

MOTOTRBO TWO-WAY RADIO SOLUTIONS AT A GLANCE





DISCOVER THE ULTIMATE IN SEAMLESS OPERATIONS WITH A TOTAL MOTOTRBO SOLUTION

Having MOTOTRBO at the heart of your organisation will help you achieve new levels of productivity, safety and efficiency. The extensive portfolio means you can custom-build your complete solution including radios, infrastructure, systems, accessories, applications and services designed around what you need today and in the future.

INSTANTANEOUS PTT COMMUNICATION

Nothing is faster than push-to-talk (PTT) when you need a guick answer or immediate emergency response. It provides real time communication for individuals or groups across your entire team from the control room to the front-line, resulting in loyal customers, satisfied employees and increased business.

HEAR AND BE HEARD CLEARLY IN NOISY ENVIRONMENTS

Superb audio quality means MOTOTRBO delivers crystal-clear communications. The Intelligent Audio feature automatically adjusts radio volume up and down in response to the level of noise in the workplace. And with MOTOTRBO's background noise suppression, you can be confident communication is loud and clear.

REACH YOUR WORKFORCE WHEREVER THEY GO

Hear calls clearly over a greater range. MOTOTRBO features advanced digital signal processing to deliver voice integrity and clarity to the limits of coverage. And thanks to DMR TDMA technology, MOTOTRBO delivers twice the call capacity of analogue radios so more workers can use voice and data, without worrying about privacy or interference.

KEEP COMMUNICATING FOR LONGER

Because MOTOTRBO radios use much less power in digital mode than analogue, batteries last significantly longer on a single charge.

CHOOSE THE RIGHT SOLUTIONS FOR THE RIGHT USERS

Whether you want ultra-light portables or extra-tough mobiles, integrated Bluetooth® and Wi-Fi® or industry-leading data applications, MOTOTRBO has the right devices and systems to fit your workforce now, and enables you to evolve as your enterprise grows.

MOVE FROM ANALOGUE TO DIGITAL WITH EASE

Migrate at your own pace, one talk group or department at a time. MOTOTRBO radios operate in both analogue and digital mode, so you can use them on your existing legacy system and move to digital when you're ready - all while running operations smoothly.

GET ADVANCED CAPABILITIES AND BUSINESS-CRITICAL FEATURES

MOTOTRBO has innovative features such as Transmit Interrupt, which lets you prioritise communication the moment it's needed. Man Down and Lone Worker applications call for help when personnel can't. Location tracking monitors vehicles, assets and the user in real time.

LEVERAGE EXPERT APPLICATIONS THAT GET THE JOB DONE EFFICIENTLY

MOTOTRBO fits the way businesses run today, with an expert Application Developer Programme that helps you customise your communication solution to your environment and workforce. Solutions range from text messaging, centralised dispatch and GPS/GLONASS tracking to personnel monitoring and work order ticket management. Applications like these make it easier to accomplish multiple tasks on a single purpose-built device.

KEEP CONNECTED WHEN CONDITIONS ARE TOUGHEST

MOTOTRBO is made to last. We design and engineer MOTOTRBO products to survive the harsh conditions of everyday business. The rugged, waterproof and intrinsically safe radios endure rigorous Accelerated Life Testing (ALT) which simulates up to 5 years of field use.

REACH EVERYONE, ANYWHERE

When you're running a professional operation, you need more than just radio-to-radio communications. MOTOTRBO has coverage options to suit your needs whether you're operating in a single building, a large campus, or even multiple locations around the world. Connecting thousands of radio and smartphone users, your capacity options are virtually unlimited.







The MOTOTRBO two-way radio portfolio offers you a wide choice of devices, from simple voice-only models to feature-rich voice and data radios. All devices work together seamlessly to deliver advanced features to enhance your safety, productivity and efficiency. With exceptional voice quality and outstanding usability, MOTOTRBO keeps your workforce connected.





ION

OUR FIRST BUSINESS-READY COMMUNICATION DEVICE WITH ALWAYS-ON VOICE AND BROADBAND DATA CAPABILITIES

MOTOTRBO Ion brings together renowned PTT performance, an open app ecosystem on the Android platform, and access to our unified technology ecosystem - from video security and analytics solutions, to best-in-class network security and powerful new software and technology services like smart virtual assistants. A TIA4950-certified version is also available for for use in hazardous environments¹.













R7

LOUD, CLEAR, CUSTOMISABLE AUDIO IN A RUGGED, DEPENDABLE, CONNECTED DEVICE

Stay in control with the ultimate in professional digital communications. This rugged IP66/IP68 portable radio is packed with features to help you direct operations. From integrated Wi-Fi and Bluetooth to long battery life and advanced audio processing, R7 has everything you need to boost safety and productivity. A TIA4950-certified version is also available for for use in hazardous environments1.

COMPATIBLE WITH: P SITE CONNECT CAPACITY PLUS CAPACITY MAX









DP4000 Ex SERIES

SPECIALISED PRODUCTS FOR POTENTIALLY EXPLOSIVE LOCATIONS

DP4000 Ex Series portable radios are ATEX and IEC Ex certified for use in potentially explosive environments where flammable or explosive gas, vapour or dust may be present. They have a comprehensive feature set, and have blue colouring for easy identification. The radios are available with a dedicated portfolio of ATEX certified accessories.

COMPATIBLE WITH: VIP SITE CONNECT CAPACITY PLUS CAPACITY MAX







DP4000e SERIES

POWERFUL AND SOPHISTICATED, FOR THE PROFESSIONAL WHO REFUSES TO COMPROMISE

When you need complete connectivity, the DP4000e Series delivers. These portable radios offer a full set of features and rich functionality in one powerful device including superb audio quality, long battery life, full colour display, built-in Bluetooth, integrated Wi-Fi, GPS/GLONASS and text messaging. A TIA4950certified version is also available for for use in hazardous environments.

