



TMR6790/6791

Single/Dual HF Exciter



- 1.5 to 30 MHz Transmit
- Digital Signal Processing Technology
- Local, Remote, and Computer Control
- Companion 125 W, 1 kW, or 5 kW LPA
- MIL-STD-188-141B (App A) (ALE)
- RS-232/RS-485 Control Bus
- TADIL-A/LINK-11
- Two Channel ISB
- Full BITE, Local, or Remote to LRU
- Configuration Flexibility

**Series 5000—Reliable, Modular,
Cost-Effective HF Systems.**



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The TMR6790 Series HF Exciter is a digital, microprocessor controlled, synthesized unit that utilizes Digital Signal Processing (DSP) technology for cost-effective, highly-flexible, solutions in complex HF communications systems. It is designed for use with the 125 W TMR1096, 1 kW TMR1090, or 5 kW TMR5405 Power Amplifier. The TMR6791 is a dual exciter providing the ultimate in flexibility.

DSP technology offers a flexible, programmable approach to narrow band filtering and baseband signal processing, while providing two channel Independent Sideband (ISB) operation. One or both exciters can be configured for two channel ISB.

Total modular design provides an easy upgrade path resulting in extended product life and functionality. All modules are plug-in circuit boards designed for rapid insertion or extraction.

The standard TMR679X Exciter is supplied with a blank front panel. Graphical User Interface (GUI) options include the TMR6490 Control Unit and computer control in Windows format utilizing PC6000 Radio Control Software.



GENERAL

Stored Channels

- 1000 programmable

Frequency Stability

- 0.33 PPM, 0° to +35°C
- 2 PPM, 0° to +50°C typical
- Optional OCXO: 0.01 PPM, 0° to +50°C

Modes of Operation

- USB/LSB/ISB/CW/AM/AME
- A1A, A1B, B7B, B8E, B9W, F1A, F1B, F1C, F3C, H2A, H2B, H3E, J2B, J3E, R2A, R2B, R3E
- Simplex, Half Duplex, or Full Duplex operation

Tuning

- Direct frequency or channel entry from keyboard or keypad on LCU, RCU, or Computer.

Synthesizer Tune Time

- < 20 ms

Remote Interfaces

- RS-232 or RS-485 (up to 1.3 km)

Line Input

- Two independent channels
- -20 dBm to +10 dBm
- 600 Ohm balanced audio

Voltage Requirements

- Universal Input: 90 to 270 VAC 47 to 400 Hz Single Phase, Auto Revert DC (20 to 32 VDC) with loss of AC Line

BITE

- Auto test to board/module level on power up
- Re-test at user command

ENVIRONMENTAL

Temperature Range

- -5° to +55°C operating
- -40° to +70°C storage

Shock/Vibration

- MIL-STD-810E

Weight

- 20.2 lbs (9.2 kg)

Size (H x W x D)

- 7 x 19 x 15 inches (178 x 483 x 381 mm)

EXCITER

Frequency Range

- 1.5 MHz to 30 MHz in 1 Hz steps

Output Power

- 50 mW

Carrier Rejection

- 60 dB Minimum

Undesired Sideband Rejection

- 60 dBc Minimum

In Band SNR

- > 50 dB in 3 kHz Bandwidth

OPTIONS

- Internal Pre/Post-Selector
- High Stability OCXO
- Rack Mount Kit
- TMR6490 Radio Control Unit

➤ Non-U.S. Government sales are subject to U.S. Government approval.
➤ Specifications are subject to change without notice.

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