TP9155/60

SPECIFICATIONS

Models shown IS TP9155 and IS TP9160

P25 TRUNKED AND CONVENTIONAL PORTABLE RADIOS

With FIPS validated encryption, certified interoperability, digital audio clarity and superb build quality the TP9155/TP9160 are tough, dependable and sophisticated portable radios. The TP9155/TP9160 gives you the flexibility of working in digital, analog or auto-sensing dual mode.

Secure, dependable and flexible

- Commercially upgradeable to P25 Phase 2
- Tested in Department of Homeland Security-recognized P25 Compliance Assessment Program (P25 CAP) lab for interoperability and performance
- Radios can be used on analog, P25 conventional, trunked and simulcast networks
- Intrinsically safe option is available
- FIPS 140-2 certified encryption
- Tait Advanced System Key prevents 'unauthorized' radios from being added to the network without prior consent*
- Tested beyond MIL-STD-810C, D, E and F – Tait performs tougher drop tests, then performs ingress and other tests on the same radio
- Configurable emergency features - Man Down and Lone Worker as standard
- A range of analog signaling features - MDC1200 encode/decode** and Two Tone decode with the purchase of software licenses***
- Comprehensive scanning features including P25 talk-group
- User interface is common with the Tait P25 mobiles for ease of use

*Please contact your local Tait representative for more information
**MDC1200 decode includes calling identity display and inhibit/uninhibit functionality
***Software license option(s) available separately

Encryption for secure communications
AES encryption certified by the US National Institute of Technology and Standards (NIST) or proven DES encryption can be incorporated into the TP9155/TP9160 for highly secure communications. These radios can be encrypted fast in-field with the Tait Key Fill Device (KFD) or via Over-The-Air Rekeying (OTAR) with a Key Management Facility (KMF).

Interoperability assured
The TP9155/TP9160 portable radios are tested on other vendors' networks as part of the P25 Compliance Assessment Program (P25 CAP). This offers public safety and government agencies a multi-vendor environment.

Analog operation for phased transition
Protect your current analog investment and migrate to P25 digital at your own pace. Analog mode allows communication between various partner agencies.

Configure to suit with software licenses
Software licenses allow a solution that is readily extended as needs change, removing the risk of hardware upgrades and factory returns. Trunking, P25 CAI, encryption, location transmission/display*, Application Programming Interfaces (APIs) and OTAR are just some of the software license options available.

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.

*Please contact your local Tait representative for more information

TP9155/60 Specifications

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

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, Standard and Intrinsically Safe (IS) 2400mAh
	Li-Ion, Standard and Intrinsically Safe (IS)** 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

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

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AUTHORIZED DEALER

www.taitradio.com

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 are available in all markets. For further information please check with your nearest Tait office or authorized dealer.

Tait is an ISO 9001: 2008 and ISO 14001: 2004 certified supplier.

*Tait confirms that this product model conforms with NTIA requirements.
**For Li-Ion IS battery availability, please contact your local Tait representative for more information.

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