16-WAY

Active Splitter

ZT-161RS

50Ω 900 to 2250 MHz Rack-Mount SMA Female

THE BIG DEAL

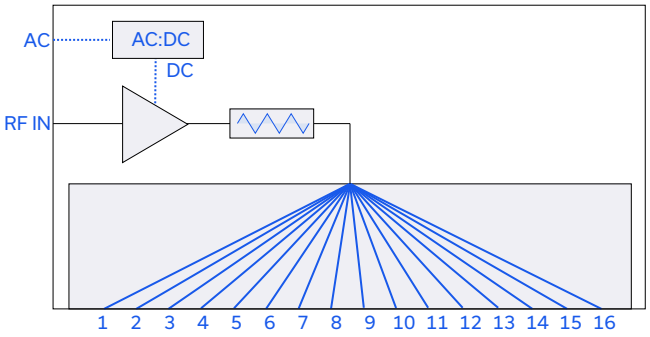
- 16-way power division with high gain
- Convenient rack-mountable chassis
- AC mains power supply

Generic photo used for illustration purposes only

APPLICATIONS

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

FUNCTIONAL BLOCK DIAGRAM



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.	Typ.	Max.	Units
Frequency Range		900		2250	MHz
Gain	900-2250 MHz		22		dB
	1200-1600 MHz	20	23		
Isolation[1]	900-2250 MHz		22		dB
	1200-1600 MHz	19	25		
Reverse Isolation[2]	Reverse path loss from 1-8 to RF IN		75		dB
Input Return Loss	900-2250 MHz		18		dB
	1200-1600 MHz		20		
Output Return Loss	900-2250 MHz		25		dB
	1200-1600 MHz		22		
Input P1dB[3]	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.

REV. C
ECO-019208
ZT-161RS
MCL NY
230913

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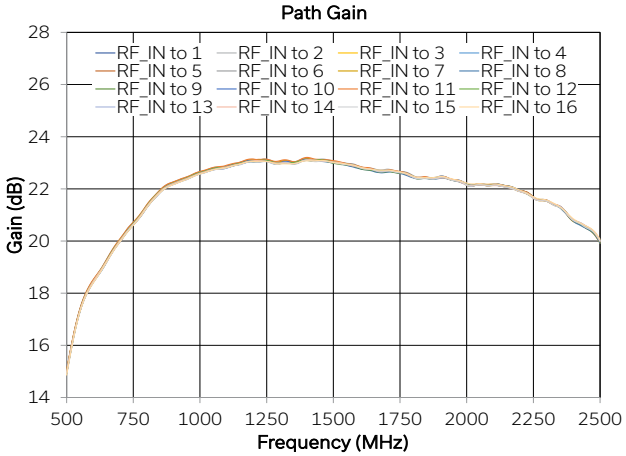
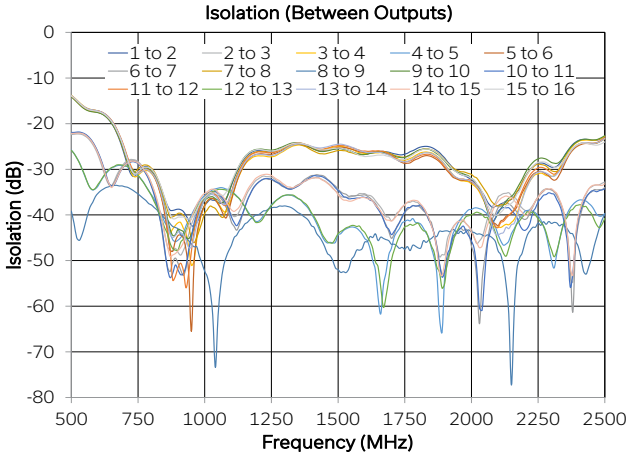
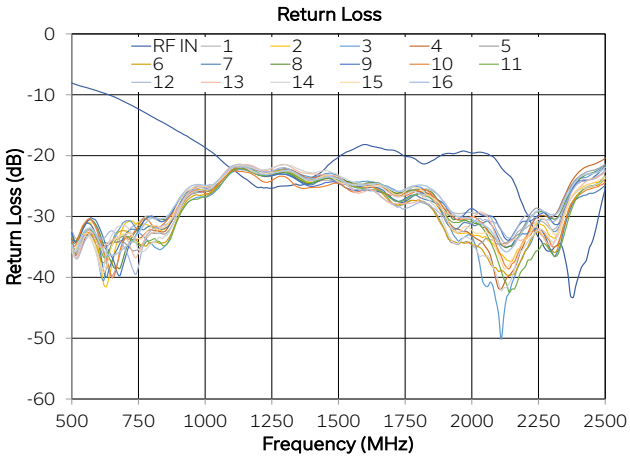
TYPICAL PERFORMANCE GRAPHS