COMPATIBLE WITH: PSITE CONNECT CAPACITY PLUS CAPACITY MAX











DP3000e SERIES

BIG PERFORMANCE FROM A SMALL, RUGGED AND WATERPROOF RADIO

Incredibly compact and exceptionally rugged, the MOTOTRBO DP3000e Series is the perfect solution for the professional on the move. It fits comfortably in your hand, integrates voice and data seamlessly and is loaded with all the benefits of the latest digital technology – superb audio quality, amazing voice clarity, outstanding coverage, long-lasting battery life and more: all packaged in a robust and waterproof IP68rated form factor. A TIA4950-certified version is also available for for use in hazardous environments¹.













DP2000e SERIES

COMPACT AND CAPABLE, FOR THE BUSY WORKER WHO NEEDS TO COMMUNICATE EFFICIENTLY

The DP2000e Series offers a feature-set geared to maximum workplace efficiency. Enhanced audio quality, impressive battery life, Intelligent Audio and voice announcement give easy, effective communication in challenging environments. Includes both analogue and digital capabilities so you can transition to digital when you're ready. A TIA4950-certified version is also available for use in hazardous environments1.











R2

AN EVERYDAY WORKHORSE FOR USERS WHO WANT TO WORK UNINTERRUPTED

MOTOTRBO R2 marries durability and ergonomics to ensure confident, easy handling. And with long range, configurable audio and seamless integration, the R2 is a reliable addition to an uninterrupted workday.









SL2600

INSTANT COMMUNICATION, PROFESSIONAL STYLE

Slim, lightweight, and discreet, the MOTOTRBO SL2600 portable two-way radio gives you the power of instant two-way communication without compromising your style. Get quick access to key radio functions along with information at a glance. Connect discreetly to Bluetooth earpieces and sensors and access Wi-Fi networks for over-the-air software updates.

COMPATIBLE WITH: IP SITE CONNECT CAPACITY PLUS CAPACITY MAX











DM4000e SERIES

POWERFUL AND SOPHISTICATED, FOR THE PROFESSIONAL WHO REFUSES TO COMPROMISE

The DM4000e Series offers a full set of features and rich functionality in one powerful device. It delivers analogue and digital modes, excellent range, superb audio quality, optional full colour display, integrated Bluetooth and Wi-Fi, GPS/GLONASS, text messaging and expert applications customised to your business.













DM1000 SERIES

SIMPLE VOICE COMMUNICATIONS FOR THE EVERYDAY USER WHO WANTS TO STAY CONNECTED

The DM1600² mobile radios allow drivers and control room staff to communicate without distraction. Great performance and a straightforward user interface mean they are ideal to keep your workforce connected simply and cost-effectively.

COMPATIBLE WITH: 1 IP SITE CONNECT (X) CAPACITY PLUS (X) CAPACITY MAX











¹R2 supports Capacity Plus single site two repeaters only ²Only in Papua New Guinea





RADIO ACCESSORIES

From discreet earpieces to efficient battery solutions, our complete portfolio of accessories optimises the performance of your MOTOTRBO radio. They are designed to help you perform your best, wherever you work, and unleash the power of the industry's most advanced digital radio platform.

EARPIECES

Transmit and receive discreetly with a variety of earpieces that feature a streamlined design and rugged cables that withstand tough conditions. With in-line push-to-talk and microphones, they're easy to use on the go. Our flexible array of surveillance kits includes two-wire kits (one wire for receiving, one wire for transmitting) and more discreet three-wire kits (separate wires for transmitting, receiving and push-to talk).



HEADSETS

Protect hearing and facilitate communications in noisy environments. Select from a wide range of comfortable, durable, lightweight to heavy duty headsets with noise-canceling boom microphones and in-line push-to-talk.



BLUETOOTH WIRELESS FOR PORTABLE AND MOBILE RADIOS

Unleash the power of your MOTOTRBO radio without wires getting in the way. Our extensive suite of Bluetooth accessories free you to take the radio off your belt, leave your vehicle or step away from your desk and stay connected up to 100m (300 feet) away. Choose from a variety of earpieces, heavy duty wireless headsets and push-to-talk solutions that let you move without constraints around the workplace.





RADIO ACCESSORIES

BATTERIES AND CHARGERS

Motorola Solutions develops and tests our batteries for optimal performance with MOTOTRBO radios and they outperform other brands of batteries. IMPRES™ batteries can be charged 150 additional times versus a standard battery – a 43% increase in charge cycles. IMPRES Over the Air Battery Management automatically collects battery information over the air while radios are in use, making battery management easier than ever.



REMOTE SPEAKER MICROPHONES (RSMs)

Communicate clearly in loud workplaces. MOTOTRBO RSMs have exclusive audio features like Windporting for windy outdoor environments and noise-cancelling to reduce background noise. Exclusive IMPRES technology ensures your voice is heard loudly and more clearly over a wide range of conditions and the INC RSM suppresses extreme noise from high decibel equipment and heavy machinery so you can be heard above all.



MOBILE RADIO MICROPHONES

Choose microphones designed to keep workers safely connected on the move. Keypad microphones let you easily navigate menus on your radios, dial phone numbers and send text messages. The heavy-duty microphone is easy to use while wearing gloves, and the telephone style handset is ideal for discreet communication. The Long Range Wireless Remote Speaker Microphone allows you to stay in touch even on remote job sites when you depend on your mobile radio but have to work outside your vehicle.



