

# Instant, reliable communications is just the beginning.

First responders around the world trust Tait for multi-agency coordination in the most challenging environments.

Built Tait Tough, the flexible TP9400 portables offer both analog and digital modes including P25 Phase 2, and strong encryption management capability.

Improve first responder effectiveness and safety with smart features such as Location Services\*, Tait GeoFencing, and Man Down alerts.



TP9455



TP9455



TP9460



TP9460



TP9460

\*Not all features are supported in all models or modes of operation. Contact Tait or an authorized channel partner for more details.



## FEATURES AND BENEFITS

### Flexible and Easy to Use

- Clear communication with P25 AMBE+2 enhanced digital vocoder and digital noise suppression software
- Bluetooth® connectivity for wireless voice accessories
- Four programmable function keys and three-way selector
- Tailor your experience with wide range of accessory options

### P25 choice and interoperability

Benefit from the spectral efficiency, multi-agency response, multi-vendor interoperability, security, migration and data capability demanded by the P25 standards

- TIA-102 P25 CAP tested and certified, providing multi-vendor interoperability
- 12.5kHz P25 Phase 1 FDMA and 6.25kHz equivalent P25 Phase 2 TDMA capable
- FCC and IC compliances include P25 Phase 2 emission designator (8K10F1W)

### Tait Tough – Designed for demanding environments

- Water-shedding grill maintains transmitted voice clarity and high audio volume in wet environments
- IP65 & IP68 dust and water proof
- Display screen protected by recess
- Drop test exceeds MIL-STD-810G
- Shock absorbing corner protection

## Extensive Network Capabilities

- Future proof multi-mode flexibility offering analog, P25 Phase 1 conventional/trunked and P25 Phase 2 trunked
- Automatic dual mode between analog and P25 Phase 1 conventional
- Support for a variety of analog and digital simulcast modes including LSM and C4FM
- Voting ensures priority selection of the channel with optimum receive quality
- Dynamic regrouping and supergroup operation for mission critical workforce management
- Increased channel capacity with up to 2,000 channels
- Scanning modes include: priority, dual priority, editable, zone, and background scan
- Range of analog signaling functionality, i.e. MDC1200 encode and decode, Two Tone decode, PL (CTCSS), DPL (DCS), 5-Tone Selcall
- Trunked failsoft reverts to conventional operation during trunked network failure
- Pre-set status messages
- Conventional and trunked IP data

## Personalization options

- Custom label printing tools
- Black, red, yellow, orange, and hi-visibility green color options for easy identification in the field

## Improve workforce safety

- Programmable emergency key is easily accessible and highly visible
- Man Down and Lone Worker
- Integrated GPS option for Location Services
- Tait GeoFencing option for automated location based behavior
- Intrinsically Safe options available (refer to TP94-61 specifications)

## Tait EnableFleet industry leading configuration management system

- Total visibility of your fleet from a secure, central point of control
- Wired connection or Over-the-air-programming (OTAP) to update configuration and software files
- OTAP via P25 trunked networks

## Secure communications

- Radio inhibit and uninhibit to allow management of misplaced or stolen radios
- Supports end-to-end encryption, including AES encryption
- Tait EnableProtectKeyFill Device, Key Management Facility, and Over the Air Rekeying
- Tait EnableProtect Advanced System Key ensures only authorized personnel can access radio software and configuration

### GENERAL

Frequency stability	±0.5ppm (-22°F to +140°F/-30°C to +60°C)
Channels/zones	1,000 channels/50 zones (2,000 channels/100 zones optional enhancement with software license)
Talk groups	1000 talk groups, up to 1,000 members total (2,000 members optional enhancement with software license)
Scan groups	300 with up to 50 members each, maximum of 2,000 members total
Dimensions (DxWxH)	
With Li-Ion standard battery	1.61 x 2.56 x 5.35in (41 x 65 x 136mm) - excluding knobs
With Li-Ion standard battery	1.77 x 2.56 x 5.35in (45 x 65 x 136mm) - excluding knobs
Weight	
With Li-Ion standard battery	11.46oz (325g) - no antenna
With Li-Ion standard battery	13.12oz (372g) - no antenna
Channel Spacing	12.5/15/20/25/30kHz
Frequency increment	2.5/5/6.25
Operating temperature	-22°F to +140°F (-30°C to +60°C)
Water and dust protection	IP68 & IP65
Rated audio	0.5W
Speaker rating	2W
Signaling options (analog)	MDC1200 encode and decode, Two Tone decode, PL (CTCSS), DPL (DCS), 5-Tone Selcall

