



Satellite Radio Combiner

A-301

The A-301 satellite radio combiner allows users to interface their own RF power amplifiers up to 200 watts per channel.

More than Quality Control

The A-301 comes with a 36-month warranty. Each unit is put through vigorous testing and analysis prior to shipment. When you power up this unit, be confident that you get the performance you expect ... not part of the time, all of the time.

The A-301 satellite radio combiner allows simultaneous transmission and reception of any two military UHF satellite radio channels on a single antenna.

Features

- Simultaneous two-channel operation at 200 watts per channel
- 3 modes of operation optimize RF performance
- Power off bypass mode
- Remote control operation
- Powered via Bias-T or connector
- No T/R switching ensures compatibility with the fastest switching modes of user terminal

Overview

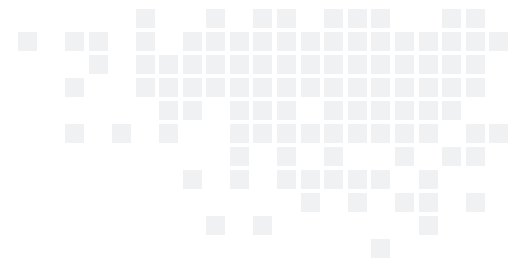
AMTI's A-301 satellite radio combiner enables simultaneous transmission and reception of any two military UHF satellite radio channels on a single antenna. Designed for continuous operation in tactical environments, the A-301 is packaged in a compact, rugged, weatherproof housing. Flexibility extends to fixed site locations, boats, vehicles, shelters and racks.

Applications

The A-301 is ideal for SATCOM on the move (SOTM) requirements where limited antenna availability may hinder operations (maritime surface craft, vehicles, aircraft and submarines). The satellite radio combiner incorporates extensive transmit and receive filtering to ensure no performance degradation in either channel during simultaneous transmit and receive operations. Multiple modes of operation allow users flexibility in configuring communications networks.

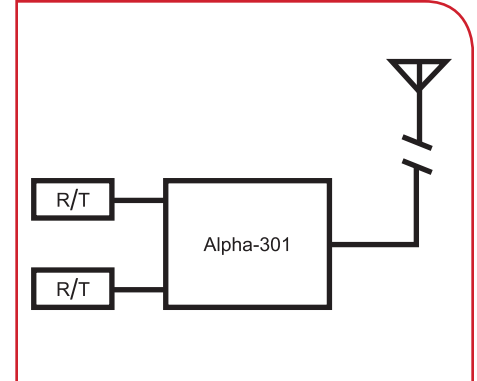
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Technical Specifications:

Part No.	A-301
Size (H x W x D - inches)	5.8 x 16.5 x 16.5
Weight	50 lbs.
Frequency Range	Transmit: 292-318 MHz Receive: 243-270 MHz
Primary Power	22-36 VDC@1.5 amps (max)
Input/Output	50 ohm (nominal)
Radio Port-to-Port Isolation	35 dB (minimum)
VSWR (any port)	<2.5:1
Insertion Loss (mode dependent):	
Bypass (off) - radio port 1 to antenna	-1.5 dB (max.)
Channel 1 Only - radio port 1 to antenna	2.0 dB (max.)
Antenna to radio port 1	+20 dB gain
Channels 1 & 2 - Either radio port to antenna	-5.5 dB (max.)
Antenna to radio port 2	+20 dB gain
Weather Resistant	Yes
Finish	FED-STD 595B, Black
Indicators:	
Power On/Off	•
Power On	•
Mode Select	•
Transmit Active	•
VSWR Fault	•
Over Current Fault	•
RF Input Overload	•
Low RF Output	•
Over Temperature	•
Radio/Antenna RF Connections	N-type, Female



A-301 Operation