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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

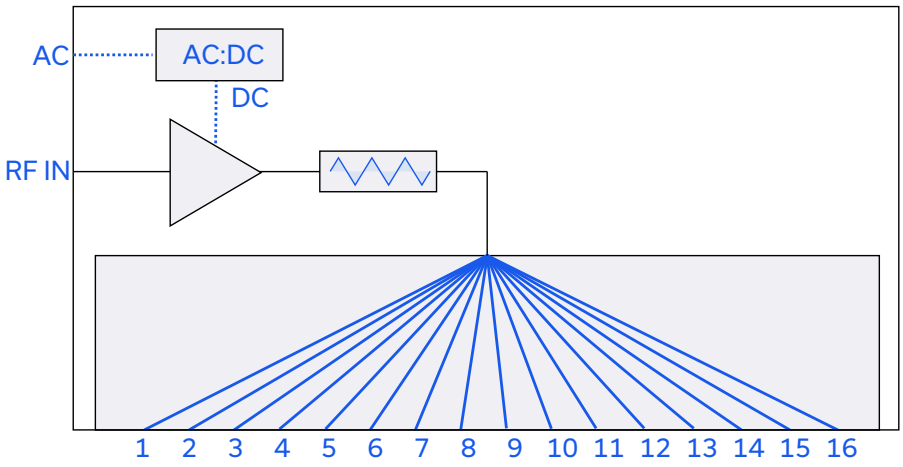
Power Supply	AC mains input: 100-240 V, 50 / 60 Hz
Fuse	2A, 250V rating
Power Consumption	150W maximum

