



## TP9800 MULTIBAND PORTABLES

### RUGGED, LIGHTWEIGHT, MULTI-AGENCY COOPERATION

Multiple bands. One portable. Customized for you. Increase worker safety and productivity across multiple radio networks and frequency bands with the TP9800 Multiband Portable, a versatile, lightweight and compact radio designed for maximum reliability and interoperability.



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## FEATURES & BENEFITS



3W speaker with water shedding grille and active noise cancellation.



Glove-friendly control options for volume and channel selection.



Large color screen to keep you fully informed at a glance.

### SEAMLESS MULTIBAND PERFORMANCE

Connect across all your bands from one dynamic portable. The TP9800 Multiband Portable is configurable to operate on any combination of VHF, UHF and 700/800MHz bands. Flexible and simple ordering and deployment of single, dual, and multiband operation at time of purchase, or subsequently over the air. Bands are not locked and can be reconfigured.

### RUGGED, LIGHTWEIGHT DESIGN

Experience the lightest P25 multiband portable radio on the market with high capacity battery and compact design. Bridge communications between agencies, or roam between network coverage areas, without the need for several bulky devices.

### MAXIMUM CONNECTIVITY

Connect to the range of networks you will encounter in current operations or future technology migrations: Conventional Analog, P25 Conventional Digital, P25 Trunking Phase 1 and Phase 2, with integrated GNSS option for Location Services, Bluetooth® for wireless voice accessories, and WiFi OTAP.

### EXCEPTIONAL AUDIO

Hear and be heard, even in the most extreme environments, with a powerful 3W speaker, and dual microphone active noise cancellation that removes background noise in both analog and digital modes.

### ENHANCED WORKER SAFETY

Ensure your workers are safer and better connected. Combined with location data, safety alerts can be automated using Man Down, Lone Worker and Tait GeoFencing software options, or triggered using the programmable Emergency key.

### ERGONOMIC USER EXPERIENCE

Enhance operational efficiency and user experience when it matters most. The TP9800 is designed for easy use in emergency situations, with ergonomic, glove-friendly control options; four programmable function keys and a three-way selector; and a range of accessories to tailor your experience.

### PROVEN P25 INTEROPERABILITY

Enable multi-agency response and multi-vendor compatibility for voice, data and encryption methods – the TP9800 is designed to meet TIA-102 P25 Compliance Assessment Program requirements.

### SECURE COMMUNICATION

Ensure only authorized personnel can hear your communications with end-to-end encryption management options, FIPS 140-2 certified module, AES, DES and ARC4 algorithms, Tait EnableProtect Key Fill Device and Key Management.

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## TECHNICAL SPECIFICATIONS

GENERAL	
Frequency stability	±0.5ppm (-22°F to +140°F/-30°C to +60°C)
Channels/zones	2,000 channels/100 zones
Talk groups	1000 talk groups, up to 2,000 members total
Scan groups	300 with up to 10 members each, maximum of 2,000 members total
Bluetooth®	Supported
Encryption (via Key-Fill Device or OTAR)	Supported in P25 Operation (FIPS Certified 256-bit AES, DES, ARC4)
OTAP	Supported (P25 Trunking, WiFi) – Requires Tait EnableFleet
Dimensions (with High Capacity battery)	1.77 x 2.56 x 5.71in / 45 x 65 x 145mm (DxWxH excluding knobs and antenna)
Weight (with High Capacity battery)	13.42oz / 382g (without antenna)
Supported Languages	English, German, French, Spanish, Portuguese, Czech, Russian, Polish, Bulgarian
Channel Spacing	6.25/12.5/15/20/25/30kHz <sup>1</sup>
Frequency increment	2.5/3.125/5/6.25kHz
Radio Operating temperature	-22°F to +140°F (-30°C to +60°C)
Water and dust protection	IP68 & IP65
Audio Output	3W
Signaling options (analog)	MDC1200 encode and decode, Two Tone decode, PL (CTCSS), DPL (DCS), Selcall
Vocoder type	AMBE +2™

