TAIT DMR
TRUNKED DMR SOLUTIONS

**A SMART INVESTMENT,
MADE TO EVOLVE**

tait
communications

TAIT TRUNKED DMR
A SMART INVESTMENT, MADE TO EVOLVE

TAIT DMR TIER 3 EMPOWERS YOUR ORGANIZATION

Because trunked DMR Tier 3 can carry both voice and data, there are countless opportunities and smart applications that will improve productivity and lower costs around your business.

Tait DMR Tier 3 is a digital communications platform that delivers workforce efficiencies and operational benefits for mission-critical users. Many digital radio technologies carry both voice and data. Tait DMR Tier 3 gives you a powerful combination of flexibility, control and resiliency. Tait DMR products are developed in conjunction with the open standards defined by the DMR Association, ensuring interoperability with other DMR equipment and opportunities for multi-vendor solutions with standardized interfaces.

Key Benefits of Tait DMR Tier 3

- Smart data applications (such as SCADA data transmission and location services),
- Tait Tough hardware,
- Resilient infrastructure,
- Secure communications,
- Lower total cost of ownership,
- Increased efficiency and productivity,
- Improved safety for your workers,
- Flexible migration options.

Tait also offers DMR Tier 2. The primary difference is that Tier 3 is a trunked radio solution, adding significant intelligence to your networking. DMR Tier 3 makes the network easier for your workgroups to talk, and more flexible for data traffic, automatically assigning network resources and prioritising voice and data calls for optimal performance.

TAIT DMR
TRUNKED DMR SOLUTIONS

SMART DATA & NETWORK MANAGEMENT FOR GREATER SAFETY & PRODUCTIVITY

TAIT GRIDLINK

Tait GridLink makes it simple and affordable to improve electrical grid intelligence with real-time centralized monitoring and control of grid assets. Wide area based Distribution Automation systems bring the transformers and reclosers into the central SCADA system via an industry standard DNP3 & IEC interface.

WORKFLOW AUTOMATION

Safety and efficiency are what lie at the heart of Tait workflow automation solutions. Whether you need to warn workers of danger; quickly send a report of a power outage; auto-populate reports; or check-in outside of LMR coverage, you have the tools and operational oversight to stay connected and save time.

TAIT TEAMUP

Tait TeamUp is a subscription-based smart device application that allows you to overcome blind spots between networks, devices and user locations, eliminating communication barriers and providing access to multimedia sharing and workflows.

TAIT AXIOM MOBILE

Enable seamless movement between DMR and Broadband networks, and access to applications and workflows using an intelligent vehicle network and edge computing platform in a familiar radio form factor.

NETWORK MANAGEMENT

Tait Enable is a revolutionary suite of software and hardware tools that places the control of your radio network firmly in the palm of your hand. Each tool can increase the intelligence of your radio management while reducing the complexity and resource it demands.

TAIT ENABLEFLEET

You can configure and manage your radio fleet from a central control point using OTAP with our radio fleet management tool.

TAIT ENABLEMONITOR

Real-time monitoring assures you that your network is operating as expected, so you can minimize or eliminate the impact of potential outages.

TAIT ENABLEINSIGHT

Confidently manage your network performance with easy-to-use real-time critical system measures and performance metrics dashboards. Gain access to in-depth analysis to diagnose incidents and problems and to optimize your network.

TAIT ENABLEPROTECT

An Advanced System Key provides you with layers of programming security, so you can have confidence that no unauthorized users can interfere with your radio fleet.

TAIT DMR
TRUNKED DMR SOLUTIONS

GREATER SAFETY FOR YOUR WORKFORCE

MAN DOWN

Should someone fall and get hurt, the control center will immediately be notified. An accelerometer recognizes if the portable radio changes position, and after a few seconds without change, a warning will sound.

LOCATION-BASED APPLICATIONS

Built-in support for location-based services allows your supervisors to know the exact location of remote workers and assets, and where events are occurring across your coverage area. DMR Tier 3 location-based business applications provide location-specific warnings and vital information. As well as a dynamic, real-time view of operations, these applications support big data analysis capability to identify ongoing communications issues.

