

The world's first professional DMR multiband radios
Increase worker safety and productivity across multiple radio
networks and frequency bands with the TP9700 Multiband Portable,
a highly reliable and versatile radio designed to adapt to a wide
variety of operations.





3W speaker with water shedding grille and active noise cancellation.



Glove-friendly control options for volume and channel selection.



Large color screen to keep you fully informed at a glance.

TP9700 MULTIBAND PORTABLES

FLEXIBLE, RUGGED AND RELIABLE COMMUNICATIONS

THE WORLD'S FIRST DMR MULTIBAND PORTABLES

The TP9700 is configurable to operate on any combination of VHF, UHF and 700/800MHz bands. Flexible and simple ordering and deployment of single, dual, and multiband operation at time of purchase, or subsequently over the air. Bands are not locked and can be reconfigured.

RUGGED TAIT TOUGH DESIGN

The TP9700 is certified IP68 dust and waterproof, IP65 protected from water jets and rated MIL-STD810H to withstand high and low temperatures, vibration, (drop tests), humidity, salt fog, and more.

COMMUNICATE WITH MULTIPLE ORGANIZATIONS

Easily communicate with other organizations without the need for several bulky devices. Roam between networks or switch frequency bands in direct mode.

MAXIMUM CONNECTIVITY

Connect to the range of networks you may encounter in current operations or future technology migrations:

Conventional Analog, MPT1327, DMR Tier 2 Conventional, DMR Tier 3 Trunking, with integrated GNSS option for Location Services, Bluetooth® for wireless voice accessories, and WiFi OTAP.

Analog signaling options include Two Tone decode, MDC1200, PL (CTCSS), DPL (DCS), and Selcall.

EXCEPTIONAL AUDIO

Hear and be heard, even in the most extreme environments, with a powerful 3W speaker, and dual microphone active noise cancellation that removes background noise in both analog and digital modes.

ENHANCED WORKER SAFETY

Man Down and Lone Worker are standard features that can send automated safety alerts and can combine with location data and Tait GeoFencing software options to guide an effective response. The programmable Emergency key can also send these safety alerts manually.

ERGONOMIC USER EXPERIENCE

The TP9700 is designed for easy use in emergency situations, with easy-grip control options, four programmable function keys, a threeway selector and a range of accessories to tailor your experience.

COMPATIBLE BATTERIES & ACCESSORIES

The TP9700 batteries, chargers and audio accessories are compatible with all current TP9000 series portables.

YOUR FREEDOM OF CHOICE

Tait proudly supports and contributes to the DMR open standard ecosystem. Open standards enable multivendor compatibility to give you more freedom of choice and value for money throughout the life of your investment.

SECURE COMMUNICATION

Secure your fleet with encryption options, tools to manage lost or stolen radios, DMR trunking authentication to prevent unauthorized network access and the Tait EnableProtect Advanced System Key to allow only authorized personnel access radio software and configuration.