CONNECTIONS

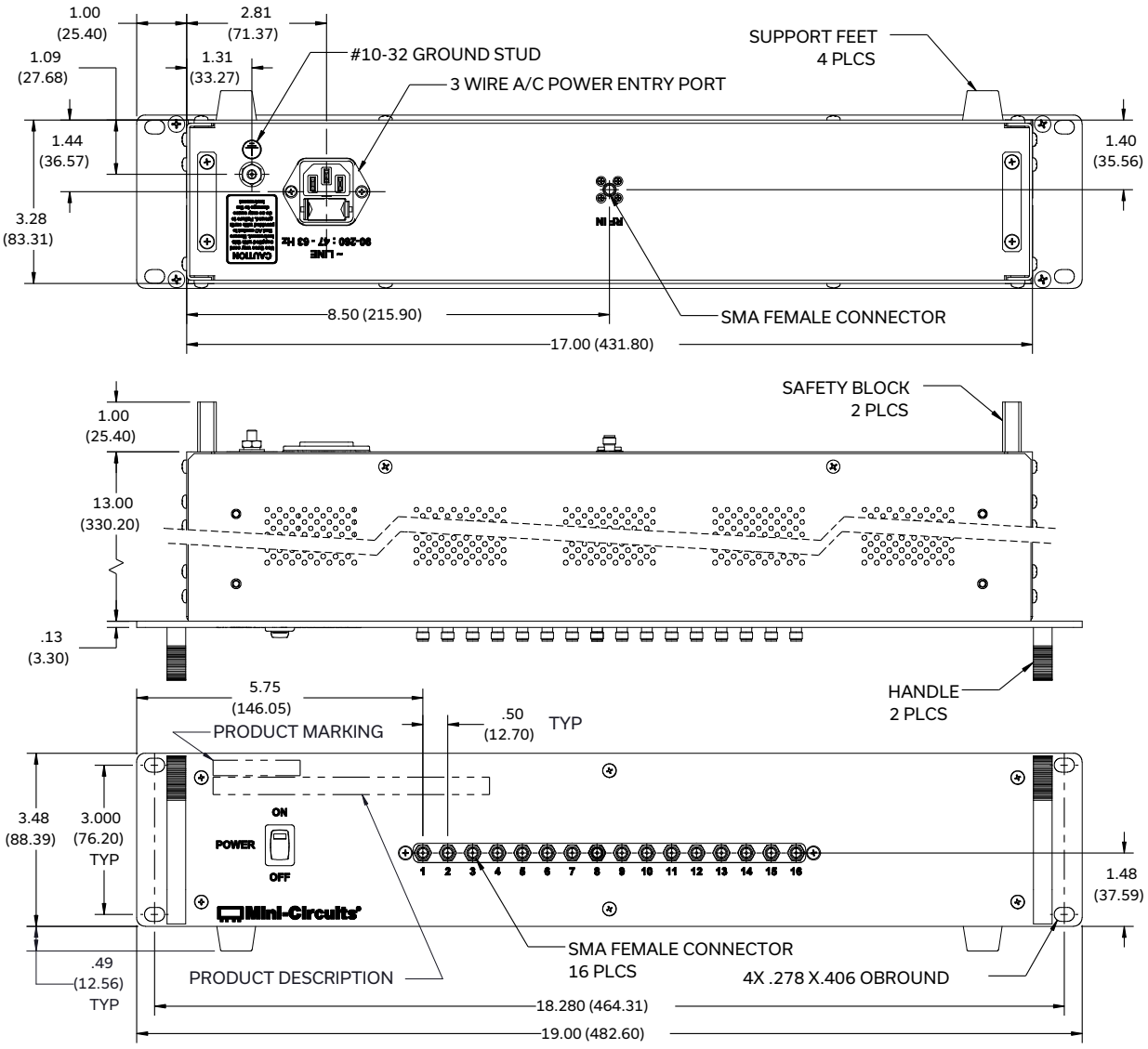
Port	Connector
RF IN & 1-16	SMA female
AC Input	IEC C14 inlet

RF IN = Input port
1-16 = Output port

FUNCTIONAL BLOCK DIAGRAM



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 UKCA 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.
	HT-4-SMA	SMA connector wrench (4" length)

AC Power Cord Options	Part Number	Description
	CBL-3W-US	USA NEMA 5-15 plug (type B) to IEC C13 connector
	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
	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.