MILITARY STANDARDS 810G					
Applicable MIL-STD	Method	Procedure	Applicable MIL-STD	Method	Procedure
Low pressure	500.5	2	Humidity	507.5	2
High temperature	501.5	1,2	Salt fog	509.5	1
Low temperature	502.5	1,2	Sand & Dust	510.5	1, 2
Temperature shock	503.5	1	Immersion	512.5	1
Solar radiation	505.5	1	Vibration	514.6	1
Rain	506.5	1,3	Shock	516.6	1, 4, 5, 6

BATTERY <sup>2</sup>	
P25 Phase 2 / TDMA Mode Shift Life (5/5/90) with High Capacity battery	18 hours
Analog and P25 Phase 1 / FDMA Mode Shift Life (5/5/90) with High Capacity battery	12 hours

CHARGER	
Charger options (Li-Ion)	Fast desktop single charger, 6-way multi charger, vehicle charger and battery only vehicle charger

REGULATORY DATA	USA (FCC)	CANADA (ISED)	EUROPE/UK (CE)	AUSTRALIA/NEW ZEALAND (AS/NZ)
VHF (136-174MHz)	✓	✓	✓	✓
UHF (378-520MHz)	✓	✓	✓	✓ <sup>3</sup>
700/800MHz	✓	✓	-	-

# TP9800 MULTIBAND PORTABLES

## TECHNICAL SPECIFICATIONS continued

TRANSMITTER	VHF	UHF	700/800MHz
<i>(Note – Radio can be configured to operate on any combination of the supported bands)</i>			
Frequency range	136-174MHz	378-520MHz	757-870MHz
Output power (nom)	5W, 3W, 2W, 1W	4W, 2.5W, 2W, 1W	3W, 2.5W, 2W, 1W
Modulation limiting			
12.5/15kHz channel	±2.5kHz	±2.5kHz	±2.5kHz
25/30kHz channel <sup>1</sup>	±5kHz	±5kHz	±5kHz
FM hum and noise			
12.5kHz channel	-45dB	-45dB	-40dB
25kHz channel <sup>1</sup>	-48dB	-48dB	-45dB
Radiated and conducted emissions	-75dBc	-72dBc	-75dBc
Audio response (analog)	+1/-3dB	+1/-3dB	+1/-3dB
Audio distortion (analog @1kHz, 60% mod) <sup>4</sup>	2%	2%	2%

RECEIVER	VHF	UHF	700/800MHz
<i>(Note – Radio can be configured to operate on any combination of the supported bands)</i>			
Frequency range	136-174MHz	378-520MHz	757-776MHz, 851-870MHz
Sensitivity (analog) 12dB SINAD (TA-603I)	0.22uV (-120dBm)	0.22uV (-120dBm)	0.22uV (-120dBm)
Sensitivity (P25) 5% BER	0.2uV (-121dBm)	0.2uV (-121dBm)	0.2uV (-121dBm)
Intermodulation rejection (P25) TIA-102	75dB	75dB	75dB
Adjacent channel rejection			
12.5kHz (P25) TIA-102	60dB	60dB	60dB
25kHz TIA-603 (2-tone) <sup>1</sup>	70dB	70dB	65dB
Spurious response rejection (P25) TIA-102	75dB	80dB	70dB
Residual audio noise ratio (P25) TIA-102	45dB	45dB	45dB
Audio distortion (rated audio)	1.5%	1.5%	1.5%
FM hum and noise (Analog)			
12.5kHz channel	-45dB	-40dB	-40dB
25kHz channel <sup>1</sup>	-48dB	-45dB	-45dB

### NOTE:

1. Wideband operation is not available in the USA in some bands.
2. Battery performance is dependent on frequency, temperature, and operational configuration.
3. The UHF band radios are approved for use in Citizen Band in Australia and New Zealand when programmed to meet the requirements of AS/NZS4365.
4. Rated audio (for performance testing) 0.5W.

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### QUALIFICATIONS



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