Instant, reliable communications is just the beginning.

First responders around the world trust Tait for multi-agency coordination in the most challenging environments.

The flexible TM9400 mobiles offer both analog and digital modes including P25 Phase 2, and strong encryption management capability.

Improve workforce safety with smart features such as Location Services*, Tait GeoFencing, and Lone Worker functionality.

Supercharge the performance of your TM9400 with TAIT AXIOM Mobile options to provide edge computing and applications processing, WiFi vehicle area networks and LTE connectivity.**

* Not all features are supported in all models or modes of operation. Contact Tait or an authorized channel partner for more details.
** Please refer to TAIT AXIOM Mobile documentation, or contact Tait or an authorized channel partner for more details.

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FEATURES AND BENEFITS

**Delivers on the P25 standards**
Benefit from the spectral efficiency, multi-vendor interoperability, security, migration and data capability demanded by the P25 standards.
- TIA-102 P25 CAP tested and certified, providing multi-vendor interoperability
- 12.5kHz P25 Phase 1 FDMA and 6.25kHz equivalent P25 Phase 2 TDMA capable
- FCC and IC compliances include P25 Phase 2 emission designator (8K10FTW)

**Designed for demanding environments**
Designed with users to ensure effective every-day operation
- IPS4 rated: protected against dust and splashing water
- Exceeds MIL-STD-810G
- Large four-line LCD with icons to display key parameters
- Configurable to suit your needs: dual head (Large or Hand Held Control Head) and remote mount 19ft and 40ft (6m and 12m) options
- Four programmable function keys on the Large Control Head, six programmable function keys on the Hand Held Control Head, including a programmable orange emergency key

**Color Options**
- TM9400 mobile Hand Held Control heads are available in black, yellow, green and red, and Large Control Heads in black, yellow, and green.
- Different color options make it easier for workgroups to identify their equipment in the field.

High-performing, voice communications
Robust design delivers clear, mission-critical voice communications
- Future proof multi-mode flexibility offering analog, P25 Phase 1 conventional/trunked and P25 Phase 2 trunked
- Automatic dual mode between analog and P25 Phase 1 conventional
- Programmable power level options
- Option to operate with dual band functionality
- Clear communication with P25 AMBE+2 enhanced digital vocoder and digital noise suppression software
- Voting ensures priority selection of the channel with optimum receive quality
- Dynamic regrouping and supergroup operation for mission-critical workforce management
- Analog and P25 Two-Tone Paging can be used to trigger pre-programmed actions
- Increased channel capacity with up to 2,000 channels
- Scanning modes include: priority, dual priority, in-zone, Talkgroup scanning, and background scan

Efficient, security-focused management
Tait management facilities and applications allow you to efficiently manage your radio fleet
- OTAR (Over-the-air Rekeying)
- Compatible with Tait EnableProtect Key Fill Device (KFD) for quick, reliable encryption key programming
- Programming application for efficient fleet programming
- Compatible with Tait EnableProtect Advanced System Key to allow administrators to authorize and restrict subscriber units on their network

Keeping your people safe
- Supports end-to-end encryption, including AES encryption
- Lone Worker, covert microphone (Large Control Head only) and stealth emergency mode as standard
- Tait GeoFencing option for automated location based behavior
- Radio inhibit and uninhibit to allow management of radios during vehicle servicing
- Trunked failsoft reverts to conventional operation during trunked network failure
- Blast Alarms and Audible Alerts on P25 conventional and Selcall channels

Effective operations with voice and data
- Support for a variety of simulcast modes such as LSM and C4FM
- Pre-set status messages
- P25 data such as GNSS location
- Internal and external GNSS options available (refer to product catalog)
- Conventional and trunked IP data
- Location services over a conventional and P25 Trunked network
- Over-the-air-programming (OTAP) with the industry-leading EnableFleet configuration management system delivers software and firmware changes over the Tait P25 Trunked radio network or WiFi, (when optional WiFi OTAP is fitted) making it faster, easier and more affordable to update and optimize the performance of radios in your fleet
- Options board space for Tait-developed or third-party options boards

TM9400 Accessories
Digital and analog interfaces allow a range of accessory options for the TM9400
# TM9400 SPECIFICATIONS

## GENERAL

- **Frequency stability**: ±0.5ppm (-22°F to +140°F / -30°C to +60°C)
- **Channels/zones**: 1,000 channels / 50 zones
- **Talk groups**: 1,000 talk groups, up to 1,000 members total
- **Scan groups**: 300 with up to 50 members each, maximum of 2,000 members total
- **Power supply**: 10.8-16VDC
- **Active standby current**: 0.15A
- **Channel spacing**: 12.5/15/20/25/30kHz
- **Frequency increment**: 2.5/3/125/5/6.25
- **Dimensions (DxWxH)**:
  - Control head: 1.38 x 7.24 x 2.8in (35 x 184 x 71mm)
  - Radio body - 25W: 6.9 x 6.3 x 2.1in (175 x 160 x 52mm)
  - Radio body - 30/35/50W: 7.7 x 6.3 x 2.1in (195 x 160 x 52mm)
- **Weight**:
  - Control head: 0.75lb (0.333kg)
  - Radio body - 25W: 2.6lb (1.2kg)
  - Radio body - 30/35/50W: 3.1lb (1.43kg)
- **Supported Languages**: English (default), German, French, Spanish, Portuguese, Czech, Russian, Polish, Bulgarian
- **Operating temperature**: -22°F to +140°F (-30°C to +60°C)
- **Water and dust protection**: IP54
- **RF connector**: 50 ohm BNC or mini UHF
- **Interface connectors**: 9 programmable interface connectors providing serial ports and GPIO lines for radio and accessory control, and audio connectivity
- **Signaling options (analog)**: MDC1200 encode and decode, Two Tone decode, PL (CTCSS), DPL (DCS), Selcall

