

Reliable • Clear Audio • Fully Compliant

## TP9100 P25 portables

Complete, affordable and high quality radio communications systems are the cornerstone of Tait's reputation. The new 9000 series P25 range of products continues this tradition with industry leading digital voice quality, rugged design specifications and intuitive user interfaces.

Dedicated to bringing you value, Tait offers a new class of P25 compliant radio solutions to meet the demanding needs of the public safety and public service sectors.

- Fully Project 25 Compliant •
- Digital, Analog and Dual Mode Capable •
- Robust Design Specifications •
- Intelligent Scanning and Voting Capabilities •
- Industry Leading Clear Digital Audio •
- Full Range of Emergency and Safety Options •
- Comprehensive P25 and Analog Signaling •

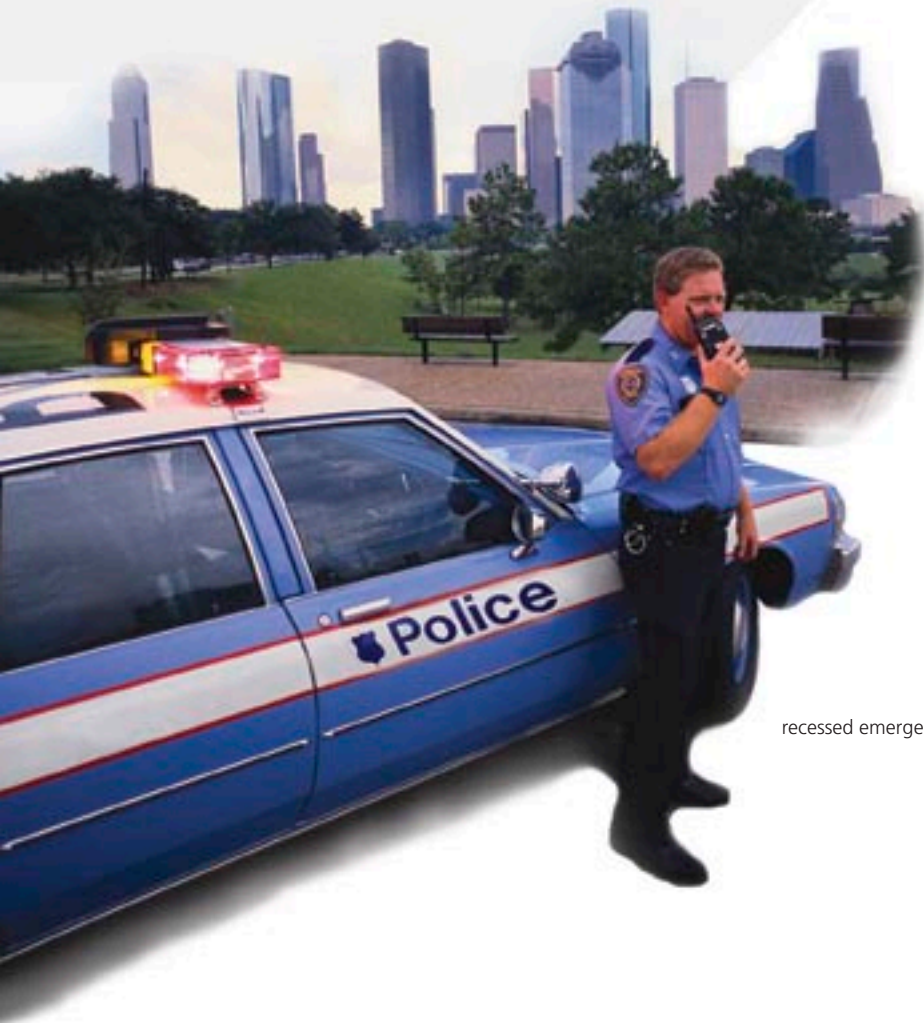


## TP9100 P25 portables

**Mission critical situations demand reliable, easy to use and clear communications. TP9100 P25 portables are high quality and affordable radios you can depend on.**

Not all P25 digital communications systems are created equal. The TP9100 product line offers complete P25 digital and analog compliance and includes such extras as DTMF, high quality channel voting, loads of emergency operation options and automatic mode selection that give you the peace of mind you want from your radio communications system.

Designed with the functionality required for public safety and public service organizations, TP9100 portables bring you state-of-the-art radio design coupled with robust specs and industry leading digital audio clarity. Quality you can depend on at a price you can afford.



