TM9356 DUAL BAND MOBILE

SPECIFICATIONS



Tait DMR, a smart investment, made to evolve.

The TM9356 mobile provides dual frequency band capability for DMR Tier 2 and conventional analog solutions. The TM9356 enables you to make and receive calls on either VHF or UHF radios from a single control head.

For analog operation, the TM9356 can also be configured as a crossband repeater.

Choose either the large control head with built-in 3W speaker, or the handheld control head option. 10W or 15W loudspeakers are available for either option.

Improve workforce safety with smart features such as Location Services, Tait GeoFencing, and Lone Worker functionality.

















FEATURES AND BENEFITS*

TM9356 features to improve workforce safety

- Lone Worker as standard
- Tait GeoFencing Automated Location Controlled Behavior
- Crystal-clear voice so the operator and user will understand the message
- Emergency calls can be integrated with a GPS location solution

Improve your organization's efficiency

- Text messaging for enhanced and unambiguous communications
- Pre-defined status messages for fast notification and response in common situations
- Optional GPS location services and Tait GeoFencing capability

Easy, flexible installation

- Install one control head to operate two radio bodies
- Remote kits allow the control head and radio bodies to be installed in separate locations (for example, install radio bodies under the seat, in a glove box, or in the trunk)
- Graphical Control head with External Speaker or built-in 3W speaker, or Hand Held Control Head with External Speaker

Designed to perform in demanding environments

- Engineered for use in demanding environments with tough die-cast metal chassis, MIL-STD 810G and IP54 rated casing, giving protection against dust, water, salt, humidity, vibration and shock
- Wide power control 1:25 ratio (25W)
- Duty 33% transmit 2 minute TX 4 minute RX (25W)

Voice communications delivering on operational needs

- VHF and UHF dual band capability
- Make and receive calls on either VHF or UHF radios from a single control head. Important calls won't be missed - with dual receive functionality, both radio bodies independently scan their channels at the same time - communications received by either radio body will be brought to the foreground
- Crossband repeater can be configured for analog operation communications received on one frequency band can be instantly transmitted on the other frequency band**
- Dual mode provides DMR Tier 2 conventional digital and conventional FM analog operation
- Roam between conventional FM analog and DMR Tier 2 digital networks
- Open DMR standard provides choice and interoperability
- Increased channel capacity with support of up to 1,500 channels
- Analog capability includes Priority and Dual Priority, Editable, Zone and Background Scan
- Individual calls provide privacy between individuals
- Optional DES or AES encryption for operation in digital mode.
- Shared menu structure between all 9300 devices

Easy fleet management

The industry-leading Tait
EnableFleet configuration
management system gives you
visibility and control of your fleet
from a single secure source, making
it faster, easier and more affordable
to update and optimize the
performance of your fleet

Data Services

- Embedded data for location
- Short data messages for location, status and text
- GPS capable to improve efficiency and safety
- CCDI connectivity to the mobile for short data and control messages in conventional mode
- Control of digital outputs by status messages

Color Options

- TM9356 mobile Hand Held Control heads are available in black, yellow, green and red
- These color options make it easier for workgroups to identify their equipment in the field

Complete package with options and accessories portfolio

- Audio accessories are available including microphones, speakers and a remote kit for hands-free operation in the car
- Variety of power supply units are available for your region and your specific application

^{*} Not all features are supported in all models or modes of operation. Contact Tait or an authorized channel partner for more details.

^{**}Some band combinations may not be supported for Crossband operation. Contact Tait or an authorized channel partner for more details

TM9356 SPECIFICATIONS



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Frequency stability ±0.5ppm (-22°F to 140°F/-30°C to 60°C)

Networks

Channels/zones 1,500 channels / 26 zones 300 with up to 50 members each Scan groups

Dimensions - inches (mm)

Each radio body Height 25W: 2.1 (52), 30W/35W/40W/50W: 2.1 (52) Width 25W: 6.3 (160), 30W/35W/40/50W: 6.3 (160) Depth 25W: 6.9 (175), 30W/35W/40/50W: 7.7 (195)

Graphical control head Height: 2.8 (71), Width: 7.24 (184), Depth: 1.38 (35)

Weight - Ib (kg)

Each radio body 25W: 2.6 (1.2), 30W/35W/40W/50W: 3.1 (1.4)

Graphical control head 0.73 (0.33)

6.25/12.5/15/20/25/30kHz Channel spacing 2.5/3.125/5/6.25kHz Frequency increment/channel step

Operating temperature -22°F to 140°F (-30°C to 60°C)

Water and dust protection IP54

ESD rating +/-4kV contact discharge and +/-8kV air discharge

Rated audio 3W internal speaker or external speaker

Power supply DC: 10.8-16VDC, AC: Desk top PSU - 100 to 130V or 200 to 250V

Digital Protocol DMR: ETSI TS 102 361

Signaling options (Analog) MDC1200, encode and decode, Two tone decode, PL (CTCSS), DPL, (DCS), Selcall

