

50 WATT SIMULTANEOUS TRANSMIT DUAL CHANNEL NEXT GENERATION AMPLIFIER

The **TCR-NXG-50** is a true simultaneous transmit 50 Watt dual channel Multiband 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 SATCOM, ANW2C, SRW, TSM, SATURN, SINGARS, P25, and legacy waveforms
- Supports MUOS SATCOM 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

RF1	
Frequency Range	30-512 MHz (VHF/UHF)
Waveforms	SATCOM, AM/FM LOS, ANW2C, SRW, TSM, SATURN, SINGARS, P25, HAVEQUICK II, ASCM
RF Power Output	Up to 50 Watts
RF2	
Frequency Range	225-450 MHz (UHF), 680-970 (LMR), 1300-2600 MHz (L/S)
Waveforms	SATCOM, AM/FM LOS, ANW2C, SRW, TSM, P25, ASCM
RF Power Output	Up to 50 Watts (225-450 MHz), Up to 25 Watts (680-2000 MHz), Up to 20 Watts (2000-2600 MHz)
ALL MODES	
RF Power Input	2-5 Watts Typical
Harmonics/Spurious	MIL-STD-461/NTIA Redbook

RECEIVE SPECIFICATIONS

RF1	
Frequency Range	30-512 MHz (VHF/UHF) with 5 co-site filters including 240-270 MHz (SATCOM)
RF2	
Frequency Range	225-450 MHz (UHF), 680-970 MHz (LMR), 1300-2600 MHz (L/S) with co-site filters
ALL MODES	
Noise Figure (Typical)	3.5 dB (VHF/UHF) 4.5 dB (LMR, L/S < 2000) 6.0 dB (L/S > 2000)
Receive Gain (Typical)	15 dB (VHF/UHF) 6 dB (LMR and L/S)

GENERAL SPECIFICATIONS

Immersion	1 meter
Radio Connectors	Two TNC Female
Antenna Connectors	Five TNC Female
DC Connector	MS3102E14S-2P
Input Power	28 VDC
Protection	High Temperature Fold Back High VSWR High Voltage Reverse Polarity Near Strike Lightning
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
Weight	10.15 lb