## TRANSMITTER**

### VHF
- **Frequency range**: 136-174MHz
- **Transmit power**: 25W, 10W, 5W, 1W
- **Modulation limiting**:
  - 12.5kHz channel: ±2.5kHz
  - 25kHz channel: ±5kHz
  - FM Hum and noise (Analog): -45dB
  - Radiated and conducted emissions: -85dB
  - Audio response (Analog): +1/-3dB
  - Duty cycle: 25W 2min Tx, 4min Rx for 8 hrs @ +140°F (+60°C)

### UHF
- **Frequency range**: 378-470MHz (1kHz)*
  - 400-470MHz (1kHz)*
  - 450-520MHz (1kHz)
- **Transmit power**: 25W, 10W, 5W, 1W
  - 40W, 20W, 15W, 10W
- **Transmit power**: +80dBm: 30W, 25W, 10W, 2W
  - 80dBm: 35W, 25W, 10W, 2W
- **Modulation limiting**:
  - 12.5kHz channel: ±2.5kHz
  - 25kHz channel: ±5kHz
  - FM Hum and noise (Analog): -45dB
  - Radiated and conducted emissions: -85dB
  - Audio response (Analog): +1/-3dB
  - Duty cycle: 25/50W 1min Tx, 4min Rx for 8 hrs @ +140°F (+60°C)
  - 5W continuous @ +104°F (+40°C)

**Contact your local Tait representative for more information.

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**Note:**
- *40W model only.
- *40W 100kHz model only.
- *25W model only.
# TM9400 Specifications

<table>
<thead>
<tr>
<th>RECEPTOR**</th>
<th>VHF</th>
<th>UHF</th>
<th>700/800MHZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency range</td>
<td>136-174MHz</td>
<td>387-470MHz</td>
<td>762-776MHz</td>
</tr>
<tr>
<td>Sensitivity (Analog)</td>
<td>0.22µV (-120dBm)</td>
<td>0.22µV (-120dBm)</td>
<td>0.28µV (-18dBm)</td>
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<tr>
<td>5% BER</td>
<td>76dB</td>
<td>75dB</td>
<td>75dB</td>
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<tr>
<td>Intermodulation rejection (P2S TIA-102)</td>
<td>46dB</td>
<td>45dB</td>
<td>45dB</td>
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<tr>
<td>Adjacent channel rejection</td>
<td>65dB</td>
<td>60dB</td>
<td>60dB</td>
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<tr>
<td>Spurious response rejection (P2S TIA-102)</td>
<td>80dB</td>
<td>80dB</td>
<td>80dB</td>
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<tr>
<td>Residual audio noise ratio (P2S TIA-102)</td>
<td>46dB</td>
<td>45dB</td>
<td>45dB</td>
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<tr>
<td>FM num and noise</td>
<td>-45dB</td>
<td>-40dB</td>
<td>-45dB</td>
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<tr>
<td>Audio distortion</td>
<td>1.5% at 1kHz 60% modulation</td>
<td>10W (into 4 ohm)</td>
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**Military Standards 810C, D, E, F AND G**

<table>
<thead>
<tr>
<th>Applicable MIL-STD Method</th>
<th>Method</th>
<th>Procedure</th>
<th>Applicable MIL-STD Method</th>
<th>Method</th>
<th>Procedure</th>
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<tr>
<td>Low Pressure</td>
<td>505.5</td>
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<td>Humidity</td>
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<td>High temperature</td>
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<td>Salt Fog</td>
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<td>Low temperature</td>
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<td>Sand &amp; Dust</td>
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<td>Temperature shock</td>
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<td>Vibration</td>
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<td>Solar radiation</td>
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<td>1</td>
<td>Shock</td>
<td>5166</td>
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<td>Rain</td>
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<table>
<thead>
<tr>
<th>REGULATORY DATA</th>
<th>USA (FCC)</th>
<th>CANADA (ISED)</th>
<th>EUROPE /UK(CE)</th>
<th>E-MARK</th>
<th>AUSTRALIA/NEW ZEALAND (AS/Hz)</th>
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<tbody>
<tr>
<td>VHF (136-174MHz)</td>
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<td>✓</td>
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<tr>
<td>UHF (387-470MHz &amp; 400-470MHz)</td>
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<tr>
<td>UHF (450-520MHz)</td>
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</tr>
</tbody>
</table>

**Contact your local Tait representative for more information.**

1 Wideband operation is not available in the USA in some bands.

2 The 25W UHF band radios are approved for use in Citizen Band in Australia and New Zealand when programmed to meet the requirements of AS/NZS4385.

Tait cannot guarantee full performance to the published specifications when the 400-470MHz band radios is operating at the CB frequencies.

3 25 Watt models only.

**TAIT P2S PHASE 2 SOLUTION**

Backed up by our proven radio network expertise, the TM9400 Mobile Radio is part of our larger P2S Phase 2 offering. This 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 P2S standard.

Tait has taken every care in compiling this specification sheet, but we're always innovating and therefore changes to our models, designs, technical specification, visuals and other information included in this specification sheet could occur. For the most up-to-date information and for a copy of our terms and conditions please visit our website www.taitcommunications.com.

For further information please check with your nearest Tait office or authorized dealer.

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Tait International Limited facilities are certified for ISO 9001:2015 (Quality Management System), ISO 14001:2015 (Environmental Management System) and ISO 45001:2018 (Occupational Health and Safety Management System) for aspects associated with the design, manufacture and distribution of radio communications and control equipment, systems and services. In addition, all our Regional Head Offices are certified to ISO 9001.

**Authorized Partners**

[Quality Management ISO 9001]
[Environmental Management ISO 14001:2015]