TP9700 MULTIBAND PORTABLES

TECHNICAL SPECIFICATIONS



| GENERAL | | | | | | | | |
|---|---------------|--|---|--------------------------|--------------------------|--|--|--|
| Conventional Mode | | Networks | 26 | | | | | |
| | | Channels/zon | es 1,500 Chanr | 000 Channels / 100 zones | | | | |
| | | Scan groups | 300 with up | to 50 members ea | ch | | | |
| Trunked Mode | | Networks | 4 | | | | | |
| | | Talk groups | 512 talk group lists | | | | | |
| | | Zones and wo | Zones and work groups 1,000 zones, 1,000 work groups | | | | | |
| Bluetooth® | | Supported | Supported | | | | | |
| Encryption | | ARC4, DES, A | ARC4, DES, AES Supported (DMR Tier 2 and Tier 3) | | | | | |
| OTAP | | Supported (D | Supported (DMR Tier 3, WiFi) – Requires Tait EnableFleet | | | | | |
| Dimensions (with High Capacity battery) | | 1.77 x 2.56 x 5 | 1.77 \times 2.56 \times 5.71in / 45 \times 65 \times 145mm (DxWxH excluding knobs and antenna) | | | | | |
| Weight (with High Capacity battery) | | 13.42oz / 382g | 13.42oz / 382g (without antenna) | | | | | |
| Supported Languages | | English, Germ | English, German, French, Spanish, Portuguese, Czech, Polish, Bulgarian | | | | | |
| Frequency stability | | ±0.5ppm (-22 | ±0.5ppm (-22°F to +140°F/-30°C to +60°C) | | | | | |
| Channel Spacing | | 6.25/12.5/15/2 | 6.25/12.5/15/20/25/30kHz ² | | | | | |
| Frequency increment | | 2.5/3.125/5/6.2 | 2.5/3.125/5/6.25kHz | | | | | |
| Radio Operating temperature | | -22°F to +140° | -22°F to +140°F (-30°C to +60°C) | | | | | |
| Vocoder type | | AMBE +2™ | AMBE +2™ | | | | | |
| Packet Data | | ½ Rate, ¾ Rat | ½ Rate, ¾ Rate, Full rate, Single Slot | | | | | |
| Audio Output | | 3W | 3W | | | | | |
| Signaling options (analog) | | MDC1200 end | MDC1200 encode and decode, Two Tone decode, PL (CTCSS), DPL (DCS), Selcall | | | | | |
| Water and dust protection | | IP68 & IP65 | IP68 & IP65 | | | | | |
| Tait Infrastructure and Terminals are designed to these DMR Specifications: | | | ETSI TR 102 398 V1.5.1, ETSI TS 102 361-1 V2.6.1, ETSI TS 102 361-2 V2.5.1, ETSI TS 102 361-3 V1.3.1, ETSI TS 102 361-4 V1.12.1 | | | | | |
| MILITARY STANDARDS | 810H | | | | | | | |
| Applicable MIL-STD | Method | Procedure | Applicable MIL-STD | 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 | Immersion | 512.5 | 1 | | | |
| Solar radiation | 505.5 | 1 | Vibration | 514.6 | 1 | | | |
| Rain | 506.5 | 1, 3 | Shock | 516.6 | 1, 4, 5, 6 | | | |
| SHIFT LIFE (5/5/90)3 W | ITH HIGH CAPA | CITY BATTERY | 6W VHF TRANSM | IIT ¹ 5W V | HF OR UHF TRANSMIT | | | |
| DMR / TDMA Mode | | | 17 hours | 19 ho | 19 hours | | | |
| Analog conventional / M | PT Mode | | 13 hours | 14 hours | | | | |
| CHARGER | | | | | | | | |
| Charger options (Li-lon) | Fast desktop | Fast desktop single charger, 6-way multi charger, vehicle charger and battery only vehicle charger | | | | | | |
| REGULATORY DATA | | | pe/UK (CE), Australia/New 2 ce for FCC and ISED only. | Zealand (AS/NZ) co | ompliance for all stated | | | |



