



**TELETRONICS**  
INTERNATIONAL® INC.

[www.teletronics.com](http://www.teletronics.com)

# Compact Perfection.

With its sleek design and just 4.3 inches in length, this Mini-Amp provides everything needed to extend the signal range of 5.8GHz wireless radio devices.

### Reliable and Flexible.

This 802.11a 500mW M58 amplifier is Teletronics' latest development under the Bi-Directional RF Amplifier product line. These amplifiers are especially designed for excellent signal linearity with a low noise figure to achieve the maximum throughput allowed in the OFDM spectrum. Reliable and flexible, this achievement would allow you to increase the range of your wireless link and with only 10dBm input power, you can achieve 27dBm (500mW) OFDM output power.

### Compatibility.

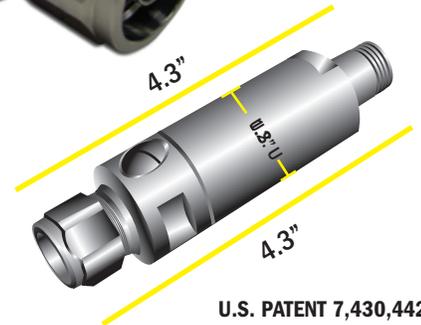
Typical radio devices can be Teletronics' TT5800, Proxim 5054 (MP.11a), and any other 802.11a radios. OFDM modulation can be achieved at 54 Mbps. The line of sight range is from 5 to 32 miles (depending on the antenna usage.)

## Features

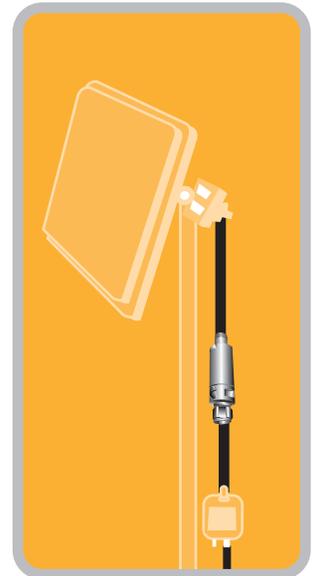
- 802.11a (OFDM) compatible
- Bi-directional
- Low noise figure
- Wide range of operating temperature
- Easy installation & Maximum flexibility
- N-type, Male/Female connectors
- Indoor and Outdoor use
- No mounting needed



M58 Amplifier 500mW: Item#12-510  
M58 Amplifier 250mW: Item#12-511



U.S. PATENT 7,430,442



### M58 Amplifier 500mW: #Item12-510

#### Specifications

Frequency Range: 5725-5875 MHz	Output Power: 500mW (0.5W)
Operating Mode: Bi-directional, TDD	Connectors: N-type, Male/Female, 50 Ohm
Transmit Gain: 13 dB	Power Consumption:
Receive Gain: 12 dB typical	Tx: 0.8A @ 7.5VDC
Noise Figure: 3.5 dB typical	Rx: 0.2A @ 7.5VDC
Frequency Response Stability: ± 1 dB	Size: Length: 4.3"
Input Power: 1mW (0dBm) min	Diameter: 1.2"
25mW (14dBm) max	Weight: 0.7 lbs
	Operating Temperature: -30 °C to + 70 °C

### M58 Amplifier 250mW: #Item12-511

#### Specifications

Frequency Range: 5725-5875 MHz	Output Power: 250mW (0.25W)
Operating Mode: Bi-directional, TDD	Connectors: N-type, Male/Female, 50 Ohm
Transmit Gain: 13 dB	Power Consumption:
Receive Gain: 12 dB typical	Tx: 0.8A @ 7.5VDC
Noise Figure: 3.5 dB typical	DC Surge: 600Watts TVS @ 7.5VDC
Frequency Response Stability: ± 1 dB	Size: Length: 4.3"
Input Power: 1mW (0dBm) min	Diameter: 1.2"
16mW (12dBm) max	Weight: 0.7 lbs
	Operating Temperature: -30 °C to + 70 °C

Teletronics International, Inc. 2 Choke Cherry Road Rockville, MD 20850 Tel: 301.309.8500 Fax: 301.309.8851 Email: [sales@teletronics.com](mailto:sales@teletronics.com)

FCC NOTICE: The use of all radio equipment is subject to radio regulations in each country. It is the responsibility of the purchaser/installer/operator to insure that only approved equipment/systems are deployed. For the ISM band (900MHz, 2.4GHz, 5.7GHz) equipment manufactured, sold/or used in the USA, FCC Title 47, Part 15 governs the sale, lease, use and manufacture of equipment (wireless LAN cards, wireless Access points, amplifiers, etc.) and prohibits the same unless such equipment is used in the FCC-certified system configuration with which such equipment is authorized.

© 2005 Teletronics International Inc.