CALL AVAILABILITY

A utility workforce must cooperate seamlessly to maintain distribution, often in remote or challenging environments. Workers need constant access to communications—warnings and calls for assistance have first priority and must connect the first time, every time.

Tait DMR Tier 3 includes call availability features such as call priority, call timers and call queuing. With DMR Tier 3, emergency calls have priority access and get through first, no matter what.

CALL CLARITY

Workers need more than just access to voice calls to keep them safe—they need exceptional call clarity to reduce the risk of misunderstanding and time-consuming repetition. Our advanced digital DMR Tier 3 technology provides better noise reduction and preserves voice quality more consistently than analog alternatives. Workers can communicate faster and more accurately, increasing efficiency and saving time during an emergency.

SCADA & TELEMETRY

Control your tools in the field from your desk with SCADA and Telemetry via an industry-standard DNP3 & IEC interface and powerful data terminals. The less time your staff are on the road or in dangerous environments, the fewer chances they have for injury. The voice and data network can improve your workers' safety by keeping them out of harm's way while also saving time and money.

INTRINSICALLY SAFE RADIOS

Intrinsically Safe Tait DMR portables are engineered to operate safely in hazardous environments, ensuring your people have site safe communications they can depend on while they get the job done.

Tait Intrinsically Safe portable radios are rigorously assessed by the accredited ExCB Hazardous Location Certification Body to ensure the safety of users in potentially explosive atmospheres. *Div 1 (US Only)*

TAIT TOUGH

TAIT
TOUGH
The Toughest Radios in the Industry

RADIOS THAT ARE BUILT TO LAST

TAIT TOUGH

Tait customers often have tough jobs. Utilities, Oil and Gas, Mining and Transport industries all place challenges on users and equipment. A critical safety tool is a reliable communications solution. The most exposed part of this solution is the portable radio. That is why Tait engineered the 9000 series DMR portables to survive in some of the most hostile conditions. Our compact radios have been tested and proven to survive. With Tait, you can trust that your people can communicate whenever they need to.

THE DROP TEST

Tait dropped portable radios from six feet onto concrete—that's 50% higher than the military requirement. The portables were dropped from 26 different angles, over and over again to ensure the durability of everything from the battery and antenna fittings to the internal componentry and the LCD screen. The portables survived each time.

WATER IMMERSION TEST

Tait 9000 series portables are IP67 water and dust protection certified to survive with no leaks in a metre of water for 30 minutes, and IP65 tested underwater jets. At Tait, we go even further and test our radios at twice the depth and for longer time intervals, earning IP68 status for some models.

BUILD QUALITY

Every component is selected and tested so the radio can endure harder knocks and more extreme temperatures. The radios are assembled and tested in our own factory, delivering maximum quality where it matters most.

TOUGH FAMILY

Tait stands behind the quality and ruggedness of all our products, not just our portables. Our mobiles and base stations have also been designed and proven to withstand extreme temperatures, hard knocks and the wear and tear of everyday use in the demanding environments that our clients work in.

TAIT TRUNKED DMR
PRODUCTS

WE DESIGN, DEPLOY AND SUPPORT END-TO-END DMR NETWORKS

TAIT TOUGH DMR PORTABLES

- Standard 9000 series portables are IP68 and IP65 rated
- Intrinsically Safe options available, IP67 and IP65 rated
- Exceeds Military Standard (MIL-STD) 810G
- Easy migration paths with multiple analog and digital modes
- Intuitive and easy-to-use programming tools available

Tait portables aren't just tough. They're also lightweight, equipped with GPS, capable of multiple analog and digital modes, and built with open standards to ensure interoperability with other vendors and neighboring organizations. The 9000 series is available in a range of high-visibility colors and branding options for personalization or talk group identification.

TP9500 SERIES

TP9500 portables enhance the user experience with a color screen, louder, clearer audio and more ergonomic controls, all built Tait Tough for critical communications.

TP9300 SERIES

TP9300 portables provide features like multiple operating modes, internal GPS, Man Down, Lone Worker and a tough chassis, giving users complete confidence in their portable communications.

The Tait TP9000 series features loud, clear audio, so teams can work safely in challenging conditions. Built Tait Tough, TP900 portables can survive harsh punishment.

