



Datron World Communications Inc.

DTX75000 **5000W HF Transmitter**



- **1.6 to 30 MHz**
- **5000W Continuous Duty Operation – Voice/Data**
- **Solid-State Construction**
- **Low Distortion, High Efficiency**
- **High Efficiency**
- **Internal ac Power Supply**
- **Full Antenna VSWR Protection**
- **Forced-Air Cooling**
- **Built-in-Test**

The DTX75000, based on the rugged and reliable TW7000TX, provides the extra power required for demanding HF communication paths. The transmitter has a full 5 kW RF output power capability, and is rated for continuous-duty operation in either voice or data modes.

TW7000TX Exciter

The TW7000TX provides high performance carefully balanced with ease of operation, high reliability, simple maintenance, and affordability. It offers multi-mode operation including USB, LSB, AME, CW, and data ranging from simple FSK up to demanding high-speed data modes. The TW7000TX is fully remote controllable using standard phone lines either by computer or from a dedicated DWC remote console. The TW7000 transceiver may be substituted for the “TX” model if complete receive/transmit capability is required in the same package. All models of the 7000 are fully compliant to FED-STD-1045A for ALE.

5 kW Amplifier

The DTX75000 5 kW Amplifier, based on solid-state DMOS devices, offers the efficiency of Class AB operation with the linearity of classical Class A designs. It incorporates a sophisticated microprocessor-based controller, and is composed of four separate 1250-watt sub-units that are combined to obtain the total 5 kW power output. The complete system is integrated into a single 19-inch rack with internal forced-air cooling.

Front panel displays include forward and reverse output power and individual module status. In the unlikely event of an output device failure, the modular nature of the amplifier allows the system to continue operation at reduced output power.

Other Versions

For those users who don't need a full 5 kW system, a 2.5 kW version of the DTX75000 is also available from DWC in a similar 19" rack. All performance parameters are the same with the exception of the lower RF output power.

SPECIFICATIONS

GENERAL

Frequency Range	1.6 to 30 MHz
Channel Spacing	10 Hz, standard
Channels	Up to 1000
Metering	Forward RF power, Reflected RF power
Operating Modes	J3E (USB, LSB), H3E (AME), J2A (CW), data
Frequency Stability	0.5 ppm
Power Requirements	220/208 VAC, 3 phase
Protection	VSWR – open or short, over-temperature, overdrive

Transmitter

RF Power Output	5000W, PEP or average, +/- 1 dB
Harmonics	-70 dB at rated output
Intermodulation Distortion	-26 dB below each tone at rated output
Duty Cycle	Continuous service, all modes
Input/Output Impedance	50 ohms
Carrier Suppression	-50 dB
Sideband Suppression	-55 dB

Mechanical/Environmental

Size	84" x 19" x 23" (H x W x D)
Cooling	Forced air
Operating Temperature	0 to +50 degrees C.
Storage Temperature	-40 to +70 degrees C.
Output Interface	7/8" EIA

Note: All specifications subject to change without notice. (3/01)



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