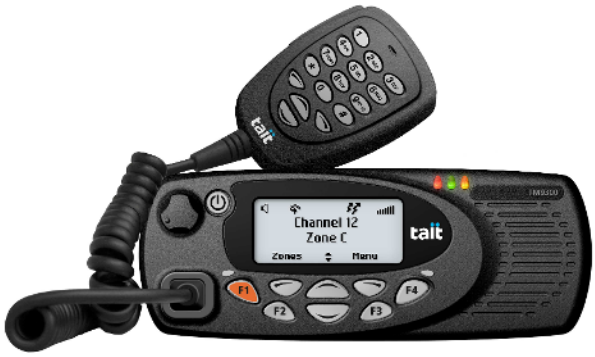
TM9355
SPECIFICATIONS

Tait DMR, a smart investment, made to evolve.

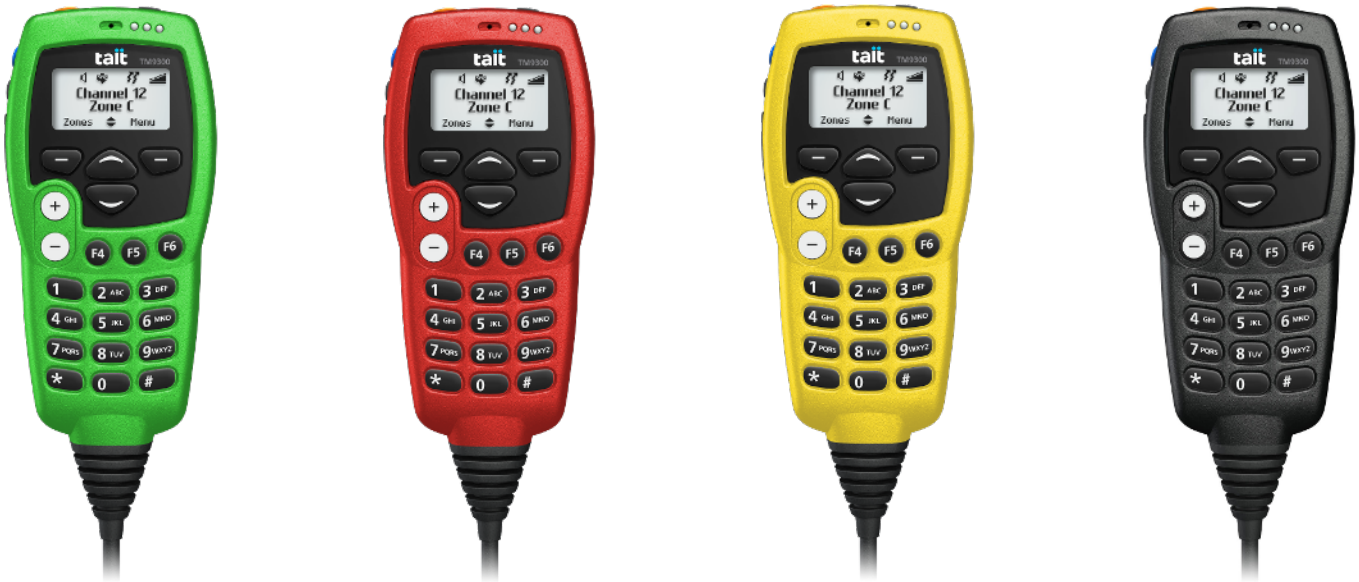


Achieve more with your radio network. The most flexible devices and networks, with smart voice and data applications.

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.*



* Please refer to Tait Unified Vehicle documentation, or contact Tait or an authorized channel partner for more details.

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FEATURES AND BENEFITS*

TM9355 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 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

- Graphical Control head with built-in 3W speaker with standard microphone or optional alphanumeric keypad microphone with backlight
- Hand Held Control Head with display and alphanumeric keypad microphone with backlight
- 10W and 15W remote speaker options
- Power supply units
- Variety of 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.