Enhanced Audio	Tait Tough	Dust and Water Proof	Bluetooth® Audio and WiFi OTAP Options	Open Standard DMR, P25, Analog and MPT	GPS, Man Down and Safety Features	Intrinsically Safe Options	Personalization Options

TAIT TOUGH
DMR MOBILES

TM9300 DMR MOBILE: FLEXIBLE, RELIABLE & BUSINESS-CRITICAL COMMUNICATIONS GRADE

A high-performing critical communications grade mobile, designed to deliver quality audio and intuitive operation for the many challenges that users face. With multiple configuration options, programmable function keys and software licenses available for additional features, the TM9300 is a future-proof communications choice.

Key Features

- Supports VHF and UHF frequencies, including digital Band III,
- Quad-mode operation (Analog Conventional, MPT1327, DMR Conventional/Tier 2, DMR Trunking/Tier 3),
- Interoperability in accordance with DMR standards,
- Encryption, voice and data, simulcast support and pre-set status messages,
- Options slot for flexible expansion capacity,
- P54 rating and water-resistant control head that exceeds MIL-STD-810G.

TM9315

The TM9315 (Analog and DMR) is designed to offer a more straightforward user interface with no keypad access and a digital channel number display. This unit is often preferred in applications where only a small number of channels or groups are used or where there is no value in having a keypad.

Key Features

- 99 channel or talk-group selection,
- Encryption-capable for voice security,
- Optional GPS receiver for location awareness.

TM9355

This mobile is at the top of the range and supports either a local or remote control head. When used with the standard control head and keypad microphone, it benefits from a large four-line display. Alternatively, a smaller handheld controller microphone can be deployed which simplifies installation in the modern vehicle environment. The keypads also support dialing or texting. A display on either of the control head types allows access to a wide range of services and operational parameters. As with the other TM9300 mobiles, a large integration area and multiple connectivity options make this radio highly adaptable.

Key Features

- Encryption capable for voice security,
- Pre-defined status messages,
- Text message capability,
- Channel capacity up to 2000,
- Optional GPS receiver for location awareness.

TM9395

The TM9395 is a multi-mode mobile that is designed to offer a data or integration platform. It has no control head but can be programmed via its front panel port. This mobile also supports voice via the auxiliary interface.

Key Features

- Integration or development platform,
- Data terminal,
- Optional GPS receiver for location updates,
- CCDI control protocol,
- Basic single-channel voice radio (with optional speaker or handset).

TAIT TRUNKED DMR
PRODUCTS

WE DESIGN, DEPLOY AND SUPPORT END-TO-END DMR NETWORKS

THE CORNERSTONE OF A TAIT DMR SYSTEM

Designed for critical operations, the Tait second-generation, native IP base station is intelligent and reliable. Genuine, DMR open-standards compliance provides interoperability and greater choice for sourcing business-critical communications.

Both the TB9400 and TB7300 have exceptional receiver performance. They excel in four particular and critical areas: sensitivity, selectivity, intermodulation suppression and blocking resistance. This combination delivers great range and one of the highest levels of protection from interference or overloading.

These base stations deliver powerful diagnostic information, as well as online tools to help identify issues. Save yourself maintenance trips by identifying and even solving many issues from your desk.

The TB9400 and TB7300 are two of the toughest base stations in the market.

Key Features

- DMR Tier 2 or Tier 3, software upgradeable,
- 6.25kHz DMR TDMA Conventional or Trunked operation,
- Supports VHF and UHF frequencies, including digital Band III on TB9400,
- VHF and UHF (400-470MHz) on TB7300,
- Multiple transmit power configurations: Single or Dual 50W, Single 100W,
- Extensive remote management and monitoring options (software upgradable, WUI, NTP, SNMP),
- In-built diagnostics with detailed alarm monitoring and management via IP,
- In-built spectrum monitor to remotely investigate cochannel interference.

TB9400

The TB9400 provides unbeatable performance and reliability with 50W and 100W outputs for both VHF and UHF frequencies.

Key Features

- Multi-mode platform supporting Analog Conventional, AS-IP (Analog Simulcast over IP), MPT, DMR Conventional, DMR Trunking and P25 Conventional modes,
- Ultra-narrowband 6.25kHz equivalent technology for DMR modes (2x TDMA channels in one12.5kHz channel),
- AC (120V) and DC (13.8V) power supply versatility,
- VHF (148-174MHz) and UHF (400-470MHz).

