# TM9355 SPECIFICATIONS



# Tait DMR, a smart investment, made to evolve.

Achieve more with your radio network. The most flexible devices and networks, with smart voice and data applications.

The flexible TM9355 mobiles offer conventional and trunked DMR operation as well as full MPT1327, and analog conventional FM in one device.



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

Supercharge the performance of your TM9355 with Tait Unified Vehicle options to provide edge computing and applications processing, WiFi vehicle area networks and LTE connectivity.\*









<sup>\*</sup> Please refer to Tait Unified Vehicle documentation, or contact Tait or an authorized channel partner for more details.







#### **FEATURES AND BENEFITS\***

## TM9355 features to improve workforce safety

- Lone Worker as standard
- Tait GeoFencing Automated Location Controlled Behaviour
- Crystal-clear voice so the operator and user will understand the message
- Emergency calls have priority access to the network, and 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
- Over-the-air-programming (OTAP) with the industry-leading
   EnableFleet configuration
   management system delivers
   software and firmware changes over
   the Tait DMR Tier 3 radio network,
   making it faster, easier and more
   affordable to update and optimize
   the performance of the radios in
   your fleet

#### **Privacy features**

- Trunked operation allows for individual and private calls within designated groups
- Optional DES or AES encryption for privacy of conversations

## Facilities to improve network security

- When operating in DMR mode all terminals must be authenticated on the network before they are given access
- Stun and Revive are implemented to temporarily deny a specific portable access to the network

### Designed to perform in demanding environments

- Graphical control head, capable of local or remote operation. The remote configuration can also support a single or dual head.
- Easy to install Hand Held Control Head option, either local or remote operation
- Engineered for use in demanding environments with tough die-cast metal chassis with IP54 rated casing, giving protection against dust and splashing water

## Voice communications delivering on operational needs

- Quad mode terminal offering Trunked DMR, Conventional DMR, MPT 1327 and analog conventional FM in one device
- Roaming between MPT 1327 and DMR Tier 3 trunked networks
- Roaming between Conventional FM and DMR Tier 2 Conventional networks
- Open DMR standard provides choice and interoperability
- Individual calls provide privacy between individuals
- Group calls allow separate teams to communicate amongst themselves without having to listen to irrelevant traffic
- Increased channel capacity with support of up to 1,500 channels
- Analog capability includes Priority and Dual Priority, Editable, Zone and Background Scan
- PSTN dialling allows a user to make phone calls on DMR systems that support telephone interconnect
- Crystal-clear voice quality
- Shared menu structure between all 9300 terminals

## Complete package with 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
- Vehicle installation kits for different mounting options
- Programming and service kits for ease of configuration and set up

#### **Data Services**

- Embedded data for location
- Short data messages for location, status and text
- GPS capable to improve efficiency and safety
- Packet data over traffic channels for work force management,
   Telemetry, SCADA and customer specific applications

#### **Color Options**

- TM9355 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.

<sup>\*</sup> Not all features are supported in all models or modes of operation. Contact Tait or an authorized channel partner for more details.





Frequency stability	±0.5ppm (-22°F to 140°F/-30°C to 60°C)
' '	TM9355
Conventional Mode	
Networks	26
Channels/zones	1,500 channels / 26 zones
Scan groups	300 with up to 50 members each
Trunked Mode	
Networks	4
Talk groups	512 talk group lists
Zones and work groups	1,000 zones, 1,000 work groups
Dimensions	
Body - in (mm)	Height 25W: 2.1 (52), 30W/35W/50W: 2.1 (52)
	Width 25W: 6.3 (160), 30W/35W/50W: 6.3 (160)
	Depth 25W: 6.9 (175), 30W/35W/50W: 7.7 (195)
Graphical control head - inches (mm)	Height: 2.8 (71), Width: 7.24 (184), Depth: 1.38 (35)
Weight - lb (kg)	
Body	25W: 2.6 (1.2), 30W/35W/40W/50W: 3.1 (1.4)
Control head	0.73 (0.33)
Channel spacing	6.25/12.5/15/20/25/30kHz
Frequency increment/channel step	2.5/3.125/5/6.25kHz
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), Selcal

