

# Tough, reliable and interoperable.

TP9135/TP9140 portable radios provide affordable and reliable digital communications for Public Safety users who need exceptional audio clarity without provision for all possible features or configurations.



## KEY FEATURES

- ▶ Radios can be used on analog, P25 conventional, trunked and simulcast networks
- ▶ Ease of operation: all user controls and menu functions are identical across all the Tait
- ▶ Tested beyond MIL-STD-810 C, D, E and F – Tait performs tougher drop tests, then performs ingress and other tests on the same radio
- ▶ Supports individual, group, broadcast and emergency calls
- ▶ Programmable power settings and intelligent batteries
- ▶ Emergency features for staff safety include Man Down and Lone Worker
- ▶ Advanced voting optimizes channel reception
- ▶ Comprehensive scanning features including P25 talk group, priority, dual priority and editable scanning



## FEATURES AND BENEFITS

### Tait Tough Radio

Reliable and durable TP9135/TP9140 portable radios have been built to withstand the accidental knocks and the extremes of nature.

Dual shot molding provides built-in shock absorption, while a unique and patented battery clasp mechanism eliminates threat of the battery dislodging when the radio is dropped.

### Interoperability assured

Genuine open standards ensure choice, value and responsiveness during routine operations or crises.

### Digital audio clarity

Crystal clear digital audio allows precise communications even in noisy environments.

### Analog operation for phased transition to P25 digital

Protect your current analog investment and migrate to P25 at your own pace.

Analog mode allows communication between various partner agencies signaling options including MDC1200 encode/decode and Two Tone decode.\*

\*A separately enabled option.

### Tailored functionality

This radio will provide the essential network performance required by Public Safety users. For more advanced functionality users should consider investing in the TP9155/60 for long term flexibility.

### Comprehensive accessory suite

Complement your public safety radio with high performance accessories and charging options that will allow frontline staff to spend more time on patrol.



Above: A TP9140 with yellow front panel shown.

More front panel colored options are available. Please contact your local Tait representative for more information.

## GENERAL

Frequency ranges	<b>Frequency band</b>
VHF	136–174MHz
	380–420MHz
UHF	400–470MHz
	450–530MHz
700/800MHz	<b>Transmit</b> 762-776MHz 792-825MHz 851-870MHz
	<b>Receive</b> 762-776MHz 851-870MHz
Frequency stability	±1.5ppm (22°F to 140°F/-30°C to 60°C)
Channel/zones	1,000 channels/30 zones
Talk groups	26 talk group lists comprised of up to 50 members each
Scan groups	300 with up to 50 members each, maximum of 2,000 members total
Dimensions (DxWxH)	1.9 x 2.6 x 6.6in (47 x 67 x 167mm)
Weight	
(includes NiMH battery)	20.4oz (580g)
(includes Li-Ion battery)	16.4oz (480g)
Interfaces	Four-line full dot matrix LCD
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)
Sealing	IP54 dust and rain
Rated audio	>500mW
Analog signalling options	MDC1200 encode/decode, Two Tone decode, PL (CTCSS), DPL (DCS)

## TRANSMITTER

	VHF	UHF	700/800MHz
Output power	5W, 3W, 2W, 1W	4W, 2.5W, 2W, 1W	3W, 2.5W, 2W, 1W
Modulation limiting			
25/30kHz channel	±5kHz		
20kHz channel	±4kHz		
12.5kHz channel	±2.5kHz		
FM hum and noise (typical)			
25/30kHz channel	-48dB	-41dB	-40dB
12.5kHz channel	-42dB	-37dB	-34dB
Conducted emissions (typical)	-75dBc	-75dBc	-70dBc
Audio response (analog)			
12.5/15kHz	300–2550Hz +1/-3dB		
25/30kHz	300–3000Hz +1/-3dB		
Audio distortion (analog)	<5% @ 1kHz, 60% modulation		
Transmit attack time (TIA/EIA 102)	50mS		
Duty Cycle	1min Tx, 4min Rx for 8hrs @ 140°F (60°C)		

## RECEIVER (TYPICAL FIGURES SHOWN)

	VHF	UHF	700/800MHz
Analog sensitivity			
12dB SINAD	0.28uV (-118dBm)	0.28uV (-118dBm)	0.28uV (-118dBm)
Digital sensitivity (TIA/EIA- 102)			
5% BER	0.22uV (-120dBm)	0.22uV (-120dBm)	0.22uV (-120dBm)
Intermodulation rejection (TIA/EIA 102)	-78dB	-78dB	-78dB
Adjacent channel selectivity			
25/30kHz channel (TIA/EIA 603)	-73dB	-73dB	-70dB
12.5kHz channel (TIA/EIA 102)	-63dB	-63dB	-60dB
Spurious response rejection	-75dB	-75dB	-70dB
Residual audio noise ratio TIA/EIA 102)	45dB	45dB	45dB
Audio distortion @ rated audio	<3%	<3%	<3%

**MILITARY STANDARDS 810C, D, E, F and G**

Applicable MIL-STD	Method	Procedure
Low pressure	500.4	2
High temperature	501.4	1, 2
Low temperature	502.4	1, 2
Temperature shock	503.4	1
Solar radiation	505.4	1
Rain	506.4	1, 3
Humidity	507.4	1
Salt fog	509.4	1
Dust	510.4	1
Vibration	514.5	1
Shock	516.5	1, 4

**BATTERY**

Intelligent battery options	NiMH and Standard 2400mAh Li-Ion 2400mAh
Battery shift life (NiMH/Li-Ion)	>12 hours 5/5/90

**CHARGER**

Charger options (NiMH, Li-Ion)*	Fast desktop smart charger 6-way multi charger Vehicle charger
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\* Multi and vehicle charger not available in Brazil.

**Please note that this product does not offer encryption capability and there is no upgrade path for this. If encryption may be required Tait recommends the TP9155/TP9160 portable radios.**

Specifications are subject to change without notice and shall not form part of any contract. They are issued for guidance purposes only. All specifications shown are typical.

\*Contact your local Tait representative for more information.

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

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Tait Limited facilities are certified for ISO9001:2008 (Quality Management System), ISO14001:2004 (Environmental Management System) and ISO18001:2007 (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 ISO9001:2008.