TB7300

This base station is a slimline 1U package with a 50W output in the VHF band and 40W output in UHF.

Key Features

- Lower standby power than the TB9400 (50%),
- AC (120V) and DC (13.8V) power supply versatility,
- VHF (148-174MHz) and UHF (400-470MHz),
- Smaller and lighter to simplify installations.

TAIT TRUNKED DMR
PRODUCTS

TAIT DMR
INFRASTRUCTURE

STAND-ALONE REPEATERS

Complete Tait DMR trunked communications systems—including mobile and portable radios, base stations/repeaters and a trunked core network—are designed, built and tested by Tait to the highest quality standards.

Our commitment to DMR open standards ensures opportunities for multi-vendor solutions with standardized interfaces. A single-sourced DMR trunked network reduces the risk of network elements not interoperating and also provides one point of call for network service and support.

TN9300 CORE NETWORK: INTELLIGENT, RELIABLE & ROBUST

The Tait TN9300 is at the heart of Tait Digital Mobile Radio Tier 3 trunked solutions, rich in features and interfaces.

Tait's DMR TN9300 digital trunked networks are IP-based and provide open standards compliant, mission-critical communications over wide geographic areas. Their extreme resilience and multiple levels of redundancy will deliver critical communications you can depend on.

Their flexibility will ensure your organization can deploy cost-effective infrastructure to meet changing operational needs now, and into the future.

The TN9300 is responsible for establishing the calls for the radio fleet. The highly flexible and scalable design of the Tait TN9300 allows your organization to deploy a cost-effective

infrastructure that meets your communication and operational needs both now and in the future.
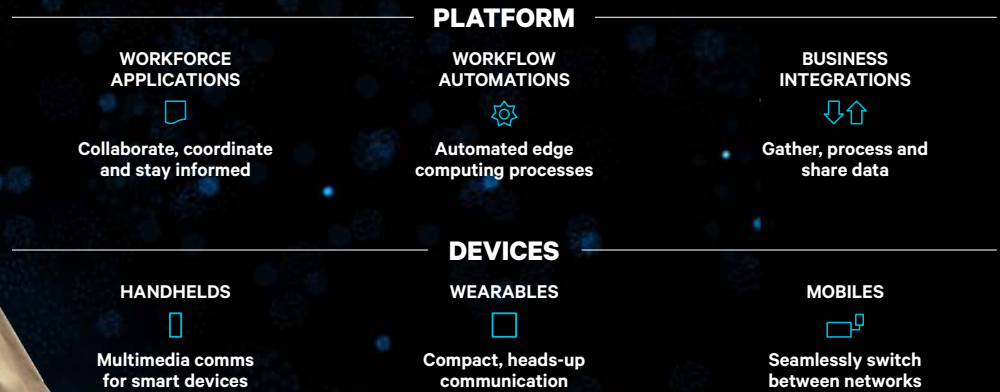
Large DMR networks are scalable up to 20 nodes and 1000 RF channels. The Tait trunked DMR multi-site network is based on a central control node. This highly robust solid-state platform controls all multi-site activity as well as providing a database for system monitoring. It also provides an interface to consoles and other external applications. This approach allows for considerable future enhancement and creates a perfect platform from which to migrate in the future to trunked DMR Tier 3. The use of the central node allows improved floor control in very busy systems reducing the number of likely issues. Key features of the infrastructure are as follows:

Key Features

- Scalable and flexible for efficient and cost-effective network design,
- Remote management for greater operational efficiency,
- Efficient system infrastructure scalability based on IP network connectivity to the DMR node controller,
- Robust design provides multiple levels of redundancy for reliable communications,
- Secure communications,
- Improved workforce safety and efficiency with flexible voice and data management,
- Future-proofed to protect your investment,
- Multiple interfaces: DIP, AIS, SIP, PSTN/PABX, Voice Recorder.

tait AXIOM

tait AXIOM

PLATFORM

WORKFORCE APPLICATIONS
Collaborate, coordinate and stay informed

WORKFLOW AUTOMATIONS
Automated edge computing processes

BUSINESS INTEGRATIONS
Gather, process and share data

DEVICES

HANDHELDS
Multimedia comms for smart devices

WEARABLES
Compact, heads-up communication

MOBILES
Seamlessly switch between networks

A SAFER, MORE PRODUCTIVE WORKFORCE

TAIT AXIOM is a secure ecosystem that integrates the reliability of LMR with the versatility of commercial and private LTE. It's more than a full range of broadband devices, workforce applications and workflow automations—it unifies networks, devices and user locations to achieve a safer, more productive workforce.

