SPECIFICATIONS

TP9300

Improved efficiency and enhanced usability

Tait DMR is a highly reliable, modern, digital radio solution that is designed for mission critical environments. Tait DMR offers a digital communications solution based on the DMR Tier 3 trunking standard.

The TP9300 portables 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. The portable has inbuilt GPS, *Bluetooth*® wireless technology and IP67 protection.

KEY FEATURES

- Future proof multi-mode portable (DMR, MPT 1327 and conventional FM)
- Full adherence to DMR standards providing choice and interoperability
- Engineered for a demanding environment with IP67 rating
- Increased usability with integrated *Bluetooth* wireless technology connectivity
- Integrated GPS to improve efficiency and safety
- Text messaging and status calls to enhance your communications environment
- Crystal-clear audio quality
- Available in a range of models and configurable to suit your application

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FEATURES AND BENEFITS

Improve workforce safety with the following TP9300 features:
- Man Down and Lone Worker as standard
- Integrated GPS will ensure that you always know where your workforce is
- Wireless accessories utilizing *Bluetooth* technology
- Crystal-clear voice ensuring the operator and user will understand the message
- Status messaging activated with one touch of a button for quick and easy notifications

Improve your organizations efficiency:
- GPS location allows efficient allocation of resources to events
- 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

Designed to perform in demanding environments:
- Water shedding grille ensures voice clarity and high audio volume is maintained in wet environments
- IP67 sealing
- 4 and 16 keypad options
- 3 programmable function keys
- Programmable orange emergency key at base of antenna for ease of location in dark or restrictive environments
- Recessed lens provides screen protection
- Impact protected corners provide shock absorbing protection

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
- Optional continuous channel control knob
- Shared menu structure between 9300 terminals

Facilities to improve network security:
- 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

Complete package with accessories portfolio:
- Audio accessories including speaker-microphones, headsets and earpieces
- Professional *Bluetooth* wireless technology accessories are available to work in the most demanding environments
- Chargers including in-vehicle, single fast chargers, and 6 way multi-chargers
- Standard and high capacity Li-Ion batteries available
- Various carry cases are available

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TRANSMITTER

	VHF
Output power	5W, 3W, 2W, 1W
Tx current consumption	5W: <1.9A
FM hum and noise (Analog)	
25/30kHz channel	-40dB
20kHz channel	-38dB
12.5/15kHz channel	-34dB
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	60dB
Transient adjacent channel power (Analog)	
ETS 300-086	12.5kHz: 50dB, 20kHz: 60dB, 25kHz: 60dB
Transient adjacent channel power (DMR)	
ETS 300-113	50dB
Conducted emissions (Analog)	
ETS 300-086 & EIA603D	-36dBm
Conducted emissions (DMR)	
ETS 300-113	-36dBm
Radiated emissions	
ETS 300-113, FCC	-36dBm
Audio response (Analog)	
12.5/15kHz	300–2,550Hz: +1/-3dB
25/30kHz	300–3,000Hz: +1/-3dB
Audio distortion (Analog)	<5% @ 1kHz, 60% deviation
Transmit rise time	<1.2ms
Spurious emissions into VSWR	Emissions <-20dBm @ VSWR <6:1, -22°F to 140°F (-30°C to 60°C), supply voltage at ± 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	73dB
Intermodulation rejection (Analog) ETS300-086	66dB
Intermodulation rejection (DMR) ETS300-113	70dB
Spurious response rejection (Analog) EIA-603D	72dB
Spurious response rejection (DMR) ETS300-113	70dB
FM hum and noise (Analog)	12.5kHz: 40dB, 20kHz: 44dB, 25kHz: 46dB
Radiated spurious emissions ETS300-086	-57dBm
Conducted spurious emissions	<-67dBm
Selectivity (Analog) EIA603D	12.5kHz: 52dB, 20kHz: 70dB, 25kHz: 72dB
Selectivity (Analog) ETS300-086	12.5kHz: 62dB, 20kHz: 70dB, 25kHz: 73dB
Selectivity (DMR) ETS300-113	>60dB
Residual audio noise ratio (TIA/EIA 102)	45dB
Optional external speaker output	0.5W (into 16ohm balanced speaker)
Blocking (Analog) EIA603D	>90dB
Blocking (Analog) ETS300-086	>84dB

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TP9300

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 (DxWxH)	
with Li-Ion standard battery	1.61 x 2.56 x 5.35in (41 x 65 x 136mm) to top of plate
with Li-Ion high-capacity battery	1.77 x 2.56 x 5.35in (45 x 65 x 136mm) to top of plate
Weight	
with Li-Ion standard battery	11.46oz (325g) - no antenna
with Li-Ion high-capacity battery	13.12oz (372g) - no antenna
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	IP67
ESD rating	+/-4kV contact discharge and +/-8kV air discharge
Rated audio	0.5W
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
Immersion	512.5	1
Vibration	514.6	1
Shock	516.6	1, 4

CHARGER

Charger Options (Li-Ion)	Fast desktop single charger, 6-way multi charger, vehicle charger

TAIT DMR SOLUTION

Backed up by our proven radio network expertise, the TP9300 portable 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

Alcom COMMUNICATIONS

Contact ALCOM to discuss your communication needs.
Bay of Plenty: (07) 345 8655 | FREE Call: 0800 TWO WAY (0800 89 69 29) | Email: vernon@alcom.co.nz

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

† 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.

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The TP9300 will undergo the Bluetooth® Qualification Process shortly.

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