CARRY SOLUTIONS

Carrying cases are available in sizes designed to fit your radio and battery and permit audio to be heard clearly. Our carry accessories keep your hands free, so you can concentrate on the task at hand. Choose from a wide range of nylon cases, leather cases, straps, holsters and clips, all designed to keep your radio protected, yet still easy to access.



INSTALLATION AND MOUNTING KITS

Mount your radio on a desk or in your vehicle without compromising safety. Mounting kits give you the flexibility to mount the radio under or in your dashboard, or in the boot or under a seat when dash space is limited.







SYSTEMS

No matter how large or small your enterprise, MOTOTRBO offers a wide range of systems specifically designed for your business — for the days ahead and the years beyond. You get the best of two-way radio with digital technology, and can enjoy integrated voice and data communication, increased capacity, enhanced features and exceptional voice quality, across the city and around the globe.





SYSTEMS

DIRECT MODE / DUAL CAPACITY DIRECT MODE TALK DIRECTLY BETWEEN RADIOS WITHOUT ANY INFRASTRUCTURE

The most basic systems that allow portable and mobile radios to communicate directly with no infrastructure. Dual Capacity Direct Mode is available only on digital channels and supports two simultaneous voice/data paths while Direct Mode supports one analogue or digital voice channel.

CONVENTIONAL **BASELINE SINGLE SITE COVERAGE AND CAPACITY**

A conventional system is a step up from basic radio-to-radio communications. Radios communicate via a high-power repeater, giving better coverage and more centralised control.

IP SITE CONNECT COVERAGE FOR MULTIPLE SITES

Use your IP network to extend the voice and data capabilities of MOTOTRBO by linking repeaters together. You can create a continuous network that covers employees at 15 geographically-dispersed locations. You can also link up to 15 repeaters to create wide area coverage or enhance coverage quality at a single site.

CAPACITY PLUS

COVERAGE AND CAPACITY FOR SINGLE AND MULTIPLE SITES

Expand the capacity and extend the coverage of MOTOTRBO with this innovative digital trunking system. With multi-site Capacity Plus (formerly Linked Capacity Plus) you can connect up to 15 sites, each with up to 8 voice and data repeaters plus up to 12 dedicated data repeaters.

CAPACITY MAX

COVERAGE, CAPACITY AND CONTROL FOR SINGLE AND MULTIPLE SITES

DMR Tier III compliant trunking, plus more. MOTOTRBO Capacity Max blends advanced design with Motorola Solutions' extensive real-world experience of trunked radio systems to deliver a scalable communications solution that's perfect for your business.







INFRASTRUCTURE

Repeaters, controllers and gateways are the backbone of your MOTOTRBO two-way radio system. They ensure your radio network is available at all times and that communications are clear, reliable and secure across your enterprise.

A repeater brings many benefits to your workplace communications. With high transmitter power and a sensitive receiver, your coverage area is significantly boosted. The digital error correction capability within the unit also improves voice quality. And with the MOTOTRBO repeater IP interface, you can more efficiently implement operations-critical applications such as Work Order Ticketing, GPS Dispatch Consoles and Telephone Interconnect. MOTOTRBO repeaters support both analogue and digital signalling and can automatically switch modes when operating in mixed fleets.

Controllers and gateways expand the capabilities and reach of your communications network to boost functionality and expand coverage by connecting your MOTOTRBO system to other devices such as smartphones and tablets.





INFRASTRUCTURE

SLR 1000 REPEATER

Using the SLR 1000 repeater, you can easily extend the range of your network through dead zones and across remote locations so everyone's within reach. Deploy the SLR 1000 indoors or out — it's IP65-rated for dust and water protection. The compact size gives you more installation options. And a low power, fanless design uses less space and energy.



SLR 5500 REPEATER

The SLR 5500 offers high performance, high efficiency and a design for the future. The repeater has a 50 W continuous-duty output and high sensitivity for optimum coverage, plus high reliability and low power consumption for low cost of ownership. With a slim, modular design, the SLR 5500 is easy to install and service.



SLR 8000 REPEATER

The SLR 8000 repeater packs up to 100 W continuous-duty operation into a case that is only 2U in height. It features high sensitivity for exceptional coverage and the modular design keeps reliability high while allowing for configurable options.



CAPACITY MAX SYSTEM SERVER

Part of the Capacity Max trunking solution, the System Server hosts control and management functions. Each server can support up to 100 talkpaths. Redundant servers can be provisioned to increase system resilience.



WAVE PTX GATEWAY

Get WAVE PTX broadband PTT without the startup costs or maintenance that come with servers installed in your facility. Cloud-based WAVE PTX deployments use a simple WAVE PTX Gateway to connect MOTOTRBO Capacity Plus or Capacity Max systems to our WAVE PTX servers in our secure data centre.