BROADBAND DEVICES

Wearable

A compact, broadband-enabled device that allows your mobile teams to work beyond the radio network edge and in challenging areas like building interiors, automatically switching communications bearers.

Handheld

These rugged smartphones allow you to connect your teams with the push of a button, bridging the gaps between networks, devices and user locations.

Mobile

The TMX450 increases worker safety and productivity by enabling seamless movement between communications networks, and access to applications and workflows using an intelligent vehicle network and edge computing platform.

WORKFLOW AUTOMATION

With advanced subscription-based applications like Tait TeamUp, users are able to overcome blind spots between networks, devices and user locations.

WORKFORCE APPLICATIONS

TAIT AXIOM provides a wide array of workforce application services, including calling, messaging, interoperating, remote control, emergency, location, video and recording.

FLEXIBLE MIGRATION OPTIONS FOR A SMOOTH TRANSITION

Upgrading a radio network can be so disruptive that operators may choose to keep their existing network in service beyond its viable lifespan. But inevitably, technological and regulatory changes will drive the decision to move to digital. When that time comes, it is important to choose a solution engineered to ensure a smooth and seamless migration from your existing radio solution—so your critical communications are uninterrupted.

SIMPLEST PATH TO NARROWBANDING
DMR Tier 3 can fully reuse all your current 12.5kHz analog channels and provides 6.25kHz channel equivalence, dramatically increasing network capacity.

MULTI-MODE TERMINALS & BASE STATIONS
Multi-mode capability on Tait hardware adds enormous flexibility to the rollout of DMR equipment. Each 9400 series terminal is capable of Analog Conventional, MPT-1327, DMR Tier 2 and DMR Tier 3. That means they can operate on your current analog radio system, then instantly move to your new digital network once it is activated.

ANALOG-EQUIVALENT COVERAGE REUSES EXISTING TOWERS
Thanks to DMR's analog-comparable coverage, new DMR networks can often reuse expensive site infrastructure elements such as combiners, cabling and aerials. Tait DMR Tier 3 has unrivaled wide area coverage and high transmit power, providing similar coverage to analog systems with more consistent signal quality. DMR Tier 3 can be deployed across your existing network, greatly increasing capacity with little or no investment in new sites.

SUPPORT FOR LEGACY EQUIPMENT INTERFACES
Tait DMR Tier 3 supports a wide range of current and legacy interfaces that can connect your existing third-party equipment—dispatch consoles, voice recorders and applications—to the new network. For continuity of service, this is vital to managing cost and risk.

LOWER CAPITAL COSTS
DMR Tier 3 minimizes infrastructure costs by providing two logical paths in one physical channel, reducing the need for duplexers and combiners.

MIGRATION DESIGN, DEPLOYMENT & SUPPORT SERVICES
Tait can take full responsibility for the seamless transition of your radio system, from system and coverage design to deployment and commissioning, leaving you to get on with what you do best.

Your people are an important part of the process, and Tait Change Management complements good project management, not only delivering your upgrade on schedule but with swift user adoption to give you the return on investment that you need.

Tait System Design considers compatibility between legacy and new equipment and can transition seamlessly, defining and developing standard and non-standard network elements. We have extensive experience integrating partner products and those of your preferred suppliers.

A simpler and smoother migration means you can quickly achieve more with DMR Tier 3 from Tait.

TAIT TRUNKED DMR
PARTNERS

OUR ENDORSED TECHNOLOGY
PARTNERS

Tait delivers unified critical communications solutions with a wide range of technology partners.

Quality Management ISO 9001

Environment Management ISO 14001:2015

Occupational Health & Safety Management ISO 45001:2018