TP9700 MULTIBAND PORTABLES

TECHNICAL SPECIFICATIONS continued



| TRANSMITTER | VHF | UHF | 700/800MHz | 900MHz | | | | |
|--|--|--|--|--------------------------------------|--|--|--|--|
| (Note – Radio can be configured to operate on any combination of the supported bands) | | | | | | | | |
| Frequency range | 136-174MHz | 378-520MHz | 757-870MHz | 896-941MHz | | | | |
| Output power (nom) | 6W ¹ , 5W, 3W, 2W, 1W | 5W ¹ , 4W, 2.5W, 2W, 1W | 3W, 2.5W, 2W, 1W | 3W, 2.5W, 2W, 1W | | | | |
| Modulation limiting | | | | | | | | |
| 12.5/15kHz channel | ±2.5kHz | ±2.5kHz | ±2.5kHz | ±2.5kHz | | | | |
| 25/30kHz channel ² | ±5kHz | ±5kHz | ±5kHz | ±5kHz | | | | |
| FM hum and noise | | | | | | | | |
| 12.5kHz channel | -45dB | -45dB | -40dB | -40dB | | | | |
| 25kHz channel ² | -48dB | -48dB | -45dB | -45dB | | | | |
| Radiated and conducted emissions | -75dBc | -72dBc | -75dBc | -75dBc | | | | |
| Audio response (analog) | +1/-3dB | +1/-3dB | +1/-3dB | +1/-3dB | | | | |
| Audio distortion (analog @1kHz, 60% mod) ⁵ | 2% | 2% | 2% | 2% | | | | |
| RECEIVER | VHF | UHF | 700/800MHz | 900MHz | | | | |
| (Note – Radio can be configured to operate on any combination of the supported bands) | | | | | | | | |
| (Note – Radio can be configured to operate on an | y combination of the sup | ported bands) | | | | | | |
| (Note – Radio can be configured to operate on an Frequency range | y combination of the sup | oported bands) 378-520MHz | 757-776MHz, 851-870MHz | 935-941MHz | | | | |
| | | • | | 935-941MHz | | | | |
| Frequency range | | • | | 935-941MHz 0.22µV (-120dBm) | | | | |
| Frequency range Sensitivity (typical) | 136-174MHz | 378-520MHz | 851-870MHz | | | | | |
| Frequency range Sensitivity (typical) Analog (12dB SINAD) | 136-174MHz 0.22µV (-120dBm) | 378-520MHz 0.22μV (-120dBm) | 851-870MHz 0.22µV (-120dBm) | 0.22µV (-120dBm) | | | | |
| Frequency range Sensitivity (typical) Analog (12dB SINAD) DMR (1% BER (ETS300-113)) | 136-174MHz 0.22µV (-120dBm) 0.25µV (-119dBm) | 378-520MHz 0.22µV (-120dBm) 0.25µV (-119dBm) | 851-870MHz 0.22µV (-120dBm) 0.25µV (-119dBm) | 0.22µV (-120dBm) 0.25µV (-119dBm) | | | | |
| Frequency range Sensitivity (typical) Analog (12dB SINAD) DMR (1% BER (ETS300-113)) DMR (5% BER) | 136-174MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) | 378-520MHz 0.22μV (-120dBm) 0.25μV (-119dBm) 0.16μV (-123dBm) | 851-870MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) | 0.22µV (-120dBm) 0.25µV (-119dBm) | | | | |
| Frequency range Sensitivity (typical) Analog (12dB SINAD) DMR (1% BER (ETS300-113)) DMR (5% BER) Audio distortion (rated audio) | 136-174MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) | 378-520MHz 0.22μV (-120dBm) 0.25μV (-119dBm) 0.16μV (-123dBm) | 851-870MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) | 0.22µV (-120dBm) 0.25µV (-119dBm) | | | | |
| Frequency range Sensitivity (typical) Analog (12dB SINAD) DMR (1% BER (ETS300-113)) DMR (5% BER) Audio distortion (rated audio) FM hum and noise (Analog) | 136-174MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) 1.5% | 378-520MHz 0.22μV (-120dBm) 0.25μV (-119dBm) 0.16μV (-123dBm) 1.5% | 851-870MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) 1.5% | 0.22µV (-120dBm) 0.25µV (-119dBm) | | | | |
| Frequency range Sensitivity (typical) Analog (12dB SINAD) DMR (1% BER (ETS300-113)) DMR (5% BER) Audio distortion (rated audio) FM hum and noise (Analog) 12.5kHz channel ² | 136-174MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) 1.5% | 378-520MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) 1.5% | 851-870MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) 1.5% | 0.22µV (-120dBm) 0.25µV (-119dBm) | | | | |
| Frequency range Sensitivity (typical) Analog (12dB SINAD) DMR (1% BER (ETS300-113)) DMR (5% BER) Audio distortion (rated audio) FM hum and noise (Analog) 12.5kHz channel ² 25kHz channel ² | 136-174MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) 1.5% | 378-520MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) 1.5% | 851-870MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) 1.5% | 0.22µV (-120dBm) 0.25µV (-119dBm) | | | | |
| Frequency range Sensitivity (typical) Analog (12dB SINAD) DMR (1% BER (ETS300-113)) DMR (5% BER) Audio distortion (rated audio) FM hum and noise (Analog) 12.5kHz channel ² 25kHz channel ² Intermodulation rejection | 136-174MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) 1.5% -50dB -55dB | 378-520MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) 1.5% -50dB -55dB | 851-870MHz 0.22µV (-120dBm) 0.25µV (-119dBm) 0.16µV (-123dBm) 1.5% -45dB -50dB | 0.22µV (-120dBm) 0.25µV (-119dBm) | | | | |

NOTE:

- 1. Very high power only available in USA/Canada.
- $2. \ \, \textit{Wideband operation is not available in the USA in some bands}.$
- ${\it 3. \ Battery \ performance is \ dependent \ on \ frequency, \ temperature, \ and \ operational \ configuration.}$
- 4. The UHF band radios are approved for use in Citizen Band in Australia and New Zealand when programmed to meet the requirements of AS/NZS4365.
- 5. Rated audio (for performance testing) 0.5W.

Tait has taken every care in compiling this brochure, but we're always innovating and therefore changes to our models, designs, technical specifications, visuals and other information included in this brochure 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

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