

Improved efficiency and enhanced connectivity.

Building on the strengths of our analog and MPT 1327 mobile products we have engineered the Tait DMR mobiles with your organizational requirements in mind.

Designed for mission critical environments, Tait DMR offers a modern and reliable digital communications solution based on the DMR Tier 3 trunking standard.

The TM9300 mobiles offer trunked DMR operation as well as full MPT 1327, and conventional FM functionality in one device. It can roam between DMR and MPT networks.



KEY FEATURES

- ▶ Future proof multi-mode mobiles (DMR, MPT 1327 and conventional analog FM)
- ▶ Full adherence to DMR standards providing choice and interoperability
- ▶ Engineered for use in demanding environments with IP54 rating
- ▶ Crystal-clear audio quality
- ▶ A range of configurable models and accessories are available to suit various applications



FEATURES AND BENEFITS

TM9300 features to improve workforce safety

- ▶ Lone Worker as standard
- ▶ Crystal-clear voice so the operator and user will understand the message
- ▶ Status messaging activated with one touch of a button for quick and easy notifications
- ▶ Support for in vehicle repeaters to ensure portable coverage when working a long distance from your vehicle

Improve your organizations efficiency

- ▶ Text messaging for enhanced and unambiguous communications
- ▶ Pre-defined status messages for a fast response in common situations

Privacy feature

- ▶ Trunked operation allows for individual and private calls within designated groups

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 mobile 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.

- ▶ Tough die-cast metal chassis with IP54 rated casing, giving protection against dust and splashing water

Voice communications delivering on operational needs

- ▶ Trunked DMR, MPT 1327 and analog conventional FM
- ▶ Roaming between MPT 1327 and DMR
- ▶ 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 2,000 channels
- ▶ Analog capability includes Priority and Dual Priority, Editable, Zone and Background Scan
- ▶ PSTN dialing allows a user to make phone calls on DMR systems that support telephone interconnect
- ▶ Crystal-clear voice quality
- ▶ Shared menu structure between 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

GENERAL**

Frequency Ranges	Frequency Band	Transmit Power	Transmit Current (max)	Standby Current [#]
VHF	136-174MHz	25W 50W	5.5A 10.5A	0.15A 0.15A
Frequency stability	±0.5ppm (-22°F to 140°F/-30°C to 60°C)			
Channels/zones	1,000 - 2,000 channels/50-100 zones			
Talk groups	26 talk group lists comprised of up to 1,000 - 2,000 members each			
Scan groups	300 with up to 50 members each, maximum of 2,000 members total			
Dimensions				
Body - in (mm)	Height 25W: 2.1 (52), 50W: 2.1 (52) Width 25W: 6.3 (160), 50W: 6.3 (160) Depth 25W: 6.9 (175), 50W: 7.7 (195)			
Graphical control head - in (mm)	Height: 2.8 (71), Width: 7.24 (184), Depth: 1.38 (35)			
Weight - lb (kg)				
Body	25W: 2.6 (1.2), 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)			
Power supply	DC: 10.8-16VDC, AC: Desk top PSU - 100 to 130V or 200 to 250V			
Air interface standard	DMR: ETSI TS 102 361			
Signaling options (Analog)	MDC1200, encode and decode, Two tone decode, PL (CTCSS), DPL, (DCS), Selcall			
Vocoder type	AMBE+2™			

TRANSMITTER**

	VHF
Output power	25W: 25W, 12.5W, 5W, 1W 50W: 50W, 25W, 15W, 10W
FM Hum and noise (Analog)	12.5kHz: -40dB 25kHz: -45dB
Adjacent channel power - static (Analog) ETS 300-086 and EIA 603D	12.5kHz: 60dB 25kHz: 70dB
Adjacent channel power - static (DMR) ETS 300-113	12.5kHz: 60dB
Conducted/radiated emissions	25W: -36dBm 50W: -20dBm
Audio response (Analog)	+1/-3dB
Audio distortion (Analog)	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) 50W: 1min Tx, 4min Rx for 8 hrs @ 140°F (+60°C)

[#] Configuration excludes LCD heater in control head.

RECEIVER**

	VHF
Sensitivity (Analog) 12dB SINAD	-120dBm (0.22µV)
Sensitivity (DMR) 5% BER	-119dBm (0.25µV)
Intermodulation rejection EIA603D	76dB
Intermodulation rejection ETS 300	70dB
Spurious response rejection (Analog) EIA603D	80dB
Spurious response rejection (DMR) ETS 300-113	70dB
FM hum and noise (Analog)	12.5kHz: -41dB 25kHz: -45dB
Conducted spurious emissions	-57dBm
Selectivity (Analog) EIA603D (2 Tone)	12.5kHz: 52dB 25kHz: 73dB
Selectivity (Analog) ETS 300-086	12.5kHz: 62dB 25kHz: 73dB
Optional external speaker output	10W (into 4ohms)
Audio distortion (rated audio)	2%

MILITARY STANDARDS 810C, D, E, F and G

Applicable MIL-STD	Method	Procedure
Low pressure	500.5	2
High temperature	501.5	1, 2
Low temperature	502.5	1, 2
Temperature shock	503.5	1
Solar radiation	505.5	1
Rain	506.5	1, 3
Humidity	507.5	2
Salt Fog	509.5	1
Dust	510.5	1
Vibration	514.6	1
Shock	516.6	1, 5, 6

TAIT DMR SOLUTION

Backed up 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.

Specifications are subject to change without notice and shall not form part of any contract. They are issued for guidance purposes only.

*All frequency bands and channel spacings may not be available in all markets. For further information please check with your nearest Tait office or authorized dealer.

*Additional frequency bands will be available in future releases.

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