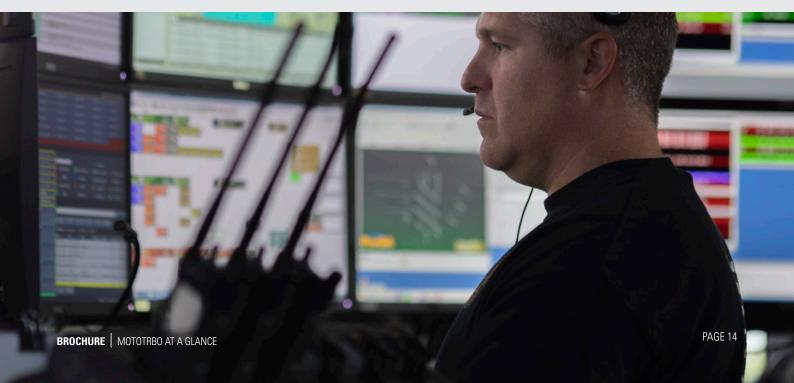


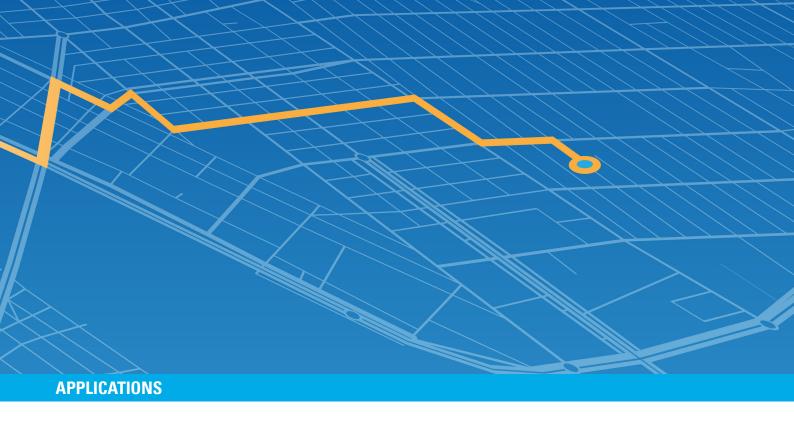




APPLICATIONS

With a wide range of applications and an expert application partner programme, MOTOTRBO offers custom solutions that truly meet your business needs. Business-specific applications like these increase the level of efficiency, safety and productivity throughout your enterprise.







COMMAND AND CONTROL

These applications work behind the scenes of your MOTOTRBO network to enhance the efficiency and responsiveness of your system. Interfacing to a Work Order Ticketing system, managing alarms and telemetry, and connecting to other messaging systems, they bring significant benefits to your business.



PERSONNEL SAFETY

Increase the safety and accountability of your staff by deploying these applications. Features such as Man Down and Lone Worker can be linked to indoor and outdoor location services for maximum effectiveness.



INTEROPERABILITY

Connect your MOTOTRBO radio system to other communication systems. From analogue two-way radio systems to SIP telephone networks or cellular providers, you can increase efficiency and increase collaboration.



LOCATION

Track your vehicles and your staff for improved safety, security and accountability. These applications allow you to make the most of MOTOTRBO's GPS and GLONASS capabilities, and some even offer indoor location tracking capabilities.



SYSTEM MONITORING

To get the best from your MOTOTRBO system, you need to know how it's performing. These applications give you a dashboard view of key metrics and parameters, with detailed logs helping you plan future growth and upgrades.



TEXT MESSAGING AND EMAIL

Enhance productivity by connecting your radio network with your text and email system. Allow your staff to use advanced work order ticketing solutions, or simply streamline the flow of information between office and shop floor.



VOICE DISPATCH

Giving you centralised control of your workforce, these applications offer customisable user interfaces to allow your dispatcher to coordinate your staff efficiently and effectively. They also enhance business connectivity by allowing telephony interconnections and multi-system patching.

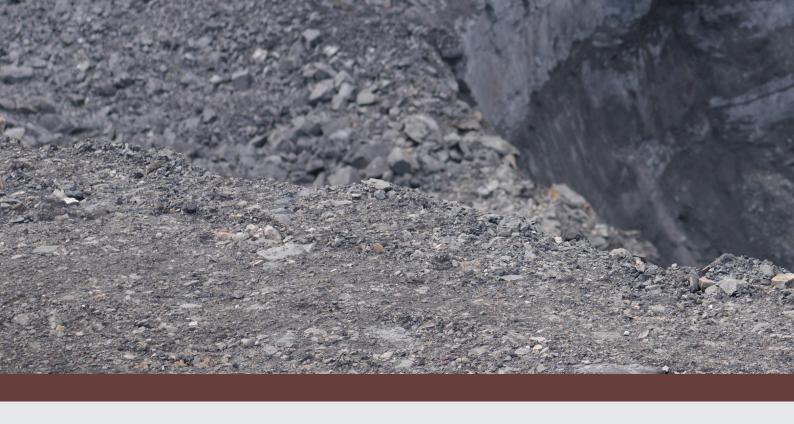


WORK TICKET MANAGEMENT

These applications enhance efficiency and accountability in the workplace using text-based issue management software.

They can be integrated with your existing work-order management solution or can be operated as an independent system.

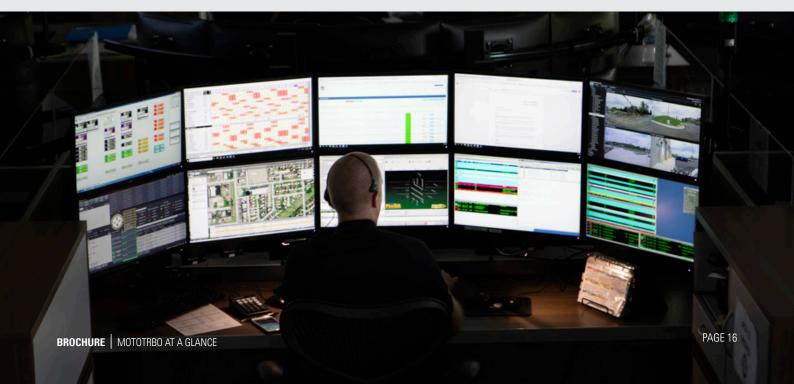






CONSOLES & SYSTEM MANAGEMENT

With options designed for your business, this portfolio of dispatch consoles and system management applications has the features you need to make quick decisions, mobilise a fleet and keep teams informed.





AVTEC SCOUT

Avtec Scout is a true VoIP console system: all its components can be distributed over a LAN/ WAN using standard Ethernet connections. The system uses a wireline interface to connect with MOTOTRBO systems, for increased functionality, call capacity and system reliability.