TRANSMITTER**	VHF	UHF	700/800MHZ #	
Frequency range	136-174MHz	320-380MHz <b>"</b>	757-870MHz	
	174-225MHz <sup>¤</sup>	378-470MHz *		
		400-470MHz		
		450-520MHz		
Output power				
25W Models	25W, 10W, 5W, 1W	25W, 10W, 5W, 1W	NA	
High Power models	50W, 25W, 15W, 10W	40W, 20W, 15W, 10W	35/30W, 25W, 10W, 2W	
nput current				
Standyby Current	0.1A	0.1A	0.1A	
25W Models	5.5A	5.5A	NA	
High Power models	10.5A	9A	7A	
M Hum and noise (Analog)				
12.5kHz	-40dB	-40dB	-40dB	
25kHz <b>1</b>	-45dB	-45dB	-45dB	
djacent 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 T	k, 4min Rx for 8 hrs @ 140°	F(+60°C)	

AMBE +2™

1/2 Rate, 3/4 Rate, Full rate, Single Slot

Vocoder type

Packet Data

<sup>1</sup> 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.

# TM**9355**SPECIFICATIONS



RECEIVER**	VHF	UHF	700/800MHZ #	
Frequency range	136-174MHz	320-380MHz	757-776MHz	
	174-225MHz	378-470MHz	850-870MHz	
		400-470MHz		
		450-520MHz		
Sensitivity (Analog) 12dB SINAD	-120dBm (0.22 <b>µ</b> V)	-120dBm (0.22 <b>µ</b> V)	-120dBm (0.22 <b>µ</b> V)	
Sensitivity (DMR) 5% BER	-119dBm (0.25 <b>µ</b> V)	-119dBm (0.25 <b>µ</b> V)	-119dBm (0.25 <b>µ</b> V)	
ntermodulation rejection				
EIA603D	76dB	70dB	75dB	
ETS 300-113	70dB	70dB	70dB	
Spurious response rejection				
EIA603D	80dB	75dB	70dB	
ETS 300-113	70dB	70dB	70dB	
FM 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	
Selectivity (Analog)				
EIA603D (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	
Optional external speaker output	10W (into 4ohms)	10W (into 4ohms)	10W (into 4ohms)	
Audio distortion (rated audio)	2%	2%	2%	

MILITARY STANDARDS 810C, D, E, F AND G					
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	1,3			

REGULATORY DATA	USA	CANADA	EUROPE <sup>3</sup>	AUSTRALIA/NEW ZEALAND 3
VHF (136-174MHz)	CFR 47	RSS-119	EN300-086, EN300-113, EN300-219, EN301-489, EN60950	AS/NZS4295
VHF (174-225MHz)	NA	NA	EN300-113, EN301-489, EN60950	NA
UHF (320-380MHz)	NA	NA	EN300-086, EN300-113, EN300-219, EN301-489, EN60950	NA
UHF (378-470MHz and 400-470MHz	CFR 47	RSS-119	EN300-086, EN300-113, EN300-219, EN301-489, EN60950	AS/NZS4295 AS/NZS4365 <sup>2</sup>
UHF (450-520MHz)	CFR 47	RSS-119	NA	AS/NZS4295 AS/NZS4365 <b>²</b>
700/800MHz Emissions Designators**	CFR 47 11K0E3E 16k	RSS-119 (0E3E <b>1</b> 6K60E2D 7K80	NA DE2D, 9K60E2D <b>1</b> 10K8E2D <b>1</b> 7K60EXW, 7K60EXI	NA D

<sup>&</sup>lt;sup>1</sup>Wideband operation is not available in the USA in some bands.

#### TAIT DMR SOLUTION

Backed by our proven radio network expertise, the TM9355 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.

The words "Tait", "Tait Unified", the "Tait" logo and "Tait Unified" logo are trademarks of Tait International Limited.

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.















<sup>&</sup>lt;sup>2</sup> 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 400-470MHz band radios is operating at the CB frequencies.

<sup>&</sup>lt;sup>3</sup> 25 Watt models only.

 $<sup>\</sup>ensuremath{^{**}}\xspace$  Contact your local Tait representative for more information.

<sup>#</sup> Supports 700 A-Block frequencies (757-758MHz Tx & Rx; 787-788MHz Tx)