FRONTGRADE

AM-SAT-50
50 Watt SATCOM Amplifier



DAMA Certified 50 Watt UHF SATCOM RF Power Amplifier

The AM-SAT-50 is a DAMA Certified 50 Watt UHF SATCOM RF Power Amplifier designed to enhance communications on critical satellite links.

The AM-SAT-50 amplifies both transmit and receive signals to improve signal margin in noisy environments or where antenna patterns are less than optimal.

COSITE filtering allows multiple amplifiers to be colocated without interference and a low noise preamplifier with variable gain provides a clean receive signal and compensation for various cable lengths.

The amplifier may be remotely located from the radio and may be powered over a single coax with a biastee or powered directly via the front panel DC connector.

Features

- 50 Watts SATCOM Transmit Power
- JITC DAMA Certified
- 25/35/50 Watt Settings
- 10/20/30 dB Receive Gain
- Elimination of Cosite Interference
- Weather Resistant
- Remote Operation
- Use With or Without Bias Tee
- RF Bypass When Powered Off

Applications

- UHF SATCOM Uplink/Downlink Comms for Tactical Forces
- Remote or Mast-Mounted SATCOM Antenna Amp Installations
- Mobile, Maritime, and Airborne UHF SATCOM Platforms
- Co-Located Multi-Radio / Multi-Amplifier Deployments Requiring Cosite Interference Mitigation
- Field-Deployed, Harsh-Environment SATCOM Systems Requiring Extended Remote Operation
- Long-Cable-Run SATCOM Installations Needing Selectable Receive-Gain Compensation

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Transmit Specifications

Frequency Range	290-318 MHz
Out of Band Rejection	50 dB
Transmit Power	25/35/50 Watts typical
Switching Speed	JITC DAMA Certified
RF Power Input	5 Watts typical (2 Watts to 20 Watts)
Harmonics	-60 dBc
VSWR	1.5:1
Transmit Duty Cycle	Continuous

Receive Specifications

Frequency Range	242-270 MHz
Out of Band Rejection	50 dB
Noise Figure	3.5 dB typical
Receive Gain	10, 20, 30 dB typical, selectable
VSWR	1.5:1

General Specifications

DAMA	Certified
Bypass Insertion Loss	1 dB typical, 30 to 512 MHz
Remote Distance	Up to 150 feet
Supply Voltage	24-32 VDC
Supply Current	8 Amps Typical
Protection	VSWR and Temperature
Operating Temperature	-20 to +60 C
Environmental	Weatherproof – Amplifier, Splash proof – Bias Tee
Dimensions	6 x 3 x 12.25 inches
Weight	10 Lbs.

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