# Features

## Full Project 25 Compliance

TP9100 P25 portables meet all Project 25 specifications for interoperability. As well as the mandatory elements of P25, optional P25 services such as individual calls, short data messages, status, radio inhibit/uninhibit and radio check are all available as standard. Tait's commitment to open standards means that your P25 system will not include proprietary encryption or signaling options that make inter-agency communications difficult.

## Robust Design

With a synthetic rubber base to absorb impact, reinforced casing around the knobs and antenna mount, and a recessed lens, the TP9100s have been built to take the knocks. The unique battery catch mechanism ensures the battery will not accidentally dislodge, even if the radio is dropped. Military standards for shock are far exceeded with the TP9100.

## Easy to Use

Accessible knobs, a large display, dedicated function keys and a modern intuitive menu make the TP9100s simple to operate. The user interface on the portables is also virtually identical to the TM9100 mobiles, meaning it is easy to swap between using a portable and a mobile. A quick reference card, automatically generated at the time of radio programming, also makes it easy for new users to learn how to operate the radio.

## Emergency and Safety Options

The TP9100 P25 portables offer the most comprehensive range of personal safety options in the industry. Various emergency activation methods such as Man Down/Lone Worker are provided as standard, as well as a choice of Silent Mode for Stealth operations or Panic Mode for those critical moments.

## Intelligent Scanning Capability

Fast reliable scanning is a given in the Tait P25 product portfolio, but sometimes you need more. TP9100 portables offer dual priority scanning, user programmable scanning and nuisance delete.

## Industry Leading Clear Digital Audio

The IMBE Vocoder in TP9100 series portables ensures your digital audio is always clear and crisp even in noisy background situations. Analogue channels also have noise reduction and companding options to ensure that both digital and analog channels are heard loud and clear.

## Multi-site Operation

Whether in a simulcast system or a multicast voting system, you need a strong signal plus good error correction. For simulcast systems, Tait radios are optimized for clear reception of a variety of transmit modulation formats. With Tait's Intelligent Voting capability your radio can quickly select the strongest channel for your location.

## Intrinsically Safe (IS)

Factory Mutual approval means these radios are certified for use in hazardous environments in the United States. In other countries, ensure your use of this portable in your work environment does not breach your local regulations.



## Standard Features

- Digital, Analog and Dual Mode Capable
- 512 Channels/Talkgroups
- 26 Zones
- Large Graphical Backlit LCD
- Scanning
  - Priority and Dual Priority
  - 300 Scan Groups
  - User Editable Scanning
  - Nuisance Delete
- Voting
- Economy Mode
- Simulcast Operation
- Repeater Talkaround/Direct Mode
- Programmable Power Settings
- Transmit Timer and Lockout
- Keypad Lock
- Preset Home Channel
- Intelligent Batteries
- Emergency Operation
  - Stealth Mode
  - Panic Mode
  - Man Down/Lone Worker
- Analog Operation
  - CTCSS/DCS
  - DTMF ANI
  - MDC 1200® ANI\*
  - Inversion Scrambler
- Project 25 Subscriber Services
  - Individual Calls
  - Talkgroup Calls
  - Talking Party Identification
  - Call Alert/Radio Page
  - Short Data Messages
  - Status Messages
  - Radio Check
  - Radio Inhibit/Uninhibit
  - Radio Unit Monitor

## Optional Features

- Administrator Mode
- DES Encryption
- Full or Limited Front Panel Keypad
- AES Encryption\*

## Accessories

- IP54 Speaker Microphone
- IP54 RF Speaker Microphone
- IP68 Speaker Microphone
- 2-Wire and 3-Wire Lapel Microphones
- Lightweight Headsets
- Heavy Duty Headsets
- Single-way Smart Charger
- Multi-way Smart Charger
- Vehicle Smart Charger\*

\*Future release





TP9155

TP9160



TPA-CH-011  
Smart Multi-charger



TPA-CH-001  
Smart Charger



TPA-AA-203  
Speaker Microphone

## Regulatory Data

<b>USA</b>	<b>VHF</b>	CFR 47 Parts 22, 90.210, 74
	<b>UHF</b>	CFR 47 Parts 22, 90.210, 74, 95A
<b>Canada</b>		RSS-119
<b>Europe</b>		EN300 086, EN300 113 EN300 219, EN301 489 EN60950-01
<b>Australia/New Zealand</b>		AS4295: 1995
<b>Type Approval</b>	<b>FCC</b>	<b>Industrie Canada</b>
	<b>VHF</b>	CASTPAB1A 737A-TPAB1A
	<b>UHF</b>	CASTPAH5A 737A-TPAH5A CASTPAH6A 737A-TPAH6A CASTPAK5A 737A-TPAK6A
<b>Emission Designators</b>		10K0F1D, 10K0F1E, 10K0F7D, 10K0F7E, 11K0F3E, 12K3F1D, 16K0F3E, 4K80F2D, 7K60F1D, 8K10F1D, 8K10F1E, 8K10F7D, 8K10F7E, 8K40F2D