Avtec Scout provides a dedicated media workstation that allows dispatchers to operate on standard hardware for reduced costs and radio and telephony integration are also supported.



SmartPTT PLUS

SmartPTT PLUS is a dispatch software application for distributed MOTOTRBO radio networks. Standard functionalities include voice dispatch, texting, job ticketing, event logging and more. Optional features include GPS tracking, indoor location, voice recording, interoperability, telephone interconnect and a web client for remote system access. SmartPTT PLUS supports both the digital functions of the MOTOTRBO radios or their analogue mode for a seamless migration to a DMR system.



TRBOnet PLUS

TRBOnet PLUS is an IP-based dispatch application that enables users to fully control and manage all available resources. The software includes a wide range of advanced features and functions to extend capabilities beyond basic dispatch. Text messaging, voice recording, telephone interconnect and many other features all combine to boost communication efficiency.





WAVE PTX™ NETWORK-INDEPENDENT BROADBAND

WAVE PTX is a subscription-based group communication service that instantly connects your team at the push of a button across different devices, networks and locations. Install the app on your existing mobile devices or purchase dedicated WAVE PTX radios.

WAVE PTX APPLICATIONS ENABLE YOUR WORKFORCE TO CONNECT AND COLLABORATE



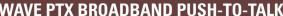
WAVE PTX Dispatch is web-based and provides centralised management for your teams.



WAVE PTX Mobile app turns your phone into a PTT handset that incorporates instant voice, photos, video and more into a single communication session.













TAKE PTT FURTHER



COMMUNICATE WITHOUT BOUNDARIES

Eliminate barriers between devices, networks and locations, and let everyone be part of the conversation.



SEAMLESSLY EXTEND RADIO COMMUNICATION

Extend your private and group calls to broadband with a direct wireline connection.



CLOUD HOSTED

No servers to buy, install or maintain so you can focus on your business.



ON PREMISES

Take control of your communication with enterprise-grade equipment installed on-site.





SERVICES

Ensure and maintain the robust performance of your MOTOTRBO radios with a complete suite of services. We've got you covered, from pre-installation to post-implementation, with expert support to make sure your business runs without interruption, disruption or unplanned downtime.



SERVICES FOR MOTOTRBO TWO-WAY RADIOS

Critical communication has become increasingly complex as your MOTOTRBO two-way radios become more IP-based, supporting integrated data applications and enhanced features. Rely on us to help you achieve your performance targets with the right level of service you need for your radio fleet.

SERVICES FOR MOTOTRBO TWO-WAY RADIOS AND INFRASTRUCTURE

Motorola Solutions is enhancing the MOTOTRBO platform with new service packages that include access to software updates, premium software features and extended hardware repair services. Your business's security and technology needs are rapidly evolving, and we want to make sure you have a world-class experience each and every time you use your MOTOTRBO products.

These new service packages bring three key benefits to your MOTOTRBO platform





The Value of Software Updates

MOTOTRBO, as all computing systems, is composed of hardware and software. The value of hardware is significant, but static. The value of software, on the other hand, keeps growing over time. Access the latest and greatest features and functionality available with each software release for added capabilities, security, and reliability. This increases the value of your investment with every update.



platform and go beyond voice with access to premium software features, previously sold a la carte. The features you need to increase productivity aren't wishful thinking - they're a smart reality. Enable the right premium software features for the right teams, so they can be safer and more efficient when it matters most.









The Value of Hardware Repair

Our two-way radios and infrastructure are built for superior performance. With expert hardware repair, all radios and infrastructure are returned to factory specifications. Service centres are certified to comply with ISO9001.

COMPLEXITY MANAGED, CALM PREVAILS



Advance Replacement for Network Hardware Repair is a repair exchange service for Motorola Solutions repeaters & Capacity Max system servers. This add-on service is available for systems so you can stay productive and run an efficient operation.



Accidental Damage offers you full coverage to keep you worry free. Accidental Damage is an add-on service that provides you with additional coverage for your two-way radios for repair and replacement beyond normal wear and tear.



Network Monitoring is an add-on service for MOTOTRBO systems to help you monitor and update your network to improve response and continuity of your Capacity Max system.



SERVICE TOOLS FLEET MANAGEMENT

CUSTOMER PROGRAMMING SOFTWARE

The MOTOTRBO Customer Programming Software (CPS) provides complete access to the configuration of your radio. Update firmware, enable features, change talkgroups, add language packs and upload voice announcements to your radio from your desktop.

RADIO MANAGEMENT

As an add-on to the CPS software, Radio Management gives you the capability to programme radios in batches to standardised templates. Reduce errors, organise large fleets more efficiently, and streamline large-scale updates.

OVER-THE-AIR PROGRAMMING

Over-the-Air Programming (OTAP) allows you to update radios remotely, either via Wi-Fi or over the MOTOTRBO network. Updates can be centrally managed and scheduled to minimise disruption to your business-critical communications.

RADIO CENTRAL

Radio Central is the latest fleet management software from Motorola Solutions. With RadioCentral you can manage and program multiple smart radios at a time. Cloud hosting allows smart radio codeplugs to be stored in a centralised database server, enabling remote configuration of data and remote programming of smart radios. With batch programming, jobs may be scheduled through an Over-The-Air-Programming (OTAP) connection, or USB or via Wi-Fi connection.

MYVIEW PORTAL

MyView Portal is a web-based platform that gives you a transparent, single source view for system and service delivery information to help make smarter, faster and more proactive decisions to keep your network running smoothly and effectively.

