

50 WATT MULTIBAND/MULTICHANNEL NEXT GENERATION RF AMPLIFIER

The **TCR-NXG-50** is a 50 Watt Multiband/Multichannel Next Generation RF Amplifier designed to extend the range of modern tactical communications radios. The form factor is ideal for use in mounted configurations whether vehicular, maritime, or airborne.

The amplifier supports narrowband and wideband networking waveforms. The advanced technology design ensures compatibility with all modern and emerging waveforms.

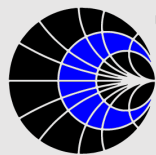
Features such as multiple antenna ports with receive co-site filtering and “future proof” software defined configurations leverage the full capabilities and channel count of the latest tactical radios.

Part #: 11000-00918, TCR-NXG-50



FEATURES

- Simultaneous dual channel transmit capability
- 5 antenna ports for multiple antenna configurations
- Intuitive menu-driven front panel interface
- Optional remote control
- Multiple receive filters for superior co-site filtering
- Compatible with any transceiver operating in the 30-2600 MHz band
- Requires no radio control or communication, fully independent operation
- Amplifies ANW2C, WREN-TSM, SATURN, SINCGARS, P25, and legacy waveforms
- Supports MUOS and LMR via bypass
- Advanced Special Communications Mode (ASCM) Compatible
- Weatherproof and rugged MIL-STD-810 design to withstand the harshest environments
- Dimmable NVIS compatible display per MIL-STD-3009



TRANSMIT SPECIFICATIONS

NARROWBAND

Frequency Range	30-512 (VHF/UHF) MHz
Modulation	AM/FM, ASK/FSK/PSK, AM/FM Frequency Hopping; ASCM Compatible
RF Power Output	10, 15, 20, 35, 50 Watts

WIDEBAND NETWORKING

Frequency Range	225-450 MHz (UHF), 1300-2600 MHz (L/S)
Waveforms	ANW2C, WREN-TSM
RF Power Output	10, 15, 20, 35, 50 Watts (1300-2000 MHz 35W max, >2000 MHz 30W max)

SATCOM

Frequency Range	290-320 MHz
Features	JITC DAMA, IW Compatible, and ASCM Compatible
RF Power Output	10, 15, 20, 35, 50

ALL MODES

RF Power Input	5 Watts Typical
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RECEIVE SPECIFICATIONS

NARROWBAND

Frequency Range	30-512 MHz with banded co-site filters
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WIDEBAND NETWORKING

Frequency Range	225-450 MHz (UHF), 1300-2600 MHz (L/S)
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SATCOM

Frequency Range	240-270 MHz
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ALL MODES

Noise Figure	3.5 dB (VHF/UHF) 4.0dB (L/S)
Receive Gain	10dB (Nominal)

GENERAL SPECIFICATIONS

Immersion	1 meter
Radio Connectors	Two TNC Female
Antenna Connectors	Five TNC Female
DC Connector	TBD
Input Power	28 VDC
Protection	High Temperature Fold Back High VSWR High Voltage Reverse Polarity
Operating Temperature	-40°C to +60°C
Cooling	Natural Convection
External Finish	Black Anodize
Dimensions	3.7" H x 5.6" W x 10.5" D (Estimated)
Weight	10.5 lb (Estimated)

