

ROATRON



**7 0 0 0 - S E R I E S
T R A N S C E I V E R S**

The Total System Solution for Your HF Communication Requirements

F E A T U R E S

Common Platform

Designed for long-haul, multi-mode usage, the 7000-series HF transceivers share a common platform and common logistics. Over 80% of the transceivers' modules are identical. This results in lower maintenance costs, reduced training requirements, and lower overall life-cycle costs.

Reliable Communications

All 7000-series transceivers are capable of providing reliable communications even under poor signal conditions. FED-STD-1045A ALE is used to compensate for constantly shifting ionospheric conditions by automatically selecting useable communications channels. Options are available to enhance voice recognition and quality, as well as improve co-location performance in high-noise environments. High-speed HF modems, using advanced waveforms and ARQ features, deliver error-free data transmissions at the fastest possible rates.



Datron's rugged, 400W mobile system is completely sealed and ideally suited for applications requiring use in harsh environments. The RT7000/RA400 system (shown above) can be used in either mobile or shipboard installations. It is rated for full continuous-duty operation.

Mission Flexibility

7000-series transceivers form the core of systems with RF power levels up to 5 kW. Software packages are available to allow computer control of both the transceiver and the ALE parameters. Orderwire messages may be composed and sent by using either the front-panel keypad of the radio or an external computer running our Windows®-based control software. Additional software packages are available that provide either point-to-point or multi-mode data network communications, including LAN connectivity and HF e-mail.

Transmission Security

All 7000-series transceivers feature embedded voice encryption to ensure that the user receives a high level of transmission security. Data traffic can easily be protected by the use of DWC's data software which has the added feature of complete privacy for all message traffic.



1000W of RF output in a compact, stack-mounted configuration. The RT7000/RA1000 system shown above has been a reliable performer in tactical shelter systems.

Remote Control

A variety of control options are available for both the TW7000 and the RT7000. An extended control unit is offered for use in vehicular installations, while long-haul control is accomplished using either DWC's FSK or ISDN-based controllers. Full-function computer control is also possible using DWC's proprietary control software. Integration into other complex computer-control systems is easily achieved using a variety of interface protocols.



All 7000 transceivers have both local (front panel) and full-function remote control capabilities.



Military RT7000-based rack system with telephone interface and encryption.

O V E R V I E W

There are three separate and distinct product configurations that comprise the 7000-series family. The TW7000 is primarily used for professional, embassy-type configurations. The RT7000 is best suited for severe environmental applications. Finally, the TW7000F is a transportable version of the TW7000, and is designed specifically for rapid deployment usage. The entire family offers high-quality, high-performance over the entire 1.6 to 30 MHz frequency range.

TW7000

The TW7000 is a professional, desktop or rack-mountable 125W transceiver. It provides all standard operating modes and contains up to 1000 preset channels. The TW7000 features an ALE option that is FED-STD-1045A compliant, as well as a high-speed HF modem option that is compliant to MIL-STD-188-110A and STANAG 4285 requirements for single tone and FSK. The radio can be controlled remotely from one of its remote control consoles (FSK, ISDN, or extended front panel) or from a computer using the radio's command protocol. It has provision for DSP-based voice enhancement and encryption options. All TW7000 models have been tested to the shock, vibration, and temperature specifications of MIL-STD-810D. Integration with a TW5300 or TW110A modem and message terminal forms a high-performance, cost-effective HF data system.



Affordable HF communications in a rugged package. DWC's waterproof RT7000 transceiver has performed to critical standards in mobile and fixed-station configurations in widely diverse environments throughout the world.

RT7000

The RT7000 is a ruggedized, completely waterproof version of the TW7000. It has been tested to MIL-STD-810D for shock, vibration, immersion, sand and dust, and temperature performance. It contains the same ALE and modem options as the TW7000 and can be controlled remotely in the same manner.



The TW7000 has formed the core of large, rack-mounted, console-based systems used in control centers and embassies around the world. These console systems range from 400 to 1000W and feature high-speed modems, local or remote control, and high-power broadband or narrowband antenna systems.

TW7000F

The TW7000F is a "flyaway" version of the TW7000. It is a deployable unit that comes mounted in a rugged, transportable case together with a remote-control head, a universal input power supply, and an automatic antenna tuner for use with narrowband antenna systems. The TW7000F has been deployed throughout the world in emergency situations for disaster relief and security applications.



In an emergency, the TW7000F goes to the scene. DWC's TW7000F "flyaway" transceiver has been successfully deployed in emergency situations or wherever high-profile HF "on the move" communication is necessary.



The TW7000E is a space saving, extended-control version of the TW7000. Remote the radio and still have full-function control from a compact control unit equally at home on a desktop or in a vehicle.

OPTIONS AND ACCESSORIES

HF DATA COMMUNICATIONS

Data communication is rapidly overtaking voice as the major user requirement in many world markets. DWC's 7000-series radios are designed to address your data communication needs with systems that are cost-effective, easy to implement, and technologically responsive.

DWC offers data packages incorporating any of the 7000-model HF transceivers for use with any PC or notebook computer. Equipment can be located on a desktop, rack-mounted, or shock-mounted in vehicles. Complete networks with LAN connectivity and e-mail capability can easily be configured using 7000 transceivers and DWC accessory data modems and peripherals. Complementary software packages provide adaptive ARQ protocol for data transfer and radio control.