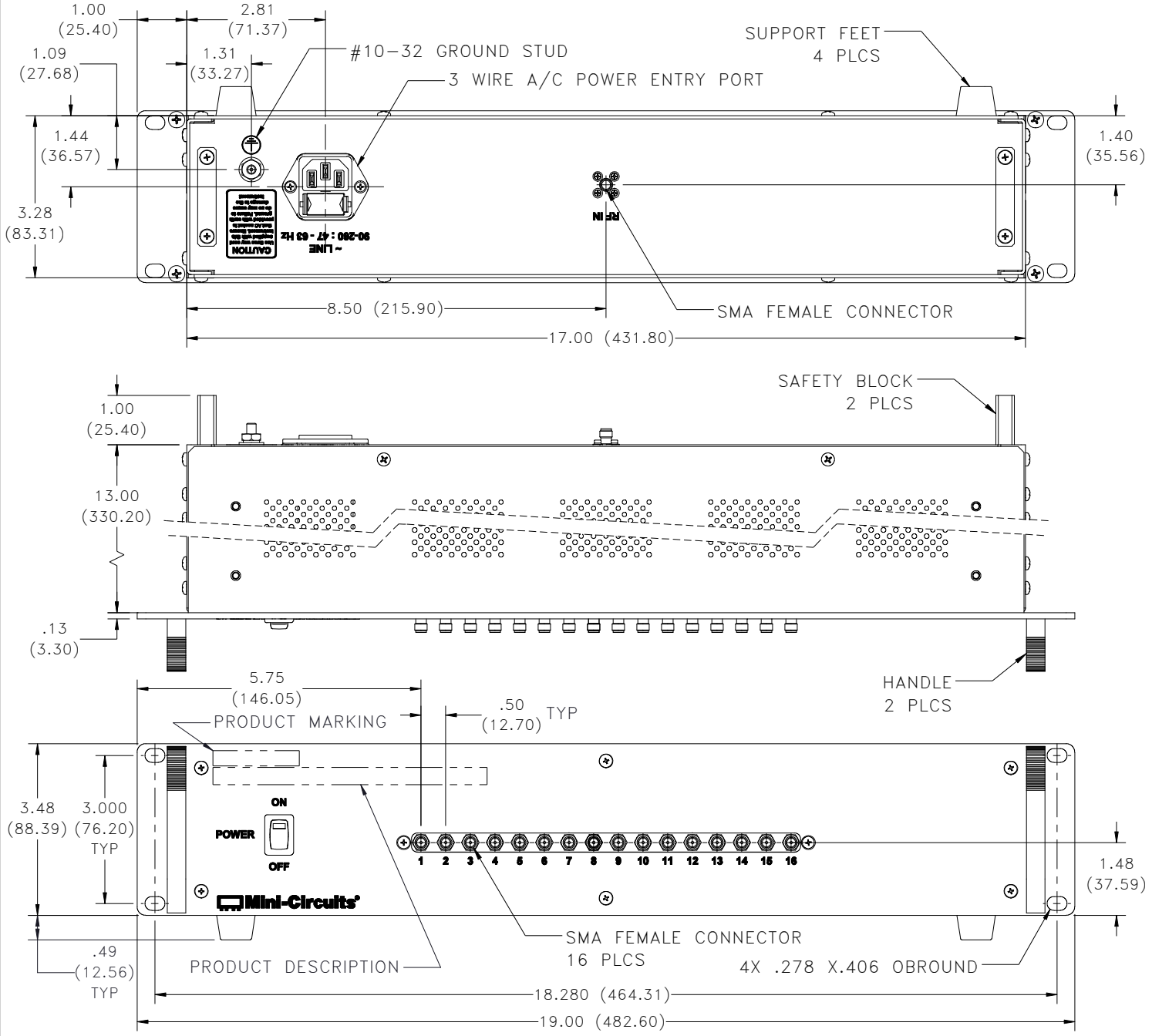
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

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

Case Style NW

Outline Dimensions

NW1980



Notes:

1. Case material: Aluminum (with protective coating to prevent corrosion).
2. Dimensions are in inches (mm). Tolerances: 2 Pl. ±.03 inch; 3 Pl. ±.015 inch.
3. Weight: 3170 grams.
4. Marking may contain other features or characters for internal lot control.

Mini-Circuits

Environmental Specifications **ENV55**

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-0° to 50° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-20° to 60° C Ambient Environment	Individual Model Data Sheet
Operating and Storage Humidity	5% to 85% RH (non-condensing)	Ambient
Bench Handling Test	Bench Top Tip 45° & Drop	MIL-PRF-28800F
Transit Drop Test	Free Fall Drop, 20 cm (7.9 inches)	MIL-PRF-28800F Class 3