TAIT *radio*
communications

Models shown TP9135 and TP9140

P25 TRUNKED AND CONVENTIONAL PORTABLE RADIOS FOR NON-FRONTLINE USERS

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

Tough, reliable and interoperable

- Radios can be used on analog, P25 conventional, trunked and simulcast networks
- Out of the box and onto the shift - the TP9135/TP9140 is a radio designed for fast integration onto a digital network (the P25 CAI is included as standard)
- Ease of operation: all user controls and menu functions are identical across all the Tait P25 portables, mobiles and hand-held control heads
- Tested beyond MIL-STD-810C, 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
- Angled, textured, shaped and colored controls for intuitive usability
- 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
- The TP9135/TP9140 front panels are available in colored options in addition to the standard black*

*Please contact your local Tait representative for more information on color options

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 communication even in noisy situations.

Analog operation for phased transition
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.*

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

*separately enabled option

Left: A TP9140 with yellow front panel shown. More front panel colored options are available*.
*Please contact your local Tait representative for more information on color options.

Regulatory Data

USA	**VHF**	CFR 47 Parts 22, 90.210, 74, 90
	UHF	CFR 47 Parts 22, 90.210,74, 95A, 90
	800MHz	CFR 47 Parts 22, 90
Canada		RSS-119
Europe		EN300 086, EN300 113
		EN301 489
		EN60950-01
Australia/New Zealand		A3/NZS4295

Type Approval	**FCC**	**Industrie Canada**	**NTIA**
VHF	CASTPAB1A	737A-TPAB1A	136-174MHz*
UHF			380-420MHz*
	CASTPAH5A	737A-TPAH5A	400-470MHz*
	CASTPAH6A	737A-TPAH6A	
800MHz	CASTPAK5A	737A-TPAK5A	

Emission Designators	10K0F1D, 10K0F1E, 10K0F7D, 10K0F7E, 11K0F3E, 12K7F1D, 16K0F3E, 6K60FZD, 7K70F1D, 8K10F1D, 8K10F1E, 8K10F7D, 8K10F7E, 9K60F2D
ESD Standard	IEC 61000-4-2

ISO 9001
ISO 14001

AUTHORIZED DEALER

TP9135/40 Specifications

General

Frequency Ranges	**Frequency Band+**
VHF	136–174MHz*
UHF	380–420MHz*
	400–470MHz*
	450–530MHz

700/800MHz	**Transmit**	**Receive**
	762–776MHz	762–776MHz
	792–825MHz	
	851–870MHz	851–870MHz

Frequency Stability	±1.5ppm (22ºF to 140ºF/-30ºC to 60ºC)
Channels/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
Operational Temperature	-22ºF to 140ºF (-30ºC to 60ºC)
Sealing	IP54 dust and rain
Rated Audio	>500mW
Analog Signaling Options	MDC1200 encode/decode, Two Tone decode, PL (CTCSS), DPL (DCS)

Military Standards 810C, D, E and F

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

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 & Noise (typical)			
25/30kHz channel	-48dB	-41dB	-40dB
12.5/15kHz 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 @ 140ºF (60ºC)		

Receiver (typical figures shown)

	VHF/UHF	**700/800MHz**
Analog Sensitivity		
12dB SINAD	0.28µV (-118dBm)	0.28µV (-118dBm)
Digital Sensitivity (TIA/EIA-102)		
5%BER	0.22µV (-120dBm)	0.22µV (-120dBm)
Intermodulation Rejection (TIA/EIA 102)	-78dB	-78dB
Adjacent Channel Selectivity		
25/30kHz channel (TIA/EIA 603)	-73dB	-70dB
12.5kHz channel (TIA/EIA 102)	-63dB	-60dB
Spurious Response Rejection	-75dB	-70dB
Residual Audio Noise Ratio (TIA/EIA 102)	45dB	45dB
Audio Distortion @ Rated Audio	<3%	<3%

Battery

Intelligent Battery Options	NiMH 2400mAh
	Li-Ion 2500mAh
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