



TM9135

SPECIFICATIONS



TM9135 P25 Mobile radio shown with standard microphone

P25 TRUNKED AND CONVENTIONAL MOBILE RADIOS FOR NON-FRONTLINE USERS

TM9135 mobile radios provide affordable and reliable digital communications for non-frontline users who need exceptional audio clarity without provision for all possible features or configurations.

Tough, reliable and interoperable

- Radios can be used on analog, P25 conventional, trunked and simulcast networks
- Out of the box and onto the shift - the TM9135 is a radio designed for fast integration onto a digital network (the P25 CAI is included)
- Hand-held control head option
- Ease of operation: all user controls and menu functions are identical across all the Tait P25 portables, mobiles and hand-held control heads
- Tested beyond MIL-STD 810C, D, E and F
- Context-sensitive and programmable menu/function keys
- Supports individual, group, broadcast and emergency calls
- Lat/long coordinates displayed on screen (requires GPS receiver and SFE)*
- Advanced voting optimizes channel reception
- User programmable scan
- Program 1,000 channels, 300 scan groups and 30 operational zones
- Comprehensive scanning features including P25 talk-group, priority, dual priority and editable scanning

*Software Feature Enabler option available separately

Tait Tough radio

Reliable and durable TM9135 mobile radios have been built to withstand the extremes of nature. A high temperature display option on Tait mobiles optimizes screen visibility in hot environments.

Interoperability assured

Genuine open standards ensure choice, value and responsiveness during routine operations or crises.

Digital audio clarity

Crystal clear digital audio allows precise communication even in noisy situations.

For immediate digital needs

The TM9135 mobile comes with the P25 CAI installed enabling immediate access to digital communications.

Analog operation for phased transition

Protect your current analog investment and migrate to P25 at your own pace. Analog mode allows communication between various partner agencies via signaling options MDC1200 encode/decode and Two Tone decode.*

Future proofing

Radio users who require the provision for advanced features or configurations should consider investing in the TM9155 for long term flexibility.

*separately enabled option



TM9135 Specifications

General

| Frequency Ranges | Frequency Band* | Transmit Power | Transmit Current |
|-----------------------------------|---|--------------------------------------|--|
| VHF | 136-174MHz | 25W | <5.5A |
| | 136-174MHz** | 50W | <10.5A |
| | 136-174MHz | 110W | <30A |
| UHF | 350-400MHz** | 40W | <8.5A |
| | 380-420MHz** | 40W | <8.5A |
| | 400-470MHz | 25W | <6.5A |
| | 400-470MHz | 40W | <8.5A |
| | 450-530MHz | 25W | <6.5A |
| | 450-520MHz | 40W | <8.5A |
| 700/800MHz | Transmit 762-776MHz 792-825MHz 850-870MHz | Receive 762-776MHz 850-870MHz | 30W (<806MHz) 35W (>806MHz) <10A <10A |
| Frequency Stability | ±1.5ppm (-22°F to 140°F/-30°C to 60°C) | | |
| Channel /Talk-groups/Zones | 1000 channels/26 talk-group lists x 50 members/30 zones | | |
| Power Supply | 10.8-16VDC | | |
| Channel Spacing | 12.5/15/20/25/30kHz | | |
| Frequency Increment/Channel Steps | 2.5/5/6.25 | | |
| Dimensions (DxWxH) Control Head | 1.38 x 7.24 x 2.8in (35 x 184 x 71mm) | | |
| Dimensions (DxWxH) Radio Body | 25W | 6.9 x 6.3 x 2.1in (175 x 160 x 52mm) | |
| | 30/35/40/50W | 7.7 x 6.3 x 2.1in (195 x 160 x 52mm) | |
| | 110W | 14.6 x 9.8 x 5in (370 x 250 x 121mm) | |
| Weight Control Head | 11.6oz (330g) | | |
| Weight Radio Body | 25W | 42.3oz (1200g) | |
| | 30/35/40/50W | 49.4oz (1400g) | |
| | 110W | 296oz (8400g) | |
| Operational Temperature | -22°F to 140°F (-30°C to 60°C) | | |
| Sealing | IP54 dust and rain | | |
| RF Connector | 50 ohm BNC or Mini UHF | | |
| Interface Connectors | 3 Interface Connectors with Serial Ports | | |

Military Standards 810F*

| Applicable MIL-STD | Method | Procedure | Procedure |
|--------------------|------------------|--------------|-----------|
| | 25/30/35/50/110W | 25/30/35/50W | 110W |
| Low Pressure | 500.4 | 2 | 2 |
| High Temperature | 501.4 | 1, 2 | 2 |
| Low Temperature | 502.4 | 1, 2 | 2 |
| Temperature Shock | 503.7 | 1 | 1 |
| Solar Radiation | 505.4 | 1 | - |
| Rain | 506.4 | 1, 3 | 3 |
| Humidity | 507.4 | 1 | - |
| Salt Fog | 509.4 | 1 | 1 |
| Dust | 510.4 | 1 | 1 |
| Vibration | 514.5 | 1 | 1 |
| Shock | 516.5 | 1, 6 | 6 |

* Also meets equivalent superseded MIL-STD 810C, D and E.

