

TPD-1116 5/1W VHF (136-174 MHz)
TPD-1416 4/1W UHF (406-470 MHz)

TPD-1124 5/1W VHF (136-174 MHz)
TPD-1424 4/1W UHF (400-470 MHz)

Maxon's TPD-1000 Series of two way radios utilize the latest DMR Tier 2 digital technology (Text, Voice Record, Encryption, IP Site Connect Roaming) with a speedy Texas Instruments chipset and full Analog features (QDC-1200, DTMF, 2Tone, 5Tone SelCall) in a rugged, MIL-STD-810F/G body.

Available in full keypad and non-display. All the bells and whistles you need at a great price.



TPD-1124/TPD-1424

TPD-1116/TPD-1416

- 5/1 Watt (VHF) - 4/1 Watt (UHF) Power Output
- VHF (136-174 MHz) - UHF (400-470/450-520 MHz)
- Contact List Capacity 512 (Display)
- DMR Tier II TDMA/Analog
- Versatile Voice Calls
- Direct or Repeater Mode
- 12.5/20/25 kHz Channel Spacing
- Various Analog Signaling Types
- DTMF Keypad - Encode/Decode
- Input Frequency Capable
- Multiple Scan Functions
- Individual Button Function Lock
- Voice Annunciation
- Vibrate & Man-Down Standard
- CTCSS/DCS
- QDC-1200. Stun/Kill OTA
- ANI, 2-Tone Encode/Decode/5-Tone Selcall
- MIL-STD-810F Compliant



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.

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.

Reliable Quality

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

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.

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.

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, IP site connect roaming, emergency, radio enable/disable, remote monitor, call alert, radio check, man down, etc.



Equipped with performance from

**TEXAS
INSTRUMENTS**

Functions and 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, DTMF, QDC-1200, 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)

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

TPD-1000 supports advanced features including man down.

Industrial Design Features

Large High Definition
Full Color Display



Multi Programmable
Function Buttons



Functional DTMF Keypad



Frequency Input Capable



MIL-STD-810F
Compliant



Locking Accessory
Connector



Large Speaker for High
Quality Audio



SPECIFICATIONS

GENERAL

TPD-1116 TPD-1124	136-174 MHz
TPD-1416, TPD-1424	406-470 MHz
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	7.4 V DC
Battery Capacity	2000 mAh Li-Ion
Frequency Stability	±1.0 PPM
Antenna Impedance	50 Ω
Dimensions (H/W/D)	5.2 x 2.2 x 1.5" (130x55x38 mm)
Weight (W/ Battery)	11.75 oz. (333 g.)
Front Case	Polycarbonate
LCD Display (TPD-1124/1424)	.8 Thin Film Transistor (TFT)
Battery Life (Hours)	Analog: 10.5 Hours, Digital: 14 Hours
	90/5/5 duty cycle

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)	.22μ V (Typical) 12dB SINAD
Sensitivity (Digital)	.22μ V/BER 5%
Selectivity TIA-603 ETSI	>60dB (12.5 kHz), 70dB (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

PACKAGE INCLUDES:

Radio, 2000 mAh Li-Ion battery, desktop charger, antenna, belt clip and user manual.

Specifications are subject to change without notice.

ACCESSORIES



Earhook Speaker w/Lapel Mic/PTT
 Speaker Microphone
 Rapid Rate Desktop Charger
 Six Unit Gang Charger
 Nylon Carrying Case
 Leather Carrying Case w/Belt Loop Swivel
 Spring Loaded Belt Clip
 Programming Software and Cable (USB)

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
Shock/Vibration	MIL-STD-810 C/D/E/F/G

Approvals	FCC
TPD-1116	P6NDH-9100V
TPD-1124	P6NDH-9800V
TPD-1416	P6NDH-9100
TPD-1424	P6NDH-9800U



Manufactured to ISO-9002:2000 quality standard.

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.

maxon
Maxon America, Inc.

11535 W. 83rd Terrace Lenexa, KS 66214
Tel: (800) 456-2071 - Tel: (913) 859-9515
Fax: (913) 859-9550

Web: www.maxonamerica.com
E-mail: maxon@maxonamerica.com