



TW7000F HF "Flyaway" Transceiver



The TW7000F is a transportable "Flyaway" version of Datron's TW7000 professional HF transceiver. It is a completely "self-contained" HF station, designed to not only provide long distance voice and data communications over HF, but specifically configured to meet the demanding requirements of rapid deployment, emergency-use equipment. It contains a TW7000-series radio with an extended control head, an embedded universal ac/dc power supply, a long-wire antenna kit, a rugged MIL handset, and a remotely deployable automatic antenna tuner - all packaged in a rugged, transportable suitcase. Easily installable internal options like FED-1045A ALE, voice encryption, and DSP-based voice enhancement add additional functionality to the basic transceiver.

A companion power pack, the TWPP, is also available to provide the capacity for 24 hours of normal radio operation and includes a built-in charger. The TWPP is also packaged in a matching aluminum suitcase.

The TW7000F has a remotely deployable antenna tuner that automatically matches the complex impedance of various whip and long-wire antennas to the TW7000F. A complete long-wire antenna kit (with counterpoise) is included in the TW7000F package.

The TW7000F will meet the environmental specifications of MIL-STD-810 for shock, vibration, and temperature. RF output power is conservatively rated at 125W, PEP, and 100W, average, and there is complete protection against antenna mismatch. Automatic BITE capability, with fault detection down to the module level, allows even unskilled operators to easily repair the radio at the field level.

Datron's Flyaway HF transceivers have been used for years in emergency applications, and the TW7000F is but the latest in a highly successful line of "Flyaway" radios deployed around the world by rapid deployment forces, providing reliable communications in disaster relief and national security situations.

- **1.6 to 30 MHz (100 kHz, Rx)**
- **Continuous duty operation - voice/data**
- **Auto-ranging 115/230Vac power supply**
- **Deployable automatic antenna tuner**
- **Extended control unit**
- **Commercial and MIL audio connectors**
- **FED-STD-1045A ALE**
- **Voice encryption**



TW7000F

SPECIFICATIONS

General

Frequency range	1.6 to 30 MHz (Tx); 100 Hz to 30 MHz (Rx); 10 Hz channel spacing
Preset channels	256, standard; 1000, optional
Scanning	Multiple scan groups, operator-selectable scan rates
Channel programming	From front panel or remotely via computer or dedicated remote control console
Frequency stability	0.5 ppm
Modes	USB, LSB, CW, AME; simplex or half-duplex
Input power requirements	11 - 15 Vdc; 90 - 260 Vac, auto-ranging
Input power protection	Reverse polarity, transient and under/over-voltage
Antenna port	SO-239 for 50 ohm broadband antennas; BNC to connect to deployable antenna tuner.
Antennas	Whips and long wires; fully automatic antenna tuning; 100 channel memory; tuner deployable up to 50 feet from main body of radio.
Radio control	Full-function, extended control unit; deployable up to 15 feet from main body of radio.

Mechanical, Environmental

Size	8.5" x 21" x 17" (21.6 cm x 53.5 cm x 43 cm), (H x W x D); overall "closed" suitcase size
Weight	45 lbs., (20 kg)
Package	Rugged, aluminum-skinned, suitcase; meets ITA under-seat requirements.
Temperature	-30 to +60 degrees C.
Shock, vibration	Per MIL-STD-810

Transmitter

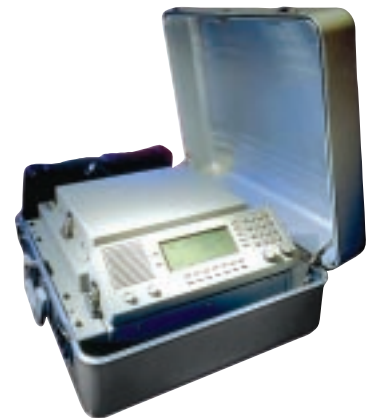
RF power output	125W, PEP; 100W, average (typical)
Duty cycle	Continuous service, all modes
Harmonics	-60 dB (2 to 30 MHz)

Receiver

Sensitivity	10 dB SINAD for 0.5uV input (2-30 MHz)
Attenuator	+20 dB, operator selectable
Audio	5W into 4 ohms; 0 dBm into 600 ohms.

Internal Options

7000ALE	FED-STD-1045A ALE
7000ENCR	Voice encryption
7000VEM	DSP-based noise reduction
7000NB	Impulse-type Noise Blanker
7000WB1	Wideband data filter (MIL-STD-188-110B)
7000CW	Narrowband CW filter
7000RS	RS422/423/485 protocol for 2nd COM port
7000HS	0.1 ppm enhanced stability



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Note: all specifications subject to change without notice

Made in the USA