



Dallas Mobile Communications

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214-884-2707

Product Features

Ergonomic Design

The industrial design ensures convenient operation and remarkable performance for the most extreme uses. Units with display and keypad provide the ability to text and visual status.

Superior Voice

With the combined application of narrowband codec and digital error-correction technologies, the TPD-1000 is capable of ensuring superior voice under noisy environments or at the edge of the coverage area. In addition, voice is optimized with the adoption of AGC technology and a 1.5 Watt speaker for loud, clear, and crisp voice communication.

Increased Operations

Compared to analog operation, the TPD-1000 can obtain up to 40% additional operation time in digital mode. The TPD-1000 is equipped with a standard high capacity 2000mAh Li-Ion battery. An optional 2500mAh battery is also available.

Higher Spectrum Efficiency and Channel Capacity

Benefiting from the TDMA technology, the TPD-1000 allows twice the channels based on the same spectrum resource. This is beneficial to relieve the increasing shortage of spectrum resources.

Reliable Quality

The TPD-1000 is strictly compliant with MIL-STD-810 C/D/E/F/G and IP67 standards, ensuring outstanding performance even under harsh environments.

Versatile Features

In addition to conventional communications services, the TPD-1000 with display and keypad features rich data services and selectable functions such as text messaging, mixed scan, emergency, radio enable/disable, remote monitor, call alert, radio check, man down (optional), GPS (optional), Bluetooth (optional), voice recording (optional), etc.



Function & Options

Dual Modes (Analog + Digital)

TPD-1000 series can operate in either analog or digital mode. It is compatible with the prevalent analog system, ensuring a smooth analog-to-digital transition.

Versatile Voice Calls

TPD-1000 supports various voice call types, including Private Call, Group Call, All Call and Emergency Call.

Vibrate Alert & Voice Channel Annunciation

Vibrate alerts any voice or message under noisy/low-volume conditions. Identify channels through audio notification.

Various Analog Signaling Types

TPD-1000 supports various analog signaling types (CTCSS/DCS, QDC1200, 2-Tone Encode/Decode and 5-Tone).

Secure Communication

TPD-1000 provides high level digital encryption utilizing advanced 256-bit algorithm and voice inversion for analog.

One Touch Text (Display Model Only)

TPD-1000 has the ability to send a text message with the press of one button.

Individual Button Function Lock

TPD-1000 has the ability to lock features individually.

IP Connectivity and Roaming

TPD-1000 supports talking with any other terminals as well as smooth roaming within IP connected repeater system.

Advanced Features (Optional)

TPD-1000 supports various optional advanced features including man down, GPS, Bluetooth, and voice recording.

Industrial Design Features



General

Channel Capacity	16/1024
Zone Capacity	64 (each with a maximum of 16 channels)
Channel Spacing	25/20/12.5 kHz (Analog) 12.5 KHz (Digital)
Operating Voltage	7.4V
Battery Capacity/Type	2000 mAh Li-Ion
Battery Life	Analog: 10.5 hours, Digital: 14 hours (90-5-5 duty cycle)
Frequency Stability	± 1.0 ppm
Antenna Impedance	50 Ω
Dimensions (H/W/D)	5.2 x 2.2 x 1.5" (130 x 55 x 38mm)
Weight	11.75 oz. (333g)
Front Case	Polycarbonate
LCD Display (TPD-1124/1424)	.8 Thin Film Transistor (TFT)

Transmitter

RF Output Power	VHF 5/1 Watt, UHF 4/1 Watt
FM Modulation	11K0F3E (12.5 kHz), 14K0F3E (20 kHz), 16K0F3E (25 kHz)
4FSK Digital Modulation	12.5 kHz Data Only: 7K60FXD, 12.5 kHz Data & Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm<1GHz, -30dBm>1GHz
Modulation Limiting	± 2.5 kHz (12.5 kHz), ± 4.0 kHz (20 kHz), ± 5.0 kHz (25 kHz)
FM Noise	40dB (12.5 kHz), 43dB (20 kHz), 45dB (25 kHz)
Adjacent Channel Power	60dB (12.5 kHz), 70dB (20/25 kHz)
Audio Distortion	<3%
Digital Vocoder Type	AMBE3000 Vocoder Chip with AMBE+2 Voice Compression Algorithm
Digital Protocol	ETSI-TS102 361-1-2-3

Receiver

Sensitivity (Analog)	0.22μ V (Typical) (12dB SINAD)
Sensitivity (Digital)	0.22μ V/BER 5%
Selectivity TIA-603 ETSI	>60dB (12.5 kHz), 70dB (20/25 kHz)
Intermodulation TIA-603 ETSI	>70dB (12.5/20/25 kHz)
S/N	40dB (12.5 kHz), 43dB (20 kHz), 45dB (25 kHz)
Audio Output Power	1.5 Watt
Audio Distortion	<3%
Audio Response	+1, ~-3dB
Spurious Emission	< -57dBm

Approvals

Environmental

Operating Temperature	-30° C to +60° C
Storage Temperature	-40° C to +85° C
ESD	IEC 61000-4-2±8KV/±15 KV
U.S. Military Standard	MIL-STD-810 C/D/E/F/G
Dust & Water Protection	IP67 Standard
Shock/Vibration	MIL-STD-810 C/D/E/F/G

NOTE: Some features indicated by specifications listed are prohibited by FCC rule and are not available on models sold in the U.S. or its territories.

Accessories

- Earhook Speaker with Lapel Mic/PTT
- Heavy Duty Speaker Microphone
- Rapid Rate Desktop Charger
- Six Unit Gang Charger
- 2500 mAh Li-Ion Battery
- Nylon Carry Case
- Leather Carrying Case with Belt Loop Swivel
- Spring Loaded Belt Clip
- Programming Software and Cable (USB)



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TPD-1000 Series Digital/Analog Portable Radios

The TPD-1000 Series of radios combine exceptional two-way radio functionality with analog and TDMA digital technology.

- Increased Capacity
- Spectrum Efficiency
- Integrated Data
- Longer Battery Life
- Enhanced Voice Communications
- Greater Range



New Features!

One Touch Text
Ability to send a text message with the press of one button. (Display Version Only)

Individual Button Function Lock
Ability to lock features individually



IP-67 Approved and Built to MIL-STD 810F Ratings