DMR specifications

Tait infrastructure and terminals are designed as per the following DMR Specifications:

- ETSI TR 102 398 V1.4.1 General System Design.
- ETSI TS 102 361-1 V2.5.1 DMR Air Interface (AI) protocol.
- ETSI TS 102 361-2 V2.4.1 DMR voice and generic services and facilities
- ETSI TS 102 361-3 V1.3.1 DMR data protocol.
- ETSI TS 102 361-4 V1.9.2 DMR trunking protocol

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

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GENERAL	
Frequency stability	±0.5ppm (-22°F to 140°F/-30°C to 60°C)
Conventional Mode	
Networks	26
Channels/zones	1,500 channels / 100 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)
Supported Languages	English (default), German, French, Spanish, Portuguese, Czech, Russian
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 102 361-1, -2, -3, -4
General System Design standard	ETSI TR 102 398 V1.4.1
Signaling options (Analog)	MDC1200, encode and decode, Two tone decode, PL (CTCSS), DPL, (DCS), Selcall
Vocoder type	AMBE +2™
Packet Data	1/2 Rate, 3/4 Rate, Full rate, Single Slot

TRANSMITTER**	VHF	UHF	700/800MHZ #
Frequency range	136-174MHz	320-380MHz¤ 378-470MHz (HK)+ 400-470MHz (H5)¤ 450-520MHz (H7)	757-870MHz
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
Input current			
Standby Current	0.1A	0.1A	0.1A
25W Models	5.5A	5.5A	NA
High Power models	10.5A	9A (7A)^	7A
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 50W: -20dBm	25W: -36dBm 40W: -20dBm	30/35W: -20dBm
Audio response (Analog)	+1/-3dB	+1/-3dB	+1/-3dB
Audio distortion (Analog)	2.5% @1kHz, 60% deviation	2.5% @1kHz, 60% deviation	2.5% @1kHz, 60% 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)		

[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)
¤ 25W model only.
+ 40W model only.
^ 40W HK model only.

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RECEIVER**	VHF	UHF	700/800MHZ #
Frequency range	136-174MHz 174-225MHz	320-380MHz 378-470MHz 400-470MHz 450-520MHz	757-776MHz 850-870MHz
Sensitivity (Analog) 12dB SINAD	-120dBm (0.22µV)	-120dBm (0.22µV)	-120dBm (0.22µV)
Sensitivity (DMR) 5% BER	-119dBm (0.25µV)	-119dBm (0.25µV)	-119dBm (0.25µV)
Intermodulation rejection			
EIA603E	76dB	75dB	75dB
ETS 300-113	70dB	70dB	70dB
Spurious response rejection			
EIA603E	80dB	75dB	70dB
ETS 300-113	70dB	70dB	70dB
FM hum and noise (Analog)	12.5kHz: -40dB 25kHz: -45dB	12.5kHz: -40dB 25kHz: -45dB	12.5kHz: -40dB 25kHz: -45dB
Conducted spurious emissions	-57dBm	-57dBm	-57dBm
Selectivity (Analog)			
EIA603E (2 Tone)	12.5kHz: 52dB 25kHz: 73dB	12.5kHz: 50dB 25kHz: 70dB	12.5kHz: 50dB 25kHz: 70dB
ETS 300-086	12.5kHz: 62dB 25kHz: 73dB	12.5kHz: 60dB 25kHz: 70dB	12.5kHz: 60dB 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 [3]	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 [2]
UHF (450-520MHz)	CFR 47	RSS-119	NA	AS/NZS4295 AS/NZS4365[2]
700/800MHz	CFR 47	RSS-119	NA	NA
Emissions Designators**	11K0F3E, 16K0F3E[1] , 6K60F2D, 7K80F2D, 9K60F2D[1], 10K8F2D[1], 7K60FXW, 7K60FXD			

[1] Wideband operation is not available in the USA in some bands.
[2] The 25W 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 is operating at the CB frequencies.
[3] 25 Watt models only.
**Contact your local Tait representative for more information.
Supports 700 A-Block frequencies (757-758MHz Tx & Rx; 787-788MHz Tx)

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.

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.

Authorized Partners

Quality Management ISO 9001

Environment Management ISO 14001:2015

Occupational Health & Safety Management ISO 45001:2018

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