IMPRES FLEET MANAGEMENT

Regularly monitor the health and status of your radio fleet. By collecting data from each battery, you can now see recommendations on which batteries need replacing so that you can better optimise your battery spend over the lifetime of your radio fleet.





BUSINESSES AROUND THE WORLD TRUST MOTOTRBO TO TRANSFORM THE WAY THEY WORK

Today, from the factory floor to the power line, MOTOTRBO radios are helping people work more efficiently, productively and safely. MOTOTRBO delivers the game-changing advantages of digital technology — from superb audio to expansive coverage — along with business-essential systems, applications and accessories that unleash the power of the radio.

MOTOTRBO puts the right device into the hands of the right user, to empower your workforce and transform your enterprise.



MOTOTRBO PORTABLE RADIO FEATURES

			2000e ERIES	DP30 SER		DP	1000e SER	IES	ES DP4000 Ex SERIES		ION		R2	R7		
FEATURE	DESCRIPTION	DP2400e	DP2600e	DP3441e	DP3661e	DP4000e/ DP4401e	DP4600e/ DP4601e	DP4800e/ DP4801e	DP4401 Ex	DP4801 Ex	lon	SL2600	R2	R7 Enable (NKP)	R7 Premium (FKP)	R7 Capable (FKP)
GENERAL SPECIFICA																
Protocol	DMR digital or analogue communication	Analo	gue/Digital	Analogue	e/Digital	An	alogue/Digi	tal	Analogu	e/Digital	Analogue/ Digital	Analogue/ Digital	Analogue / Digital	An	alogue / Dig	gital
Frequency Range	Capable of operating in the following frequency ranges	VH	IF, UHF¹	VHF &	UHF ¹		VHF, UHF ¹ & 800MHz ⁵		VHF 8	¼ UHF¹	UHF	VHF & UHF ¹	VHF & UHF1	VHF, UHF1 & 800MHz 5		
Max. Power Output	Radio's full power rating	4W UF	IF / 5W VHF	4W UHF /	5W VHF		UHF / 5W VH		1W UF	HF/VHF	4W	2W(an) / 3W(dig)	4W UHF / 5W VHF	4V	/ UHF / 5W V 2.5W 800MF	HF /
Max. Channel Capacity	Programmable channel capacity	64	128	64	1000	64	1000	1000	64	1000	1000	256	64	64		000
Display	Displays provide easy access to advanced features	No	2 Line Monochrome	No	5 Line Colour	No	5 Line Colour	5 Line Colour	No	5 Line Colour	102mm colour touchscreen, plus 27mm monochrome LCD	2 line OLED	No	No	QVGA displa	0 x 240 px. y, with up to 1 of text
Keypad	Keypads provide access to radio controls, texting and telephony	No	Menu Buttons	No	Menu Buttons	No	Menu Buttons	Full Keypad	No	Full Keypad	Capacitive touchscreen	4 virtual buttons	No	No	Full I	Keypad
Integrated GPS & GLONASS	Embedded GPS & GLONASS receiver for		No	Ye	es		Yes ²		GPS	Only	Yes	No	No	Y	es	Option
Integrated Bluetooth	Wireless connection for audio		No	Audio ai	nd Data	Δι	udio and Dat	a ²		-	Yes	Audio			Yes ⁸	1 -1
Capability Dedicated Emergency	accessories or data comms Orange programmable button for one-					/ //				and Data			Yes			
Button Programmable	touch emergency calling Allow access to most often used features	2	No	Ye			Yes			es	Yes	No	No No	0		-
Buttons	with one press Supports option boards for third party	2	4	2	4	3	5	5	3	5	3	1	2	3	5	5
Option Board Capability	applications		No	Ye			Yes		Yes No		No	No	Yes			
IMPRES Audio Compatible	IMPRES audio ensures your voice is heard clearer and louder		Yes	Ye	es		Yes		Yes Yes		No	No	Yes			
IMPRES Energy Compatible	Use IMPRES batteries for longer life and optimal performance		Yes	Ye	es		Yes		Yes Yes		No	No	Yes			
ATEX / IEC Ex Certified	Certified for use in potentially explosive environments		No	N	0		No		Yes No		No	No	No			
IP Rating	Rated sealing for dust and water ingression		IP67	IP6	68		IP68		IP	67	IP68	IP54	IP55		IP66/IP68	
Dimensions³ (HxWxL)	Physical size	122 x	56 x 36 mm	100 x 55 x 30 mm	100 x 55 x 36 mm	130 x 55 x 34 mm	130 x 55 x	36 mm	138 x 57 x 38 mm	138 x 57 x 40 mm	143 x 70 x 29 mm	126 x 55 x 23 mm	125 x 55 x 37 mm	132 x 56 x 31 mm	132 x 50	6 x 35 mm
