

### ACS-101

### Antenna Combiner/Splitter

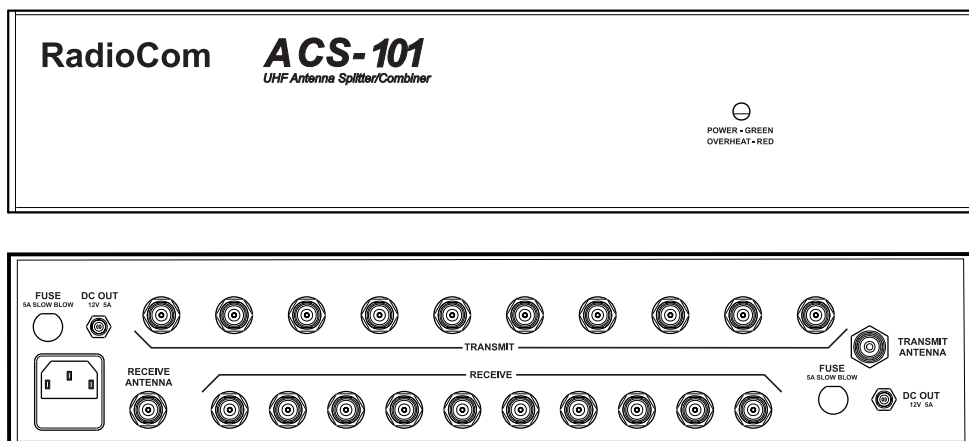


The ACS-101 (Antenna Combiner-Splitter 10-to-1) is an amplified and filtered broadband splitter-combiner. It allows up to ten UHF base stations to use only one (1) transmit and one (1) receive antenna. The antenna combiner section contains innovative hybrid coupling, amplifying and matching technology to combine ten transmitters to one (1) output with very low intermod distortion. The antenna splitter section has broadband input filtering and amplification to maintain signal levels through the splitters. High output isolation between ports is also achieved. The industrial strength power supply of the ACS-101 supplies voltage and current to two (2) outputs on the product. Each output can supply up to 5 Amps at 12VDC.

## Features

- Ideal for use with BTR-1, RKP-4B, BTR-500, BTR-600, BTR-700 wireless intercom systems.
- BTR-800 and BTR-80N with dual TX modification and set to 50mW or below per TX channel may also be used with the ACS-101.
- Two (2) power outputs supply up to 5 Amps at 12VDC each.
- The two (2) power outputs supply up to 10 BTR-1 or RKP-4B transceivers.
- Standard IEC-320 Power Input Connector.
- 115VAC or 230VAC operation.
- High-Quality TNC connectors for consistent impedance across the entire frequency range.
- Rack mount brackets included for 19" (482.6mm) rack.
- Power light/overheat condition indicator.

## Line Drawings



# Specifications

## Overall

Antenna Connectors:..... Standard TNC Receptacles  
 AC Input Power: ..... 100–120VAC, 60Hz, 6A max. or  
 200–240VAC, 50Hz, 6A max.  
 AC Input Fuse:..... 10A, 250V, 3AG  
 DC Output Power: ..... 12VDC, 5A for each output  
 DC Output Jacks: ..... Two (2) , 5.5mm x 2.1mm Jacks  
 DC Output Fuses:..... 5A, 250V, 5mm x 20mm, slow blow

## Antenna Splitter

Frequency Range: ..... 614–746MHz  
 Output IP3: ..... Greater than 30dB  
 Net Gain: ..... 0 dB Typical  
 Noise Figure: ..... Less than 4.5dB  
 Minimum Isolation:..... 20dB between adjacent ports  
 Greater than 20dB between non-adjacent ports

## Antenna Combiner

Frequency Range: ..... 470–870MHz  
 Net Gain: ..... 0 dB (Maximum)  
 Noise Figure: ..... 10dB Typical  
 Output 3rd order IM: ..... -55dBc @ + 17dBm input on each transmitter  
 Overheat Sensor: ..... Shuts down amplifier and indicates on front panel if heatsink rises above 75°C (167°F)

## Product Dimensions/Weight

ACS-101 (with rack ears attached):..... 19" W x 3.50" H x 14.63" D  
 (48.3cm x 8.89cm x 37.16cm),  
 11lb (5kg)

## Shipping Dimensions/Weight

ACS-101:..... 21" W x 6" H x 19.5" D  
 (53.34cm x 49.53cm x 15.24cm),  
 17lb 6oz (7.88kg)

# Order Information

ACS-101 • Antenna Combiner/Splitter, 115VAC, US cord  
 ACS-101-Euro • Antenna Combiner/Splitter, 230VAC, Euro cord  
 ACS-101-UK • Antenna Combiner/Splitter, 230VAC, UK cord

## IMPORTANT:

Using products that deliver more than 50mW of transmit power to the ACS-101 is not recommended, and may cause damage to the unit or accompanying gear.

For ordering information, contact your regional sales representative at:  
<http://rtsintercoms.com/us/intercom/contact>

The specification information is preliminary and is subject to change without notification.  
 Brand names mentioned are the property of their respective companies.