TP9100

TAiT radio communications

Models shown IS TP9155 and IS TP9160

P25 TRUNKED AND CONVENTIONAL PORTABLE RADIOS

With industry-leading digital audio clarity, superb build quality and DES/AES encryption, the TP9100 is a tough, dependable and sophisticated piece of radio engineering. Fully interoperable, the TP9100 gives you the flexibility of working in digital, analog and auto-sensing dual mode.

Tough, reliable and interoperable

- Superb build quality and user-friendly design
- 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
- Rubber armour knobs and base, recessed lens, strong metal-hinged belt clip and a unique dislodgeable battery catch mechanism
- Angled, textured, shaped and colored controls for intuitive useability
- Unique quick reference card creation for each configured radio makes it easy for users to learn
- Programmable power settings, economy mode and intelligent batteries
- Configurable emergency options - man down and lone worker as standard
- Program 1,000 channels, 300 scan groups and 30 tactical zones
- Application Programming Interface places the power to customize a Tait P25 system into the hands of those with ideas, expertise and applications in mind

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.
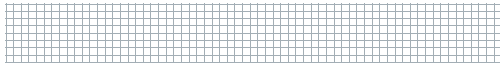
Configure to suit with SFEs
Software feature enablers (SFEs) allow a solution that is readily extended as needs change, removing the risk of hardware upgrades and factory returns. Trunking, CAI, encryption, APIs and conventional OTAR are just some of the SFEs available.
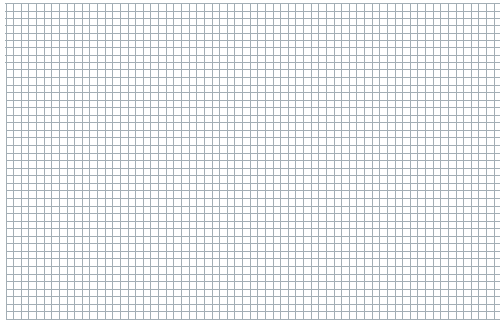
Comprehensive accessory suite
Complement your radio with high performance accessories:

- IP54 speaker microphone
- IP54 RF speaker microphone
- IP68 speaker microphone
- 2-wire and 3-wire lapel microphone
- Lightweight headsets
- Heavy duty headsets
- Single-way smart charger
- Multi-way smart charger
- Vehicle smart charger

TAIT: THE RIGHT FIT

Tait radio communications

Being a manufacturer of digital and analog terminals, base stations and network equipment means Tait has the solution focus to serve you better. P25 portables, mobiles and the hand-held control head all share the same intuitive interface.

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
	VHF	CASTPAB1A	737A-TPAB1A
	UHF	CASTPAH5A	737A-TPAH5A
		CASTPAH6A	737A-TPAH6A
	800MHz	CASTPAK5A	737A-TPAK5A
Emission Designators		10K0F1D, 10K0F1E, 10K0F7D,	
		10K0F7E, 11K0F3E, 12K7F1D,	
		16K0F3E, 6K60FZD, 7K70F1D,	
		8K10F1D, 8K10F1E, 8K10F7D,	
		8K10F7E, 9K60F2D	

TELARC ISO 9001 REGISTERED

TELARC CERTIFIED ENVIRONMENTAL MANAGEMENT SYSTEM

FM APPROVED

AUTHORIZED DEALER

SP9155 -12110790

TP9100 Specifications

General

Frequency Ranges	Band	Operational Frequency	
VHF	B1	136–174MHz	
UHF	H5	400–470MHz	
	H6	450–530MHz	
700/800MHz	K5	**Transmit**	**Receive**
		762–776MHz	762–776MHz
		792–825MHz	
		851–870MHz	851–870MHz
Frequency Stability		±1.5ppm (22ºF to 140ºF/-30ºC to 60ºC)	
Channels/Talkgroups		1,000 channels/30 zones	
Dimensions (DxWxH)		1.9 x 2.6 x 6.6in (47 x 67 x 167mm)	
Weight (includes NiMH battery)		19.7oz (559g)	
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	

Military Standards 810 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

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

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			
25/30kHz channel	-48dB	-41dB	-40dB
12.5/15kHz channel	-42dB	-37dB	-34dB
Conducted Emissions	57dBc	57dBc	48dBc
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 @ 60ºC		

Receiver

	VHF/UHF	700/800MHz
Analog Sensitivity		
12dB SINAD	0.28µV (-118dBm)	0.28µV (-118dBm)
Digital Sensitivity (TIA/EIA-102)		
5%BER	0.20µV (-121dBm)	0.20µV (-121dBm)
Intermodulation Rejection (TIA/EIA 102)	-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%	

Battery

Intelligent Battery Options	NiMH, Standard and Intrinsically Safe
Battery Shift Life with NiMH Pack	>12 hours 5/5/90

Charger

Charger Options	Fast desktop smart charger
	6-way multi charger