Dimensions³ (Weight)	Physical weight	275 g	292 g	254 g	290 g	295 g	330 g	330 g	456 g	456 g	414 g	190 g	286 g	289 g	3	16 g
FEATURES AND FUN																
Intelligent Audio	Automatic volume control based on background noise levels		Yes	Ye	es		Yes		Y	es	Yes	Yes	No		Yes	
Emergency Alarm	Radio can initiate a Emergency call process		Yes	Ye	es		Yes		Yes		Yes	Yes	Analog only	Yes		
Lone Worker	Initiates emergency if user does not respond to periodic alerts		Yes	Ye	es		Yes		Yes Yes		Yes	Analog only	Yes			
Remote Monitor	Radio can remotely activate another radio's microphone	Dec	ode Only	Ye	es		Yes		Y	es	Yes	Yes	Decode Only		Yes	
Freeform Text Messaging	User can enter and send free-form text messages		No	N	0		No	Yes	No	Yes	Yes	No	No	No	١	/es
Pre-programmed Text Messaging	Radio can send pre-programmed text messages		Yes	Ye	es		Yes		Y	es	Yes	Yes	Yes		Yes	
Vibrate Alert	Vibrate silently alerts the user to an incoming call	C)ption	N	0		Option		N	lo .	No	No	No No		No	
Digital Telephone Patch	Ability to connect to telephone system (requires additional hardware)	()ption	Ye	es		Yes		Y	es	No	Option	No	Yes		
Transmit Interrupt Decode	Radio transmissions can be interrupted by other radios		Yes	Ye	es		Yes		Y	es	Yes	Yes	Yes	Yes		
Transmit Interrupt Encode	Radio can interrupt transmissions from other radios		Yes	Ye	es		Yes		Yes		Yes	Option	No	Yes		
Basic Privacy	MOTOTRBO 16-bit encryption for protection against eavesdropping		Yes	Ye	es		Yes		Y	es	Yes	Yes	No	Yes		
Enhanced Privacy	MOTOTRBO 40-bit encryption for more robust protection		Yes	Ye	es		Yes		Yes		Yes	Option	Option	Yes		
AES256 Encryption	Advanced Encryption Standard (AES)		No	Opt			Option				Option	No	No	Option		
Default Voice	256-bit encryption Audible confirmation of selected operations		Yes	Ye			Yes		<u> </u>		Yes (Text to	Yes	Yes	Yes		
Announcement Programmable Voice	of the radio Ability to use customised recordings for voice								Yes		Speech) Yes (Text to					
Announcement	announcements RM provides centralised radio		Yes	Ye			Yes		Yes Yes (Text to Speech)		Yes	Yes	Yes			
Radio Management	configuration and code plug management		Yes	Ye	es		Yes		Yes Yes		Yes	Yes	Yes	Yes		
Over the Air Programming (OTAP)	Remote, over-air programming using Radio Management		Yes	Ye	es		Yes		Yes Yes ⁸		Yes	No	Yes			
Restricted Access to System	Prevents unauthorised users from communicating through the repeater		Yes	Ye	es		Yes Yes Y		Yes	Yes	Yes	Yes				
Radio Enable/Disable	Radio can remotely disable and re-enable another radio		Yes	Υe	es		Yes Yes Yes I		Decode Only	nly Yes						
Integrated Mandown	Enhance personnel safety by monitoring movement		No	Υe	es		Yes ⁷		Y	Yes Yes No No		No	Yes			
Dual Capacity Direct Mode	Use both TDMA time slots to double capacity without using a repeater		Yes	Ye	es —		Yes		Y	es	Yes	Yes	Yes		Yes	
SYSTEM CONFIGURA																
	Direct radio-to-radio operation		Yes	Ye			Yes			es	Yes	Yes	Yes	Yes		
Single-Site Conventional	Single site conventional operation (channel selection by users)		Yes	Ye	es		Yes		Y	es	Yes	Yes	Yes	Yes		
IP Site Connect	Multi-site conventional operation (channel selection by users)		Yes	Ye	es		Yes		Yes Yes Yes		Yes	Yes				
Capacity Plus (single- and multi- site)	Single site trunking (channel selection managed by system)	C)ption	Ye	es		Yes		Yes Yes Option Option ⁹			Yes				
Capacity Max	Multi-site DMR Tier III trunking with		No	Opt	ion		Option		Ωn	tion	Yes	No	No	Option	Yes	Option

