control



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# DETAILED MODEL INFORMATION IS AVAILABLE ON OUR WEBSITE CLICK HERE

Case Style	NW1980		
Environmental Rating	ENV55		
Regulatory Compliance	Refer to our website for compliance methodologies and qualifications CE LK	www.minicircuits.com/quality/environmental_introduction.html	

Contact Us: testsolutions@minicircuits.com

Included Accessories	Part Number	Description
	CBL-3W-xx	AC power cord (IEC C13 connector to local plug) Select one option from the list below. Please contact Please contact testsolutions@minicircuits.com if your regions is not listed.
and the second s	HT-4-SMA	SMA connector wrench (4" length)

AC Power Cord Options	Part Number	Description
20	CBL-3W-US	USA NEMA 5-15 plug (type B) to IEC C13 connector
<b>\$</b>	CBL-3W-EU	Europe CEE 7/7 plug (type E/F) to IEC C13 connector
	CBL-3W-UK	UK BS-1363 plug (type G) to IEC C13 connector
9 m	CBL-3W-AU	Australia & China AS/NZS 3112 plug (type I) to IEC C13 connector
	CBL-3W-IL	Israel SI-32 plug (type H) to IEC C13 connector

NOTES

A. 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.

- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. 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