TM**9315**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 TM9315 mobile offers MPT, trunked DMR, conventional DMR and Analog FM operation. Its rugged design delivers straight forward voice communications in demanding environments.

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

### **KEY FEATURES**

- Future proof multi-mode mobile (DMR trunked, DMR conventional, MPT 1327 and conventional analog FM)
- Roaming between MPT and DMR Tier 3 trunked networks
- Roaming between FM Conventional and DMR Tier 2 Networks
- Open DMR standard provides choice and interoperability
- Engineered for use in demanding environments with IP54 rating
- Audio clarity provided by noise reducing digital technology
- High quality audio
- A range of accessories including hands free microphones and GPS antennas
- GPS capable to improve efficiency and safety
- Support for digital encryption







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

### TM9315 features to improve workforce safety

- Digital technology improves audio quality and reduces background noise to ensure clear communications
- High quality voice ensuring the operator and users will understand the message
- Emergency calls have priority access to the network
- GPS capable (software/hardware option) radio ensures that you know where your workforce is at all times
- Tait GeoFencing Automated Location Controlled Behavior
- Lone Worker
- Blast Alarms and Audible Alerts in DMR modes

#### **Tait GeoFencing Automation**

- Radios can automatically take a range of actions based on location, such as change modes, send messages, hazardous area alert, activate lone worker features, or activate radio I/Os to turn lights on
- Independent of the network, dispatch, or any other software applications

## Improve your organization's efficiency

- 100 channel/talk-group capacity gives considerable flexibility
- Trunked operation allows for individual and private calls within designated groups
- Up to four trunked networks supported (MPT standard, DMR Tier 3 as a software option)
- Up to 100 call presets per trunked network
- Over-the-air-programming (OTAP) with the industry-leading Tait 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

#### Facilities to improve network security

- Optional 56bit DES encryption ensures privacy of conversations
- Stun and Revive are implemented to temporarily deny a specific mobile access to the network
- Configurable DMR authentication to protect network access

### Designed to perform in demanding environments

- High power external speaker option
- · Rugged standard microphone
- 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, Conventional DMR Tier 2 conventional FM, MPT 1327 and trunked DMR (software option) in one device
- Roaming between Conventional FM and Conventional DMR networks
- Roaming between MPT 1327 and trunked DMR networks
- Group calls allow separate teams to communicate amongst themselves without having to listen to irrelevant traffic
- Channel capacity with support of up to 100 channels
- Digital simplex mode
- Analog capability, includes foreground scan, CTCSS and DCS
- High quality voice
- Shared programming structure between 9300 terminals

### Complete package with accessories portfolio

- Audio accessories are available including microphones and external speakers
- 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

#### **Smart features**

- Low standby power consumption
- Wide power control 1:25 ratio (25W)
- Duty 33% transmit 2 minute TX 4 minute RX (25W)
- Control of digital outputs by status messages

### Flexible and Easy to Use

- Channel Authorization for DMR Tier 2 and Tier 3 gives users confidence their call will be heard
- Proceed to Talk Tone available in all modes, for consistent operation

#### **Data Services**

- Short data messages for location, status, and text
- CCDI connectivity to the mobile for short data and control messages in conventional mode
- RAP connectivity to the mobile for short data and control messages in trunked mode
- IP data in digital trunked mode
- USBD Fast Polling capable of 2000 polls per minute on compatible DMR Tier 3 systems

<sup>\*</sup> Not all features are supported in all modes of operation. Feature comparison tables are available in the full product catalog.

### TM**9315 SPECIFICATIONS**



Frequency stability	±0.5ppm (-22°F to 140°F/-30°C to 60°C)
Conventional Mode	
Networks	1

Channels/zones 100 channels, 1 zone

300 Scan/vote groups

**Trunked Mode** 

GENERAL

Networks 4

Talk groups 32 talk groups

OTAP Supported (DMR Tier 3)

Dimensions

Body - in (mm) Height 25W: 2.1 (52), 30-50W: 2.1 (52) Width 25W: 6.3 (160), 30-50W: 6.3 (160)

Depth 25W: 6.9 (175), 30-50W: 7.7 (195) 2 digit control head - in (mm) Height: 2.0(51), Width: 6.9 (175), Depth: 1.38 (35)

Weight - lb (kg)

Body 25W: 2.6 (1.2), 30-50W: 3.1 (1.4)

0.4 (0.18) Control head

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

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

Water and dust protection IP54

ESD rating +/-4kV contact discharge and +/-8kV air discharge Rated audio 3W (internal speaker) 10W (external speaker)

DC: 10.8-16VDC Power supply

DMR: ETSI TS 102 361-1 V2.6.1, -2 V2.5.1, -3 V1.3.1, -4 V1.12.1 Air interface standard DMR: ETSI TR 102 398 V1.5.1 General System Design

Signaling options (Analog) PL (CTCSS), DPL (DCS), Selcall, T99, MDC1200, MPT 1327

Signaling options (Digital) DMR Tier 2, DMR Tier 3 (option)

Vocoder type AMBE +2™

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

Packet Data		72 Kate, 74 Kate, Full fate, 3	Sirigie Siot	
TRANSMITTER**	VHF	UHF	700/800MHZ #	
Frequency range	136-174MHz (B1)	320-380MHz (G1)¤	757-870MHz (K5)	
	174-225MHz (CO) <sup>a</sup>	378-470MHz (HK)*		
		400-470MHz (H5) <sup>a</sup>		
		450-520MHz (H7)		
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 <b>1</b>	-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)

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<sup>&</sup>lt;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)

<sup>2</sup> 25W model only.

<sup>† 40</sup>W model only. ^ 40W HK model only.

# TM**9315**SPECIFICATIONS



RECEIVER**	VHF	UHF	700/800MHZ #
Frequency range	136-174MHz (B1) 174-225MHz (C0)	320-380MHz (G1) 378-470MHz (HK) 400-470MHz (H5) 450-520MHz (H7)	757-776MHz & 850-870MHz (K5)
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) 1% BER	-119dBm (0.25 <b>µ</b> V)	-119dBm (0.25 <b>µ</b> V)	-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	12.5kHz: -40dB	12.5kHz: -40dB
	25kHz: -45dB	25kHz: -45dB	25kHz: -45dB
Conducted spurious emissions	-57dBm	-57dBm	-57dBm
Selectivity (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
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 (FCC)	CANADA (ISED)	EUROPE/UK (CE) <sup>3</sup>	AUSTRALIA/NEW ZEALAND (AS/NZ) <sup>3</sup>
VHF (136-174MHz)	<b>✓</b>	~	<b>~</b>	<b>✓</b>
VHF (174-225MHz)	<b>~</b>	-	<b>✓</b>	-
UHF (320-380MHz)	-	-	<b>~</b>	-
UHF (378-470MHz & 400-470MHz)	<b>~</b>	<b>✓</b>	<b>~</b>	<b>y</b> <sup>2</sup>
UHF (450-520MHz)	<b>~</b>	<b>✓</b>	<b>✓</b>	<b>√</b> <sup>2</sup>
700/800MHz	<b>~</b>	<b>✓</b>	-	-

<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 TM9300 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.taitcommunications.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.













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Health & Safety
Management

<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>Contact your local Tait representative for more information.

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