



# TM9155

SPECIFICATIONS



TM9155 P25 mobile radio shown with optional keypad microphone.

## P25 TRUNKED AND CONVENTIONAL MOBILE RADIOS

With industry-leading digital audio clarity, superb build quality and DES/AES encryption, the TM9155 is a tough, dependable and sophisticated piece of radio engineering. Fully interoperable, the TM9155 gives the flexibility of working in digital, analog and auto-sensing dual mode.

### Interoperable, flexible, configurable

- Superb build quality and user friendly centered design
- Tested beyond MIL-STD 810 C, D, E and F
- Secondary concealed microphone in control head
- Four-line graphic backlit display for intuitive useability
- Context-sensitive and programmable menu/function keys
- Complete range of P25 subscriber features: from messaging to call alerts, and from individual/group calls to status updates
- Unique quick reference card creation for each configured radio makes it easy for users to learn
- Remote or local installation and hand-held control head option
- Advanced voting secures the best channel efficiently
- Scanning/Priority scan/Dual priority scan
- User programmable scan
- 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 P25 standards ensure choice, value and responsiveness during routine operations or crises.

### Digital audio clarity

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

### Analog operation for phased transition and improved interoperability

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, P25 CAI, encryption, APIs and conventional OTAR are just some of the SFEs available.

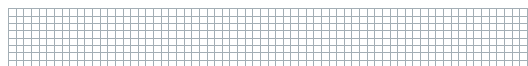
### Comprehensive accessory suite

Complement your radio with high performance accessories:

- Remote trunk mount or dash mount
- U-bracket or security cradle mount
- Alphanumeric keypad microphone
- Hand-held control head
- External speaker
- Desktop power supply
- Desktop microphone
- IP54 rated keypad microphone
- Handsfree kit



# TM9155 Specifications



Remote mounted standard control head



Local standard control head



Local hand-held control head



110W mobile



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.

## General

Frequency Ranges	Band	Operational Frequency <sup>+</sup>	Transmit Power
VHF	B1	136-174MHz	25W
	B1	136-174MHz	50W
	B1	136-174MHz	110W
UHF	G2*	360-400MHz	40W
	H5	400-470MHz	25W
	H5	400-470MHz	40W
	H6	450-530MHz	25W
	H7	450-520MHz	40W
700/800MHz	K5	<b>Transmit</b> 762-776MHz 792-825MHz 850-870MHz	<b>Receive</b> 762-776MHz 850-870MHz
			30W (<806MHz) 35W (>806MHz)
Frequency Stability	±1.5ppm (-22°F to 140°F / -30°C to 60°C)		
Channel /Talkgroups	1000 channels/30 zones		
Power Supply	10.8-16VDC		
Channel Spacing	12.5/15/20/25/30kHz		
Frequency Increment/Channel Steps	2.5/5/6.25		
Dimensions (DxWxH) Control Head	1.38 x 7.24 x 2.8in (35 x 184 x 71mm)		
Dimensions (DxWxH) Radio Body	6.9 x 6.3 x 2.1in (175 x 160 x 52mm) 7.7 x 6.3 x 2.1in (195 x 160 x 52mm) 14.6 x 9.8 x 5in (370 x 250 x 121mm)		
Weight Control Head	11.6oz (330g)		
Weight Radio Body	25W 30/35/40/50W 110W 42.3oz (1200g) 49.4oz (1400g) 296oz (8400g)		
Operational Temperature	-22°F to 140°F (-30°C to 60°C)		
Sealing	IP54 dust and rain		
RF Connector	50 ohm BNC or Mini UHF		
Interface Connectors	3 Interface Connectors with Serial Ports		

## Military Standards 810 F\*

Applicable MIL-STD	Method 25/30/35/50/110W	Procedure 25/30/35/50W	Procedure 110W
Low Pressure	500.4	2	2
High Temperature	501.4	1, 2	2
Low Temperature	502.4	1, 2	2
Temperature Shock	503.7	1	1
Solar Radiation	505.4	1	—
Rain	506.4	1, 3	3
Humidity	507.4	1	—
Salt Fog	509.4	1	1
Dust	510.4	1	1
Vibration	514.5	1	1
Shock	516.5	1, 6	6

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

## Transmitter

	VHF/UHF (TIA/EIA 102 and 603a)	700/800MHz (TIA/EIA 102 and 603a)
Output Power	25W, 12W, 5W, 1W	30W, 15W, 5W, 2W 35W, 15W, 5W, 2W
Modulation Limiting	±5kHz ±2.5kHz	±5kHz ±2.5kHz
FM Hum & Noise	25/30kHz channel 12.5kHz channel	-43dB -38dB
Audio Response (Analog)	300-3000Hz +1/-3dB	
Audio Distortion	< 3% at 1kHz 60% deviation	
Transmit Attack Time (TIA/EIA 102)	50ms	

## Receiver

	VHF/UHF	VHF 50W	VHF 110W	700/800MHz
Analog Sensitivity	0.28µV (-118dBm)	0.315µV (-117dBm)	0.25µV (-119dBm)	0.28µV (-118dBm)
Digital Sensitivity (TIA/EIA-102)	0.20µV (-121dBm)	0.233µV (-120dBm)	0.18µV (-122dBm)	0.18µV (-122dBm)
Intermodulation Rejection (TIA/EIA 102)	-75dB	-75dB	-70dB	-75dB
Adjacent Channel Selectivity	25/30kHz channel (TIA/EIA 603a) 12.5kHz channel (TIA/EIA 102)	-75dB -65dB	-80dB -70dB	-75dB -65dB
Spurious Response Rejection	-75dB	-90dB	-70dB	-75dB
FM Hum & Noise	25/30kHz channel 12.5kHz channel	-43dB -40dB	-43dB -40dB	-43dB -40dB
Residual Audio Noise Ratio	45dB	45dB	45dB	45dB
Audio Distortion @ Rated Audio	3% @ 1kHz 60% modulation (typical)			

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.

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\*Not type accepted, Federal sales only.

## Regulatory Data

USA	VHF UHF 800MHz	CFR 47 Parts 22, 90.210, 74, 90, 95 CFR 47 Parts 22, 90.210, 74, 95A, 90 CFR47 Parts 22, 90
Canada		RSS-119
Europe		EN300 086, EN300 113 EN301 489 EN60950
Australia/New Zealand		AS/NZ54295
Type Approval	FCC	Industrie Canada
25W	VHF UHF	CASTMAB1E 737A-TMAB1E CASTMAH5E 737A-TMAH5E CASTMAH6E 737A-TMAH6E CASTMAK5F 737A-TMAK5F
30/35W	UHF	
50W	VHF	CASTMAB1F n/a
40W	UHF	CASTMAH5F n/a CASTMAH7F n/a
110W (ERFPA)	VHF	CASTMAB1Z n/a
Emission Designators		10K0F1D, 10K0F1E, 10K0F7D, 10K0F7E, 11K0F3E, 12K7F1D 16K0F3E, 6K60F2D, 7K70F1D 8K10F1D, 8K10F1E, 8K10F7D 8K10F7E, 9K60F2D



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