



TM9700 MULTIBAND MOBILES

FLEXIBLE, RUGGED AND RELIABLE COMMUNICATIONS

Increase worker safety and productivity across multiple radio networks and frequency bands with the TM9700 Multiband Mobile, a highly reliable and versatile radio designed to adapt to a wide variety of operations.

tait
communications



Tait TM9000 mobile radios have a wide range of control heads, microphones, speakers and installation kits to suit a variety of different vehicles and types of operation. Refer to the TM9000 Control Heads Datasheet for all options.



The Hand Held Control Head (HHCH) option puts all functions in the palm of your hand with easy, flexible installation and is available in a range of colors..

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FLEXIBLE, RUGGED, RELIABLE COMMUNICATIONS

SEAMLESS MULTIBAND PERFORMANCE

The TM9700 Multiband Mobile is configurable to operate on any combination of 136-174MHz or 378-520MHz. Flexible and simple ordering and deployment of single band or multiband operation at time of purchase, or subsequently over the air. Bands are not locked and can be reconfigured.

MAXIMUM CONNECTIVITY

Connect to the range of networks you may encounter in current operations or future technology migrations: Conventional Analog, MPT1327, DMR Tier 2 Conventional and DMR Tier 3 Trunking.

COMMUNICATE WITH MULTIPLE ORGANIZATIONS

Easily communicate with other organizations without the need for several bulky devices. Roam between networks or switch frequency bands in direct mode.

ENHANCED WORKER SAFETY

Lone Worker feature included as standard to send automated safety alerts and can combine with location data and Tait GeoFencing software options to guide an effective response. The programmable Emergency key can also send these safety alerts manually.

The LCH, TCH4 and TCH6 Control Heads support covert microphone operation.

Blast Alarms and Audible Alerts supported on digital and analog Selcall channels.

EFFECTIVE OPERATIONS WITH VOICE AND DATA

Use pre-set status messages or short data messages for location, status and text.

Location services over conventional and trunked networks. Internal and external GNSS options available (refer to product catalog). USB D Fast Polling on compatible DMR Tier 3 systems capable of 2000 polls per minute.

Packet data is available over traffic channels. CCDI connectivity for messages in conventional mode. IP data and RAP connectivity for messages in digital trunked mode.

YOUR FREEDOM OF CHOICE

Tait proudly supports and contributes to the DMR open standard ecosystem. Open standards enable multivendor compatibility to give you more freedom of choice and value for money throughout the life of your investment.

SECURE COMMUNICATION

Secure your fleet with encryption options, tools to manage lost or stolen radios, DMR authentication to prevent unauthorized network access, and the Tait EnableProtect Advanced System Key to allow only authorized personnel access radio software and configuration.

Over-the-air-programming (OTAP) with Tait EnableFleet delivers software and firmware changes over the Tait DMR Trunked network, making it faster, easier and more affordable to optimize the performance of your fleet.

OPTIONS AND ACCESSORIES

The TM9000 mobiles share a range of versatile user interface and installation options. Refer to the product catalog for the range of microphones, 10W or 15W external speakers for loud, clear audio, and a variety of installation kits. Digital and analog interfaces allow a range of optional connections.

TM9700 MULTIBAND MOBILES

TECHNICAL SPECIFICATIONS

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GENERAL	
Frequency stability	±0.5ppm (-22°F to +140°F/-30°C to +60°C)
Channels/zones	1,000 channels/50 zones (2,000 channels/100 zones optional enhancement with software license)
Talk groups	1000 talk groups, up to 1,000 members total (2,000 members optional enhancement with software license)
Scan groups	300 with up to 50 members each, maximum of 2,000 members total
Power supply	10.8-16VDC
Active standby current	0.15A
Channel spacing	12.5/15/20/25/30kHz
Frequency increment	2.5/3.125/5/6.25
Radio Body Size - Dimensions (DxWxH)	6.9 x 6.3x 2.1in (175x 160 x 52mm)
- Weight	2.6lb (1.2kg)
Supported Control Heads	TCH3, TCH4, TCH6, LCH and HHCH (refer to TM9000 Control Heads Brochure)
Supported Languages	English, German, French, Spanish, Portuguese, Czech, Polish, Bulgarian
Operating temperature	-22°F to +140°F (-30°C to +60°C)
Water and dust protection	IP54
RF connector	50 ohm BNC
Interface connectors	3 programmable interface connectors providing serial ports and GPIO lines for radio and accessory control, and audio connectivity
Signaling options (analog)	MDC1200 encode and decode, Two Tone decode, PL (CTCSS), DPL (DCS), Selcall

