

TM9315

RELIABLE AND SMART MOBILES FOR BUSINESS CRITICAL COMMUNICATIONS.

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Designed for mission-critical environments, Tait DMR offers a secure and reliable digital communications solution based on the DMR standard.

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



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 - 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 WORK FORCE 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 always know where your workforce is.
- Lone Worker.

IMPROVE YOUR ORGANIZATIONS' 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 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.
- When operating in DMR mode all terminals must be authenticated on the network before they are given 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.

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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.
- Group calls allow separate teams to communicate amongst themselves without having to listen to irrelevant traffic.
- 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 minuteTX4 minute RX(25W)
- CCDI controlover conventional channels
- RAP control for trunked networks
- Control of digital outputs by status messages

DATA SERVICES

- Short data messages for location
- 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

GENERAL

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

Conventional Mode

Networks 1
Channels/zones 100 channels,1 zone
Scan/vote groups 300

Trunked Mode

Networks 4
Talk groups 32 talk groups
Zones and work groups 0
OTAP Supported (DMR Tier 3)

Dimensions
Body - in (mm) Height 25W: 21(52),
Width 25W: 6.3(160),
Depth 25W:6.9 (175)

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)
Control head 0.4 (0.18)
Channel spacing 6.25/12.5/15/20/25/30kHz
Frequency increment/channel step 2.5/3.125/5/6.25kHz
Operating temperature -22°Fto 140°F(-30°C to 60°C)
Water and dust protection IP54
ESD rating +/-4kV contact discharge and +/-8k Vair discharge
Rated audio 3W (internal speaker) 10W (external speaker)
Power supply DC:10.8-16VDC,AC:Desk topP-SU- 100 to 130Vor 200 to250V
Air interface standard DMR: ETSI TS 102 361
Signaling options(Analog) PL (CTCSS),DPL (DCS),Sel-call,T99,MDC 1200,MPT 1327
Signaling options(Digital) DMR Tier 2, DMR Tier 3 (option)
Vocoder type AMBE+2™

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TRANSMITTER	VHF	UHF
Frequency range	136-174MHz	320-380MHz (G1) 400-470MHz (H5) 450-520MHz (H7)
Output power 25W Models	25W, 10W, 5W, 1W	25W, 10W, 5W, 1W
Input current (Typical)		
Standby	0.1A	0.1A
25W Models	4.7A	5.4A
FM Hum and noise (Analog)		
12.5kHz	-40dB	-40dB
25W Models	-45dB	-45dB
Adjacent channel power - static (Analog)		
@12.5kHz offse	-60dB	-60dB
@25kHz offset	-70dB	-70dB
ETS 300-113	12.5kHz: 60dB	12.5kHz: 60dB
Conducted/radiated emissions	25W: -36dBm	25W: -36dBm
Audio response	+1/-3dB	+1/-3dB
Audio distortion (Analog)	2.5%@1kHz, 60% deviation	2.5%@1kHz, 60% deviation
Duty cycle	25W: 2minTx,4min Rx for 8 hrs@140°F(+60°C), 5W continuous@104°F(+40°C)	

TRANSMITTER	VHF	UHF
Frequency range	136-174MHz	400-470MHz (H5) 450-520MHz (H7)
Sensitivity (Analog) 12dB SINAD	-120dBm (0.22uV)	-120dBm(0.22uV)
Sensitivity (DMR) 5% BER	-119dBm (0.25uV)	-119dBm (0.25uV)
Intermodulation rejection		
EIA603D	76dB	70dB
25W Models	70dB	70dB
Spurious response rejection		
EIA603D	80dB	75dB
ETS3 00-113	70dB	70dB
FM hum and noise (Analog)	12.5kHz: -40dB 25kHz: -45dB	12.5kHz: -40dB 25kHz: -45dB
Conducted spurious emissions	-57dBm	-57dBm

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TRANSMITTER	VHF	UHF
Selectivity (Analog) EIA603D (2Tone)	12.5kHz: 52dB 25kHz: 73dB	12.5kHz: 50dB 25kHz: 70dB
ETS 300-086	12.5kHz: 62dB 25kHz: 73dB	12.5kHz: 60dB 25kHz: 70dB
ETS 300-086	12.5kHz: 62dB	12.5kHz: 60dB
Optional external speaker output	10W (into 4ohms)	10W (into4ohms)
Audio distortion (rated audio)	2%	2%

MILITARY STANDARD S810C, 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(CE)	AUSTRALIA/NEWZEALAND(AS/NZ)
VHF(136-174MHz)	CFR47	RSS-119	EN300-086, EN300-113, EN300-219, EN301-489, EN60950	AS/NZS4295
UHF (400-470MHz)	CFR47	RSS-119	EN300-086, EN300-113, EN300-219, EN301-489, EN60950	AS/NZS4295 AS/NZS4365
UHF(450-520MHz)	CFR47	RSS-119	NA	AS/NZS4295 AS/NZS4365
Emissions Designators	11K0F3E, 16K0F3E, 6K60F2D, 7K80F2D, 9K60F2D, 10K8F2D, 7K60FXW, 7K60FXD			