



1765~2250MHz
20W
Bidirectional Amplifier

Item # 70-221

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Utilizing the latest in Amplification Technology, this bi-directional amplifier meets the demands of extending network coverage for both wearable and portable applications including MANET operations. It has proven reliability in extreme environments from terrestrial to airborne networks. It interfaces with all TDD radios that require high speed switching between TX and RX modes and is compatible with most common and proprietary modulation schemes.

This units is for use in 1765-2250MHz, delivers 20Watts of output power with high efficiency.

Due to the high RF power outputs these units are only offered for sale to Military, OEM, Licensed or overseas customers.



- Lightweight, portable placements.
- Environmentally Sealed, rugged design.
- Slim profile for field vest pockets.
- Manual Enable/Disable engagement switch

Specifications

Operating Range	1765 - 2250 MHz
Operating Mode	TDD, Time Division duplex,
Transmit Power	P1dB 43dBm, 30 Watt
Transmit Gain	12dB +/-2dB (up to 18 available)
Transmit input Power	5dBm min 33 dBm max
Receive Gain	10dB +/-3dB, (15 dB optional)
Noise Figure	<3dB
DC Power Range	24-32VDC @ 3A
Power Consumption @ 28 V DC	100mA @ Rx, Max 3A @ Tx (depending upon TX duty Cycle)
VSWR	Amp is capable to handle 10:1 VSWR
LED indicators	Red for Receive (Default mode) Green for Transmit
Operating Temp	-40 °C to + 65 °C at ambient conditions
Dimensions	7.5"x3.5"x1"



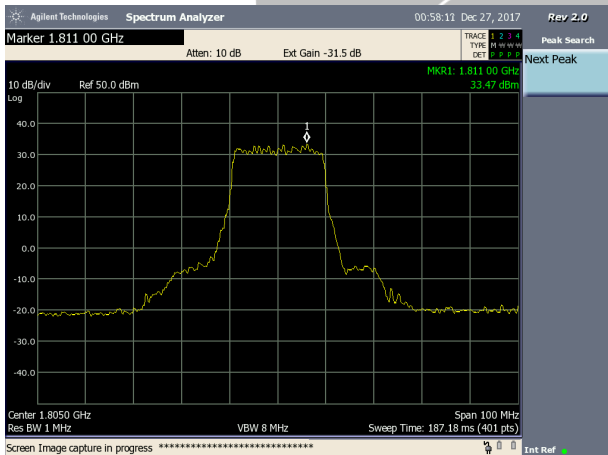
TEST RESULTS WITH TW-400 CUB RADIO



TX Gain @ 1800MHz	11dB
P1dB @ 1800MHz	44.52dBm

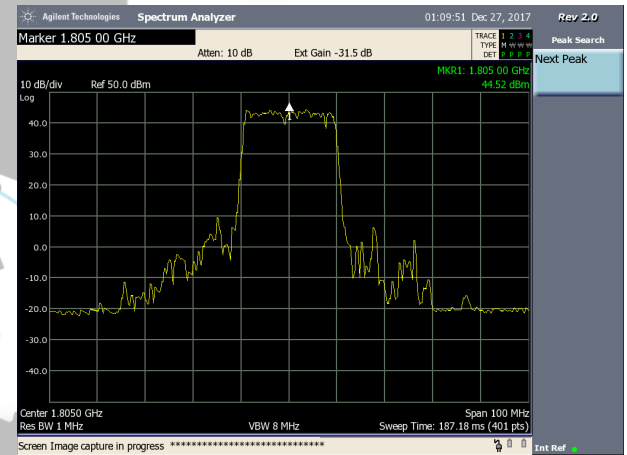
Radio O/P power dBm	AMP output power dBm	Output Power In Watts
27	38	6.3
30	41	12.6
33.5	44.52	28.3

TW-400 CUB OUTPUT

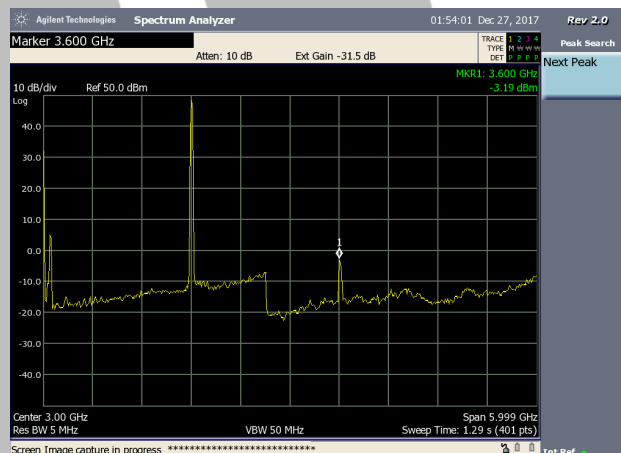


- > 33.47dBm Radio output
- > 20 MHz Channel Size

TW-400 CUB OUTPUT WITH AMP



- >: 44.5dBm Amp output
- >: 11dB gain
- >:20 MHz channel size



2nd Harmonic , Pout@50W