Transmitter

| | VHF/UHF (TIA/EIA 102 and 603a) | 700/800MHz (TIA/EIA 102 and 603a) |
|------------------------------------|--------------------------------|-----------------------------------|
| Output Power | | |
| 25W | 25W, 12W, 5W, 1W | |
| 30W | | 30W, 15W, 5W, 2W |
| 35W | | 35W, 15W, 5W, 2W |
| 40W | 40W, 20W, 15W, 10W | |
| 50W | 50W, 25W, 15W, 10W | |
| 110W | 110W | |
| Modulation Limiting | | |
| 25/30kHz channel | ±5kHz | ±5kHz |
| 12.5kHz channel | ±2.5kHz | ±2.5kHz |
| FM Hum & Noise | | |
| 25/30kHz channel | -43dB | -40dB |
| 12.5kHz channel | -38dB | -33dB |
| Conducted Emissions | -85dBc | -75dBc |
| Audio Response (Analog) | 300-3000Hz +1/-3dB | |
| Audio Distortion | < 3% at 1kHz 60% deviation | |
| Transmit Attack Time (TIA/EIA 102) | 50ms | |

Receiver

| | VHF/UHF | VHF 50W | VHF 110W | 700/800MHz |
|---|------------------------------------|-------------------|------------------|------------------|
| Analog Sensitivity | | | | |
| 12dB SINAD | 0.28µV (-118dBm) | 0.315µV (-117dBm) | 0.25µV (-119dBm) | 0.28µV (-118dBm) |
| Digital Sensitivity (TIA/EIA-102) | | | | |
| 5%BER | 0.20µV (-121dBm) | 0.233µV (-120dBm) | 0.18µV (-122dBm) | 0.18µV (-122dBm) |
| Intermodulation Rejection (TIA/EIA 102) | -75dB | -75dB | -70dB | -75dB |
| Adjacent Channel Selectivity | | | | |
| 25/30kHz channel (TIA/EIA 603a) | -75dB | -80dB | -75dB | -75dB |
| 12.5kHz channel (TIA/EIA 102) | -65dB | -70dB | -65dB | -65dB |
| Spurious Response Rejection | -75dB | -90dB | -70dB | -75dB |
| FM Hum & Noise | | | | |
| 25/30kHz channel | -43dB | -43dB | -43dB | -43dB |
| 12.5kHz channel | -40dB | -40dB | -40dB | -40dB |
| Residual Audio Noise Ratio | 45dB | 45dB | 45dB | 45dB |
| Audio Distortion @ Rated Audio | 3% @ 1kHz 60% modulation (typical) | | | |

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

**Tait confirms that this product model conforms with NTIA requirements. The word "Tait" and the Tait logo are trademarks of Tait Electronics Ltd. Tait is an ISO 9001:2008 and ISO 14001:2004 certified supplier.

*Please note that not all frequency bands are available in all markets. For further information please check with your nearest Tait office or authorized dealer.

It is important to note that this product does not offer encryption capability and there is no upgrade path for this. If encryption may be required Tait recommends the TM9155 mobile radio.

Regulatory Data

| | | | | |
|-----------------------|--------|---|-------------|--------------|
| USA | VHF | CFR 47 Parts 22, 90.210, 74, 90, 95 | | |
| | UHF | CFR 47 Parts 22, 90.210, 74, 95A, 90 | | |
| | 800MHz | CFR 47 Parts 22, 90 | | |
| Canada | | RSS-119 | | |
| Europe | | EN300 086, EN300 113 | | |
| | | EN301 489 | | |
| | | EN60950 | | |
| Australia/New Zealand | | AS/NZ54295 | | |
| Type Approval | FCC | Industrie Canada | NTIA | |
| 25W | VHF | CASTMAB1E | 737A-TMAB1E | |
| | UHF | CASTMAH5E | 737A-TMAH5E | |
| | | CASTMAH6E | 737A-TMAH6E | |
| | | CASTMAK5F | 737A-TMAK5F | |
| 30/35W | UHF | | | |
| | | | | |
| 40W | UHF | | | 350-400MHz** |
| | | | | 380-420MHz** |
| 50W | VHF | CASTMAH5F | n/a | |
| | | CASTMAH7F | n/a | |
| 110W (ERFPA) | VHF | CASTMAB1F | n/a | 136-174MHz** |
| | | CASTMAB1Z | n/a | |
| Emission Designators | | 10K0F1D, 10K0F1E, 10K0F7D, 10K0F7E, 11K0F3E, 12K7F1D 16K0F3E, 6K60F2D, 7K70F1D 8K10F1D, 8K10F1E, 8K10F7D 8K10F7E, 9K60F2D | | |



ISO 9001
ISO 14001

AUTHORIZED DEALER

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