



TPD-8000E Series

Digital/Analog Portable Radios

TPD-8424E 3W UHF (440-470 MHz)

The TPD-8000E Series of radios combine exceptional two-way radio functionality with Analog and DMR Digital technology in a compact size.



- 512 Channels (16 Zones, 32 Ch. per Zone)
- 3W Digital, 2W Analog RF Output Power
- Direct or Repeater TDMA Tier II Mode
- 2200 mAh Li-Ion Battery
- 1 Watt Audio Output
- Battery Saver
- CTCSS/DCS (Analog Mode)
- Multiple Scan Modes
- Direct Call contact list (54 Contacts)
- Remote Stun/Revive
- One-Touch Text
- Stores 10 Messages (Up to 40 Characters Each)
- VOX
- Voice Recording & Playback
- Programmable Buttons
- Etiquette (Vibrate) Mode
- Lone Worker
- AES 256-bit Encryption
- IP54 Certified
- Repeater Ready



SPECIFICATIONS

GENERAL

TPD-8424E UHF	440-470 MHz
Channel Capacity	512; 16 Zones, max 32 Ch Per Zone
Digital	DMR Tier II TDMA
Channel Spacing	25/20/12.5 kHz (Analog) 12.5 kHz (Digital) 2 Time Slots of 6.25 Each
Operating Voltage	3.7V
Battery Capacity	2200 mAh Li-Ion
Frequency Stability	± 1.0 PPM (-30° to +60° C)
Antenna Impedance	50 Ω
Dimensions (H/W/D)	3.89 x 2 x .82" (99x51x21 mm)
Weight (W/ Battery)	5.86 oz. (160 g.)
Case/Frame	Polycarbonate/Aluminum Die Cast
LCD Display	3 Lines Mono - Choice of Alphanumeric or Numeric
Battery Life (Hours)	Analog: 10.5 Hours, Digital: 14 Hours 90/5/5 duty cycle

TRANSMITTER

RF Output Power	3 Watt Digital, 2 Watt Analog
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)
Adjacent Channel Power	60dB (12.5 kHz), 70dB (20/25 kHz)
Audio Distortion	3% maximum with 1kHz modulation
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 12dB SINAD
Sensitivity (Digital)	.22μ V/BER 5%
Selectivity TIA-603 ETSI	>65dB (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	1.0 Watt
Audio Distortion	< 3% at rated output
Audio Response	+1, ~ -3dB From 6dB per octave de-emphasis characteristics
Spurious Emission	70dB

PACKAGE INCLUDES:

Radio, 2200 mAh Li-Ion battery, dual-slot desktop charger, USB cord, antenna, swivel belt clip, and user manual.

Specifications are subject to change without notice.

ACCESSORIES



Charger Options

Dual-Slot Desktop Charger w/USB Cord
2200 mAh Li-Ion Battery
Charger Connector Links



Speaker Mic Options

Standard Speaker Microphone
Heavy Duty Speaker Microphone



Ear Piece Options

"D" Style Earhook Speaker w/Lapel Mic/PTT
"C" Style Earhook Speaker w/Lapel Mic/PTT
Clear Earbud Speaker w/Lapel Mic/PTT



Other Options

Molded Belt Clip
Available in 3 Colors:
(Black, Blue, Orange)

ENVIRONMENTAL

Operating Temperature	-22° to 140° F (-30° to 60° C)
Storage Temperature	-40° to 185° F (-40° to 85° C)
ESD	IEC 61000-4-2/±8KV/±15 KV
Dust & Water Protection	IP54 Standard

Approvals

TPD-8424E

FCC

VSOTPD-8424

Industry Canada

9680A-TPD-8424



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.

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