

FEATURES

- Enables two active RF outputs (Ports 3 and 4) in MiniBridger™ Amplifiers
- Splitter and Directional Coupler (8, 10, and 12 dB) options available
- Ergonomic shell for easy insertion/removal through chassis cover
- Common module between 1 GHz and 1.2 GHz STARLINE™ MiniBridger Amplifiers

CommScope's MiniBridger RF amplifier features two-driven RF outputs. Port 2 is the main output, and the amplifier ships with a jumper that allows operators to select either Port 3 or Port 4 as the second RF output depending on their installation requirements. When three RF outputs are required, operators may install either a plug-in Splitter (SP120) or Directional Coupler (DC120/*). The Splitter develops equal losses so that Port 3 and Port 4 have equal output levels. It has a wide frequency response (5–1218 MHz) that allows it to function as both a combiner for upstream and splitter for downstream RF signals. The Directional Couplers are keyed so that the direction the in which plug-in is inserted determines which output port has the lower coupled output level.



SPECIFICATIONS @ 1.2 GHZ (UNLESS SPECIFIED)¹

Characteristic	Specification
SP120 Splitter	
Common Port	
Return Loss	20 dB @ 5–200 MHz 16 dB @ 201–400 MHz 12 dB @ 401–1218 MHz
Insertion Loss (1 GHz), max	4.7 dB
Insertion Loss (1.2 GHz), max	5.0 dB
Tilt, 5–1218 MHz	1.5 dB
Flatness, 5–1218 MHz	0.3 dB
Isolation, 5–1218 MHz	17 dB
Output/Input Port	
Return Loss	20 dB @ 5–400 MHz 16 dB @ 401–600 MHz 12 dB @ 601–1000 MHz 10 dB @ 1001–1218 MHz
Insertion Loss (1 GHz), max	4.7 dB
Insertion Loss (1.2 GHz), max	5.0 dB
Tilt, 5–1218 MHz	1.5 dB
Flatness, 5–1218 MHz	0.3 dB
Isolation, 5–1218 MHz	17 dB
DC120/8 8 dB Directional Coupler	
Return Loss	12 dB (Input Port Only) 17 dB (Output Port Only) 16 dB (Coupled Ports)
Insertion Loss (1 GHz), max	3.3 dB (Input Port to Output Port) 8.5 dB (Input Port to Coupled Ports)
Insertion Loss (1.2 GHz), max	3.3 dB (Input Port to Output Port) 9.0 dB (Input Port to Coupled Ports)
Tilt, 5–1218 MHz	1.5 dB (Input Port to Output Port) 2.0 dB (Input Port to Coupled Ports)
Flatness, 5–1218 MHz	0.5 dB (Input Port to Output Port) 1.3 dB (Input Port to Coupled Ports)
Isolation, 5–1218 MHz	17 dB
DC120/10 10 dB Directional Coupler	
Return Loss	14 dB (Input Port Only) 14 dB (Output Port Only) 14 dB (Coupled Ports)
Insertion Loss (1 GHz), max	2.7 dB (Input Port to Output Port) 10.5 dB (Input Port to Coupled Ports)
Insertion Loss (1.2 GHz), max	2.7 dB (Input Port to Output Port) 10.5 dB (Input Port to Coupled Ports)
Tilt, 5–1218 MHz	1.5 dB (Input Port to Output Port) 2.5 dB (Input Port to Coupled Ports)
Flatness, 5–1218 MHz	0.5 dB (Input Port to Output Port) 1.4 dB (Input Port to Coupled Ports)
Isolation, 5–1218 MHz	19 dB
DC120/12 12 dB Directional Coupler	
Return Loss	14 dB (Input Port Only) 17 dB (Output Port Only) 16 dB (Coupled Ports)
Insertion Loss (1 GHz), max	2.2 dB (Input Port to Output Port) 12.5 dB (Input Port to Coupled Ports)
Insertion Loss (1.2 GHz), max	2.2 dB (Input Port to Output Port) 12.5 dB (Input Port to Coupled Ports)
Tilt, 5–1218 MHz	1.5 dB (Input Port to Output Port) 3.0 dB (Input Port to Coupled Ports)
Flatness, 5–1218 MHz	0.5 dB (Input Port to Output Port) 1.6 dB (Input Port to Coupled Ports)
Isolation, 5–1218 MHz	18 dB

NOTE:

1. All specifications were measured in a test fixture; there was no degradation to the amplifier's return loss.

ORDERING INFORMATION

Model Name	Part Number	Description
SP120	531230-001-00	SP120 Splitter
DC120/8	531230-002-00	DC120/8 8 dB Directional Coupler
DC120/10	531230-003-00	DC120/10 10 dB Directional Coupler
DC120/12	531230-004-00	DC120/12 12 dB Directional Coupler

RELATED PRODUCTS

SFE Equalizer	SRE Equalizer
BLE120 Amplifier	MB120 Amplifier
CE-120-* Cable Equalizer	CS-120-* Cable Simulator

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656



Note: Specifications are subject to change without notice.

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1513962_1.2 GHz MB-SP/DC_DS_RevB