MOTOTRBO MOBILE RADIO FEATURES

		DM1000 SERIES	DM4000e SERIES		
FEATURE	DESCRIPTION	DM1600	DM4400e/ DM4401e	DM4600e/ DM4601e	
GENERAL SPECIFICATIONS					
Protocol	DMR digital or analogue communication	Analogue/Digital	Analogue	/Digital	
Frequency Range	Capable of operating in the following frequency ranges	VHF & UHF ¹	VHF, UHF ¹ 8		
Max. Power Output	Radio's full power rating	25W or 45W VHF 25W or 40W UHF	25W or 45W VHF 25W or 40W UHF 10W or 35W 800MHz ⁵		
Max. Channel Capacity	Programmable channel capacity	160	99	1000	
Display	Displays provide easy access to advanced features	2 Line Monochrome	2-digit numeric	4 line full colour	
Keypad	Keypads provide access to radio controls, texting and telephony	Menu Buttons	No	Menu Buttons	
Integrated GPS	Embedded GPS receiver for location monitoring	No	Yes	S ²	
Integrated Bluetooth Capability	Wireless connection for audio accessories or data comms	No	Audio an	d Data²	
Permanent Bluetooth Discovery	"Always on" mode used by some location tracking applications	No	No)	
Dedicated Emergency Button	Orange programmable button for one-touch emergency calling	No	No)	
Programmable Buttons	Allow access to most often used features with one press	4	4		
Digital DMR Signalling	DMR standard digital voice communications	Yes ⁴	Ye	S	
PL / DPL Signalling	Analogue Private Line / Digital Private Line compatible	Yes	Ye	S	
Quick Call II Signalling	Analogue Quick Call II compatible	Yes	Ye	S	
MDC Signalling	Analogue MDC compatible	Yes	Ye	S	
5 Tone Signalling	Analogue 5 tone compatible	No	Ye	S	
DTMF Hot Keypad	DTMF tone compatible	Yes ⁵	Yes	55	
MPT1327 Signalling	Analogue MPT1327 compatible (requires option board)	No	Opti	on	
Option Board Capability	Supports option boards for third party applications	No	Ye	S	
IMPRES Audio Compatible	IMPRES audio ensures your voice is heard clearer and louder	No	Yes		
IP Rating	Rated sealing for dust and water ingression	IP54	IP54		
Dimensions (HxWxL)	Physical size	44 x 169 x 134 mm	53 x 175 x 206 mm		
Dimensions (Weight)	Physical weight	1.3 kg	1.8	ka	
FEATURES AND FUNCTIONS	· · · · · ·				
Intelligent Audio	Automatic volume control based on background noise levels	No	Ye		
Emergency Alarm	Radio can initiate a Emergency call process	Yes	Ye		
Lone Worker	Initiates emergency if user does not respond to periodic alerts	Yes	Ye		
Remote Monitor	Radio can remotely activate another radio's microphone	Decode Only	Ye		
Freeform Text Messaging	User can enter and send free-form text messages	No	Yes		
Pre-programmed Text Messaging	Radio can send pre-programmed text messages	Yes	Ye		
Digital Telephone Patch	Ability to connect to telephone system (requires additional hardware)	No	Ye	S	
Transmit Interrupt Decode	Radio transmissions can be interrupted by other radios	Yes	Ye	S	
Transmit Interrupt Encode	Radio can interrupt transmissions from other radios	No	Ye		
Basic Privacy	MOTOTRBO 16-bit encryption for protection against eavesdropping	Yes	Ye		
Enhanced Privacy	MOTOTRBO 40-bit encryption for more robust protection	No	Ye		
AES256 Encryption	Advanced Encryption Standard (AES) 256-bit encryption	No	Opti		
Default Voice Announcement	Audible confirmation of selected operations of the radio	Yes	Ye		
	Ability to use customised recordings for voice announcements	Yes	Ye		
Radio Management	RM provides centralised radio configuration and code plug management	Yes	Ye		
Over the Air Programming (OTAP)	Remote, over-air programming using Radio Management	No	Ye		
Restricted Access to System	Prevents unauthorised users from communicating through the repeater	Yes	Ye		
Radio Enable/Disable	Radio can remotely disable and re-enable another radio	Decode Only	Yes	Yes	
Dual Capacity Direct Mode	Use both TDMA time slots to double capacity without using a repeater	Yes	Ye		
Fixed Installation	Mobile radios can be used in a fixed installation such as a control room	Yes	Ye		
Control Station	Mobile acts as RF link between Application Server and radio network	No	Yes		
Remote Mount Control Head	Controls and display can be located separately from radio chassis	No	Opti	on	
SYSTEM CONFIGURATIONS					
Direct Mode Operation	Direct radio-to-radio operation	Yes	Ye	S	
Single-Site Conventional	Single site conventional operation (channel selection by users)	Yes	Yes		
IP Site Connect	Multi-site conventional operation (channel selection by users)	Option Yes			
Capacity Plus (single- and multi- site)	Single site trunking (channel selection managed by system)	No	Ye	s	
Canacity Max	Multi-site DMR Tier III trunking with dedicated control channel	No	Onti	on	

Multi-site DMR Tier III trunking with dedicated control channel

Capacity Max

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No

Option

¹ VHF frequency range supported is 136-174MHz. UHF frequency range supported is 403-527MHz, except DP1000, DP4000 Ex, SL Series, DM1000 and DM2000 Series when UHF range is 403-470MHz, R2 UHF range is 400-470MHz & 450-527MHz. Ion and R7 Series support 400-527MHz.

 $^{^{\}rm 2}$ Integrated Bluetooth and GPS are supported on DP4x01e & DM4601e only.

³ Based on standard Li-lon battery.

⁴ Requires keypad microphone.

⁵ 800MHz is only available for DP4401e, DP4800e, R7 Premium FKP, DP4801e and DM4601e

 $^{^{\}mbox{\scriptsize 6}}$ Integrated man down on DP4401e, DP4601e and DP4801e only.

⁷ Over Wi-Fi only.

⁸ R2 supports Capacity Plus single site, two repeaters only.



	DIRECT MODE / DUAL CAPACITY DIRECT MODE	SINGLE SITE CONVENTIONAL
SITES	1	1
REPEATERS (MAX)	0/1	1
CHANNELS / SITE (TRAFFIC + DATA REVERT)	1/2+0	2+0
MAX USERS / SITE	100 / 200	200
RADIOS¹ (MAX)	100 / 200	200
TRUNKING	No	No
SEPARATE CONTROLLER	n/a	n/a
CONTROLLER REDUNDANCY	n/a	n/a
SUBSCRIBER ACCESS CONTROL	No	No
SUBSCRIBER AUTHENTICATION	No	No
ENHANCED TRAFFIC CHANNEL ACCESS (COLLISION MITIGATION)	No	Yes
PRIORITISATION	No	No
STORE & FORWARD TEXTS	No	No
QUEUING (LEVELS)	No	No
TRANSMIT INTERRUPT	Yes	Yes
REMOTE MONITOR	Yes	Yes
RADIO ENABLE/DISABLE (STUN/REVIVE)	Yes	Yes

¹Maximum capacity, based on standardisation low traffic call model



IP SITE CONNECT	CAPACITY PLUS (SINGLE- & MULTI-SITE)	CAPACITY MAX
1-15	1-15	1-250
15	Single site: 8 voice + 12 data revert Multi-site: 165	5250
2 + 0	16 + 24	29 + 12
200	1,600	3,000
200	24,000	100,000
No	Yes	Yes – DMR Tier III
n/a	No	Yes
n/a	n/a	Yes
No	No	Yes
RAS	RAS	Yes
No	No	Yes
No	No	Yes
No	No	No
No	No	Yes (10)
Yes	Yes	Yes
Yes	Yes	Yes
Yes	Yes	Yes



For more information, please visit: motorolasolutions.com/MOTOTRBO

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