

# TR6000 AM Broadcast Transmitter

## A Design for a New Century



The TR6000 AM Broadcast Transmitter represents an aggressive advance in design, signaling a new era in limited area AM broadcasting. Here are the high points:

- High Quality** TR6000's high quality compander circuitry manages the output, providing a level of audio processing never before possible in a limited-area AM transmitter. In short, a program broadcast by the TR6000 sounds great, with excellent intelligibility.
- High Efficiency** TR6000's RF amplifier operates on "Class D" design, delivering its product using 1/3 the power of conventional limited area AM transmitters. The resulting decrease in the size of the solar generator and battery systems lowers the cost to procure, operate and maintain radio systems employing the TR6000. Defeatable LED operation reduces power utilization even further. With its integrated design, the TR6000 prices more efficiently than fully optioned transmitters of the past. Finally, the TR6000's slim size offers efficiency in space. Its chassis is only 20% the size of older-style transmitters.
- High Reliability** TR6000 is the only Class D transmitter on the market today that generates its signal using only two output devices. This critical design difference makes the TR6000 much more reliable in operation than its predecessors. With all components - RF, power, control and audio - on a single circuit board and protected by a fully regulated power supply, reliability is further enhanced. Because the TR6000 is capable of outputting wattages in excess of 10 watts, running at fewer than 0 watts for TIS and HAR allows it to operate at a fraction of its capacity, extending its useful life.
- High Flexibility** TR6000 can operate on any AM frequency without a crystal change. A technician can modify its frequency on the bench, conveniently. The unit can mount in a 19" rack, on a panel or on a shelf, allowing TR6000 to operate in virtually any physical environment.
- High Functionality** TR6000 includes all the functions you need in one package: Convenient external front panel controls include LED wattmeter and modulation meter, power and modulation controls, power and meter switches. The TR6000 is capable of precision RF output by two styles of on-board oscillators or by an external reference oscillator.
- High Flexibility** TR6000 can operate on any AM frequency without a crystal change. A technician can modify its frequency on the bench, conveniently. The unit can mount in a 19" rack, on a panel or on a shelf, allowing TR6000 to operate in virtually any physical environment.

# Specifications

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- 0-10-watt operation, Class D, high efficiency output; internal components rated to 3 times operating wattage, utilizing 2 output devices.
- Federal Communications Commission certified for Travelers Information Service in the United States under Part 90.242., Certification Number B7MTR-6000TIS-WB.
- IPC-610 certified.
- Manufactured in compliance with Class 3 wavesolder standards.
- Approved for US Military use.
- Single-board design with all RF, power and audio circuitry.
- Integral LED wattage and VU reference meters.
- Remote broadcast monitoring control.
- Synthesized frequency selection, compander-style audio processing.
- Defeatable LED operation to save power.
- 24V DC, fully regulated power supply.
- 530 to 1700 kHz AM frequency range.
- Frequency stability +/-20 Hz.
- Continuously adjustable power and audio modulation controls, externally accessible on front panel.
- Tunable series filter on RF output.
- Audio distortion: less than 1.2%, 100 Hz to 3 kHz.
- Noise level: 70 dB below 95% modulation level, 100 Hz to 3 kHz.
- Modulation: 99%, -40 dB to #20 dB.
- Temperature: -40 to +85 degrees Celsius.
- Humidity: 95% (non-condensing).
- External audio, power and synchronization inputs.
- External PL-259 UHF style RF output and 1/4" audio headphone output driven by detector circuit to provide positive modulation indication.
- Rack, panel or shelf-mountable cabinet.
- Slim-line design (7.5" height, 17" width, 1.5" depth) and 4 pounds.
- Mean time between failure - in excess of 60 years.
- Estimated product life = in excess of 30 years.

# Options

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- External control closures to control power on/off and monitor audio.

# Pricing

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- \$2,795.00
- Includes external relays for remote on/off and external switched monitoring. See specifications.
- *Availability: Stock. Ground freight is prepaid by ISS. Product availability is typically 30 days after receipt of order. Terms: Net 30 days to governmental entities and their agents; check-with-order or COD for initial orders from private sector entities. Prices are valid for 180 days from the quotation date. One-year parts and service warranty. Note: The warranty is void if the customer modifies the product. Purchases from ISS, Inc., are subject to the ISS "Standard Terms and Conditions" agreement, which is signed by the purchaser, becoming part of the contract.*



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