TRANSMITTER	VHF	UHF
<i>(Note – Radio can be configured to operate on any combination of the supported bands)</i>		
Frequency range	136-174MHz	378-520MHz
Transmit power	25W, 10W, 5W, 1W	25W, 10W, 5W, 1W
Transmit current	4.5A max	4.5A max
Modulation limiting		
12.5/15kHz channel	±2.5kHz	2.5kHz
25/30kHz channel	±5kHz	±5kHz
FM hum and noise (Analog)		
12.5kHz channel	-40dB	-40dB
25kHz channel	-45dB	-45dB
Radiated and conducted emissions	-80dBc	-80dBc
Audio response (Analog)	+1/-3dB	+1/-3dB
Audio distortion (Analog)	1.5% @ 1kHz, 60% deviation	
Duty cycle	25W: 2min Tx, 4min Rx for 8 hrs @ +140°F (+60°C) 5W: continuous @ +104°F (+40°C)	

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TECHNICAL SPECIFICATIONS continued

RECEIVER	VHF	UHF
<i>(Note – Radio can be configured to operate on any combination of the supported bands)</i>		
Frequency range	136-174MHz	378-520MHz
Sensitivity (typical)		
Analog (12dB SINAD)	0.22µV (-120dBm)	0.22µV (-120dBm)
DMR (1% BER (ETS300-113))	0.25µV (-119dBm)	0.25µV (-119dBm)
DMR (5% BER)	0.16µV (-123dBm)	0.16µV (-123dBm)
Intermodulation rejection		
EIA603E	76dB	75dB
ETS 300-113	70dB	70dB
Spurious response rejection		
EIA603E	80dB	75dB
ETS 300-113	70dB	70dB
FM hum and noise (Analog)		
12.5kHz channel	-40dB	-40dB
25kHz channel	-45dB	-45dB
Conducted spurious emissions	-57dBm	-57dBm
Selectivity (Analog)		
EIA603E (2 Tone)	12.5kHz: 52dB, 25kHz: 73dB	12.5kHz: 50dB, 25kHz: 70dB
ETS 300-086	12.5kHz: 62dB, 25kHz: 73dB	12.5kHz: 60dB, 25kHz: 70dB
Optional external speaker output	10W (into 4 ohm)	
Audio distortion (rated audio)	2%	

MILITARY STANDARDS 810C, D, E, F, and G [#]					
Applicable MIL-STD	Method	Procedure	Applicable MIL-STD	Method	Procedure
Low pressure	500.5	2	Humidity	507.5	2
High temperature	501.5	1, 2	Salt fog	509.5	1
Low temperature	502.5	1, 2	Sand & Dust	510.5	1, 2
Temperature shock	503.5	1	Vibration	514.6	1
Solar radiation	505.5	1	Shock	516.6	1, 4, 5, 6
Rain	506.5	1, 3			

REGULATORY DATA	AUSTRALIA/NEW ZEALAND (AS/NZ)
VHF (136-174MHz)	Pending
UHF (378-520MHz)	Pending

[#] Designed to meet MIL Standards. Compliance pending.

Tait has taken every care in compiling this brochure, but we're always innovating and therefore changes to our models, designs, technical specifications, visuals and other information included in this brochure could occur. For the most up-to-date information and for a copy of our terms and conditions please visit our website www.taitcommunications.com

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QUALIFICATIONS