### TRANSMITTER

	VHF	UHF	700/800MHZ
Frequency range	136-174MHz	378-470MHz 450-520MHz	757-870MHz
Output power	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	±5kHz	±5kHz	±5kHz
FM hum and noise			
12.5kHz channel	-45dB	-45dB	-40dB
25kHz channel	-48dB	-50dB	-45dB
Radiated and conducted emissions	-75dBc	-72dBc	-75dBc
Audio response (analog)	+1/-3dB	+1/-3dB	+1/-3dB
Audio distortion (analog)	1.5% @ 1kHz, 60% deviation	1.5%	1.5%

### RECEIVER

	VHF	UHF	700/800MHZ
Frequency range	136-174MHz	378-470MHz 450-520MHz	757-776MHz, 851-870MHz
Sensitivity (analog)			
12dB SINAD	0.22uV (-120dBm)	0.22uV (-120dBm)	0.22uV (-121dBm)
Sensitivity (P25)			
5% BER	0.22uV (-120dBm)	0.22uV (-120dBm)	0.22uV (-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)	73dB	70dB	70dB
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	-48dB	-45dB	-45dB

### MILITARY STANDARDS 810C, D, E, F AND G

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

	136-174MHz	378-470MHz	450-520MHz	700/800MHz
P25 Phase 2 / TDMA Mode Shift Life (5/5/90)				
Li-Ion Premium	19 hours	19 hours	18 hours	18 hours
Li-Ion Standard	15 hours	15 hours	14 hours	14 hours
Analog and P25 Phase 1 / FDMA Mode Shift Life (5/5/90)**				
Li-Ion Premium	15 hours	15 hours	14 hours	14 hours
Li-Ion Standard	12 hours	12 hours	11 hours	11 hours

\*\*Operational shift life is dependent on model, frequency and use.

### CHARGER

Charger options (Li-Ion) Fast desktop single charger, 6-way multi charger#, vehicle charger#

#These chargers are not available for sale in Brazil

REGULATORY DATA <sup>2</sup>	USA	CANADA	EUROPE	AUSTRALIA/NEW ZEALAND
VHF (136-174MHz)	CFR 47	RSS-119	2014/53/EU	AS/NZS4295
UHF (378-470MHz)	CFR 47	RSS-119	2014/53/EU	AS/NZS4295
				AS/NZS4365 <sup>2</sup>
UHF (450-520MHz)	CFR 47	RSS-119	2014/53/EU	AS/NZS4295
				AS/NZS4365 <sup>2</sup>
700/800MHz	CFR 47	RSS-119	NA	NA
Emission Designators*	1K0F3E, 16K0F3E <sup>1</sup> , 6K60F2D, 7K80F2D, 9K60F2D <sup>1</sup> , 10K8F2D <sup>1</sup> , 7K60FXW, 8K10F1E, 8K10F1D, 8K10F1W			

<sup>1</sup> Wideband operation is not available in the USA in some bands

<sup>2</sup> 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.

### TAIT P25 PHASE 2 SOLUTION

Backed up by our proven radio network expertise, the TP9400 portable is part of our larger P25 Phase 2 offering. This solution consists of terminals, infrastructure, applications, services and integration with third party interfaces to ensure that your organization can reap all the benefits of the spectrally-efficient P25 standard.

Tait has taken every care in compiling this specification sheet, but we're always innovating and therefore changes to our models, designs, technical specification, visuals and other information included in this specification sheet could occur. For the most up-to-date information and for a copy of our terms and conditions please visit our website [www.taitradio.com](http://www.taitradio.com).

For further information please check with your nearest Tait office or authorized dealer.

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Tait International Limited facilities are certified for ISO 9001:2015 (Quality Management System), ISO 14001:2015 (Environmental Management System) and BS OHSAS 18001:2007 (Occupational Health and Safety Management System) for aspects associated with the design, manufacture and distribution of radio communications and control equipment, systems and services. In addition, all our Regional Head Offices are certified to ISO 9001.

### Authorized Partners