# TP9100 Specifications

## General

<b>Frequency Ranges</b>	<b>VHF</b>	136-174MHz	
	<b>UHF</b>	400-470MHz	
		450-520MHz	
	<b>800MHz</b>	<b>Receive</b>	<b>Transmit</b>
		762-776MHz	762-776MHz
		850-870MHz	792-825MHz
			850-870MHz
<b>Channel Spacing</b>	<b>VHF</b>	12.5/25/30kHz	
	<b>UHF</b>	12.5/25kHz	
	<b>800MHz</b>	12.5/20/25kHz	
<b>Channels/Talkgroups</b>		512 channels/26 zones	
<b>Frequency Stability</b>		±1.5ppm (22°F to 140°F/-30°C to 60°C)	
<b>Dimensions (LxWxH)</b>		6.4 x 2.6 x 1.9in (163 x 66 x 48mm)	
<b>Weight (includes NiCD battery)</b>		19.7oz (559g)	
<b>Rated Audio</b>		>500mW	
<b>Intelligent Battery Options</b>		NiCD, NiMH	
<b>Battery Shift Life</b>			
	with NiCD Packs	>8 hours 5/5/90	
	with NiMH Packs	>12 hours 5/5/90	

## Environmental

Standard - MIL-STD-810F*	Method	Procedure
<b>Low Pressure</b>	500.4	2
<b>High Temperature</b>	501.4	1, 2
<b>Low Temperature</b>	502.4	1, 2
<b>Temperature Shock</b>	503.4	1
<b>Solar Radiation</b>	505.4	1
<b>Rain</b>	506.4	1, 3
<b>Humidity</b>	507.4	1
<b>Salt Fog</b>	509.4	1
<b>Dust</b>	510.4	1
<b>Vibration Shock</b>	514.5	1
	516.5	1, 4

\* Also meets equivalent superseded MIL-STD-810 C, D & E standards

<b>Sealing</b>	IP54 dust and rain
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## Transmitter

<b>RF Power Output</b>	<b>VHF</b>	5W
	<b>UHF</b>	4W
	<b>800MHz</b>	3W

<b>Modulation Limiting</b>	
25/30kHz channel	±5kHz
12.5kHz channel	±2.5kHz

<b>FM Hum &amp; Noise</b>	<b>VHF</b>	<b>UHF</b>	<b>800MHz</b>
25/30kHz channel	-48dB	-41dB	-40dB
12.5kHz channel	-42dB	-37dB	-34dB

<b>Radiated &amp; Conducted Emissions</b>	-36dBm <1GHz
	-30dBm >1GHz

<b>Audio Response</b>	+1/-3dB
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<b>Audio Distortion</b>	<2% @ 1KHz, 60% modulation
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## Receiver

<b>Analog Sensitivity</b>	
12dB SINAD	0.28µV (-118dBm)

<b>Digital Sensitivity (TIA/EIA-102)</b>	
5%BER	0.20µV (-121dBm)

<b>Intermodulation Rejection</b>	75dB
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<b>Adjacent Channel Selectivity</b>	
25/30kHz channel	73dB
12.5kHz channel	63dB

<b>Spurious Response Rejection</b>	75dB (typical) 2,2 Response >66dB at Band Extremes
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<b>FM Hum &amp; Noise</b>	<b>VHF</b>	<b>UHF</b>	<b>800MHz</b>
25/30kHz channel	-47dB	-45dB	-46dB
12.5kHz channel	-41dB	-40dB	-39dB

<b>Audio Distortion @ Rated Audio</b>	<3%
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<b>Audio Response</b>	+1/-3dB
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Specifications are subject to change without notice and shall not form part of any contract. They are issued for guidance purposes only. Please note that not all frequency bands and power outputs are available in all markets. For further information please check with your nearest Tait office or authorized dealer.

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Authorized Dealer

