

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 FM)
- ▶ Full adherence to DMR standards providing choice and interoperability
- ▶ Engineered for use in demanding environments with IP54 ratings
- ▶ Crystal-clear audio quality
- ▶ A range of models and accessories are available and the TM9300 mobiles are configurable to suit your 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



TRANSMITTER

	VHF
Output power	25W: 25W, 12.5W, 5W, 1W 50W: 50W, 25W, 15W, 10W
Tx current consumption	25W: <5.5A 50W <10.5A
FM hum and noise (Analog)	12.5kHz: -34dB, 20kHz: -38dB, 25kHz: -40dB
Adjacent channel power - static (Analog) ETS 300-086 & EIA 603D	12.5kHz: 60dB, 20kHz: 70dB, 25kHz: 70dB
Adjacent channel power, 12.5kHz - static (DMR) ETS 300-113	25W/50W: 60dB
Transient adjacent channel power (Analog) ETS 300-086	25W 50W 12.5kHz 50dB 46dB 20kHz 60dB 46dB 25kHz 60dB 46dB
Transient adjacent channel power (DMR) ETS 300-113	25W: 50dB 50W: 46dB
Conducted emissions (Analog) ETS 300-086 & EIA603D	25W: -36dBm 50W: -13dBm
Conducted emissions (DMR) ETS 300-113	25W: -36dBm 50W: -13dBm
Radiated emissions ETS 300-113, FCC	25W: -36dBm 50W: -13dBm
Audio response (Analog) 12.5/15kHz 25/30kHz	300-2,550Hz: +1/-3dB 300-3,000Hz: +1/-3dB
Audio distortion (Analog)	<1.5% @ 1kHz, 60% deviation
Transmit rise time	<1.2ms
Duty cycle (FDMA)	25W: 2min Tx, 4min Rx for 8 hrs @ 140°F (+60°C) 50W: 1Min Tx, 4min Rx for 8 hrs @ 140°F (+60°C) 5W continuous @ 104°F (+40°C)
Spurious emissions into VSWR	Emissions <-20dBm @ VSWR <3:1, -22°F to 140°F (-30°C to +60°C), Supply voltage ± 10%

RECEIVER

	VHF
Sensitivity - static (Analog) EIA-603D	-119dBm
Sensitivity - static (Analog) ETS300-086	-114dBm
Sensitivity - static (DMR) ETS300-113	-119dBm
Intermodulation rejection (Analog) EIA603D	76dB
Intermodulation rejection (Analog) ETS300-086	68dB
Intermodulation rejection (DMR) ETS300-113	68dB
Spurious response rejection (Analog) EIA-603D	85dB
Spurious response rejection (DMR) ETS300-113	70dB
FM hum and noise (Analog)	12.5kHz: 40dB, 20kHz: 44dB, 25kHz: 46dB
Radiated spurious emissions EIA603	100-500uV/m (freq dependant)
Radiated spurious emissions ETS300-086	-57dBm
Conducted spurious emissions	<-67dBm
Selectivity (Analog) EIA603D	12.5kHz: 52dB, 20kHz: 75dB, 25kHz: 75dB
Selectivity (Analog) ETS300-086	12.5kHz: 62dB, 20kHz: 70dB, 25kHz: 72dB
Selectivity (DMR) ETS300-113	>60dB
Residual audio noise ratio (TIA/EIA 102)	45dB
Optional external speaker output	10W (into 4ohms)
Blocking (Analog) EIA603D	>90dB
Blocking (Analog) ETS300-086	>84dB

GENERAL	
Frequency Ranges	Frequency Band†
VHF	136-174MHz
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 (1.20), 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	2.5/3.125/5/6.25Hz
Operating temperature	-22°F to 140°F (-30°C to 60°C)
Sealing	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 - 120V or 230V
Air interface standard	DMR: ETSI TS 102 361
Signaling options (Analog)	MDC1200, encode and decode, Two tone decode, PL (CTCSS), DPL (DCS), Selcall

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	1
Salt fog	509.5	1
Dust	510.5	1
Vibration	514.6	1
Shock	516.6	1, 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.

Authorized Partners

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

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† Please note that the frequency band and some channel spacings are not available in all markets. For further information please check with your nearest Tait office or authorized dealer.