AMBE +2™ Vocoder type

TRANSMITTER**	VHF	UHF	700/800MHZ #	
Frequency range	136-174MHz 174-225MHz ¤	320-380MHz * 378-470MHz *	757-870MHz	
	77 1 225777 12	400-470MHz 450-520MHz		
Output power				
25W Radio bodies	25W, 10W, 5W, 1W	25W, 10W, 5W, 1W	NA	
High Power radio bodies	50W, 25W, 15W, 10W	40W, 20W, 15W, 10W	35/30W, 25W, 10W, 2W	
Input current				
Standby Current	0.1A	0.1A	0.1A	
25W Models	<5.5A	<6A	NA	
High Power models	<10.5A	<10.5A	<10.5A	
FM Hum and noise (Analog)				
12.5kHz	-40dB	-40dB	-40dB	
25kHz 1	-45dB	-45dB	-45dB	
Adjacent channel power - static (Analog)				
@ 12.5kHz offset	-60dB	-60dB	-60dB	
@ 25kHz offset 1	-70dB	-70dB	-70dB	
Adjacent channel power - static (DMR)				
ETS 300-113	12.5kHz: 60dB	12.5kHz: 60dB	12.5kHz: 60dB	
Conducted/radiated emissions	25W: -36dBm	25W: -36dBm		
	50W: -20dBm	40W: -20dBm	30/35W: -20dBm	
Audio response (Analog)	+1/-3dB	+1/-3dB	+1/-3dB	
Audio distortion (Analog)	2.5% @1kHz, 60%	2.5% @1kHz, 60%	2.5% @1kHz, 60%	
	deviation	deviation	deviation	
Duty cycle	25W: 2min Tx, 4min Rx for 8 hrs @ 140°F (+60°C), 5W: continuous @ 104°F (+40°C) 30/35/40/50W: 1min Tx, 4min Rx for 8 hrs @ 140°F (+60°C)			

www.taitradio.com

¹ Wideband operation is not available in the USA in some bands.
**Contact your local Tait representative for more information.
Supports 700 A-Block frequencies (757-758MHz Tx & Rx; 787-788MHz Tx)

2 25W model only.

²⁵W model only.

⁺ 40W model only.





RECEIVER**	VHF	UHF	700/800MHZ #	
requency range	136-174MHz	320-380MHz	757-776MHz	
	174-225MHz	378-470MHz	850-870MHz	
		400-470MHz		
		450-520MHz		
ensitivity (Analog) 12dB SINAD	-120dBm (0.22 µ V)	-120dBm (0.22 µ V)	-120dBm (0.22 µ V)	
ensitivity (DMR) 5% BER	-119dBm (0.25 µ V)	-119dBm (0.25 µ V)	-119dBm (0.25 µ V)	
ntermodulation rejection				
EIA603E	76dB	70dB	75dB	
ETS 300-113	70dB	70dB	70dB	
purious response rejection				
EIA603E	80dB	75dB	70dB	
ETS 300-113	70dB	70dB	70dB	
M hum and noise (Analog)	12.5kHz: -40dB	12.5kHz: -40dB	12.5kHz: -40dB	
	25kHz: -45dB	25kHz: -45dB	25kHz: -45dB	
conducted spurious emissions	-57dBm	-57dBm	-57dBm	
electivity (Analog)				
EIA603E (2 Tone)	12.5kHz: 52dB	12.5kHz: 50dB	12.5kHz: 50dB	
	25kHz: 73dB	25kHz: 70dB	25kHz: 70dB	
ETS 300-086	12.5kHz: 62dB	12.5kHz: 60dB	12.5kHz: 60dB	
	25kHz: 73dB	25kHz: 70dB	25kHz: 70dB	
ptional external speaker output	10W (into 4ohms)	10W (into 4ohms)	10W (into 4ohms)	
udio distortion (rated audio)	2%	2%	2%	

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Applicable MIL-STD Method	Method	Procedure	Applicable MIL-STD Method	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	514.5	1	
Solar radiation	505.5	1	Shock	516.5	1,5,6	
Rain	506.5	13				

REGULATORY DATA	USA	CANADA	EUROPE 3	AUSTRALIA/NEW ZEALAND 3	
VHF (136-174MHz)	FCC	RSS	CE	AS/NZS	
VHF (174-225MHz)	NA	NA	CE	NA	
UHF (320-380MHz)	NA	NA	EN300-086, EN300-113, EN300-219, EN301-489,	NA	
UHF (378-470MHz and 400-470MHz	FCC	RSS	CE	AS/NZS ²	
UHF (450-520MHz)	FCC	RSS	NA	AS/NZS ²	
700/800MHz	FCC	RSS	NA	NA	

¹Wideband operation is not available in the USA in some bands.

TAIT DMR SOLUTION

Backed by our proven radio network expertise, the TM9356 mobile is part of our larger DMR offering. The Tait DMR solution consists of terminals, infrastructure, applications, services and integration with third party interfaces to ensure that your organization can reap all the benefits of the spectrally-efficient DMR standard in a mission critical environment.

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

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Tait International Limited facilities are certified for ISO 9001:2015 (Quality Management System), ISO 14001:2015 (Environmental Management System) and ISO 45001:2018 (Occupational Health and Safety Management System) for aspects associated with the design, manufacture and distribution of radio communications and control equipment, systems and services. In addition, all our Regional Head Offices are certified to ISO 9001.











Environment Management

Health & Safety Management



² The UHF band radios are approved for use in Citizen Band in Australia and New Zealand when programmed to meet the requirements of AS/NZS4365. Tait cannot guarantee full performance to the published specifications when the 378-470MHz and 400-470MHz band radios are operating at the CB frequencies.

³ 25 Watt models only.

 $[\]ensuremath{^{**}}\xspace$ Contact your local Tait representative for more information.

[#] Supports 700 A-Block frequencies (757-758MHz Tx & Rx; 787-788MHz Tx)