





# MOTOTRBOTTWO-WAY RADIO SYSTEMS AT A GLANCE







# DISCOVER WHAT MOTOTRBO CAN DO THROUGHOUT YOUR ORGANISATION

Two-way radios are the go-to technology for companies around the world – connecting people wherever they need clear, instant and reliable communications. MOTOTRBO is a portfolio of analogue and digital two-way radios that enable voice and data communications. It combines the best of two-way radio functionality with the latest digital technology for instant communication, easy decision-making and seamless coordination.

MOTOTRBO brings all the benefits of push-to-talk communications in an incredibly powerful tool that takes productivity, efficiency and safety to a whole new level. MOTOTRBO is truly the next generation of business communications.



#### HEAR AND BE HEARD CLEARLY IN NOISY ENVIRONMENTS

Superb audio quality on MOTOTRBO ensures 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 digital voice delivers 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® or industry-leading data applications, MOTOTRBO has the right devices and systems to fit your workforce now, and allow 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 analogue 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 prioritize communication the moment it's needed. Man Down and Lone Worker applications call for help when personnel can't. GPS location tracking monitors vehicles, assets and the user in real time.

## LEVERAGE EXPERT APPLICATIONS THAT GETTHE JOB DONE EFFICIENTLY

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

#### KEEP CONNECTED WHEN CONDITIONS ARE TOUGHEST

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







#### **SL4000e SERIES**

#### SLEEK AND SMART FOR THE BUSINESS LEADER WHO NEEDS COMPLETE CONTROL

Stay instantly connected and in control with the incredibly thin, light portable that is the ultimate in discreet communications. Versatile and powerful, the SL4000e Series is packed with features to help you direct operations. From integrated Wi-Fi® and Bluetooth 4.0, to a user interface designed for the latest workforce management applications, the SL4000e Series has everything you need to boost safety and productivity.

COMPATIBLE WITH:











#### **DP3441e**

#### **BIG PERFORMANCE FROM A SMALL, RUGGED AND WATERPROOF RADIO**

Incredibly compact and exceptionally rugged, the MOTOTRBO DP3441e 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 clarity, outstanding coverage, long-lasting battery life and more: all packaged in a robust and waterproof IP68-rated form factor.

COMPATIBLE WITH:











#### **DP4000 Ex SERIES ATEX-CERTIFIED**

#### SPECIALISED PRODUCTS FOR POTENTIALLY EXPLOSIVE AREAS

The DP4401 Ex and DP4801 Ex are ATEX and IEC Ex certified for use in potentially explosive environments. 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:











#### DP4000e SERIES

#### POWERFUL AND SOPHISTICATED, FOR THE PROFESSIONAL WHO REFUSES TO COMPROMISE

When you need complete connectivity, the DP4000e Series delivers. It offers 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 4.0, integrated Wi-Fi, GPS/GLONASS and text messaging. A TIA4950-certified version is also available for for use in hazardous environments¹.

COMPATIBLE WITH:











#### **DP2000e SERIES**

#### SCALABLE PORTABLE 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, longer range, Intelligent Audio and voice announcement give easy, effective communication in challenging environments. With analogue and digital capabilities and the ability to expand features with a simple software upgrade, you can transition to digital when you're ready. A TIA4950-certified version is also available for for use in hazardous environments1.

COMPATIBLE WITH:











#### **SL1600**

#### **ULTRA-PORTABILITY FOR THE USER WHO NEEDS EASY CONNECTIVITY**

Discover freedom with this slim, lightweight radio. Advanced technology brings high performance with intuitive operation and the eye-catching Active View display combines ruggedness and simplicity with long battery life. A versatile range of carry options allow you to stay connected and free to focus on the job at hand.

COMPATIBLE WITH:











#### **DP1400**

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

Connect your workforce efficiently and affordably and make the move to digital as your business grows. The DP1400 two-way analogue/digital radio provides great voice communication now, or buy the analogue-only model to integrate into your existing system and software-upgrade to digital when you're ready. It features superior audio quality, outstanding coverage and long battery life.

COMPATIBLE WITH:











#### 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 excellent range, superb audio quality, optional full colour display, integrated Bluetooth 4.0 and Wi-Fi, GPS/GLONASS, text messaging and expert applications customised to your business.

**COMPATIBLE WITH:** 











#### **DM2600**

#### AFFORDABLE VOICE COMMUNICATIONS FOR THE **BUSY PROFESSIONAL WHO WANTS BETTER CONNECTIVITY**

The power of digital is within reach. The DM2600 mobile features integrated voice systems capability, twice the calling capacity and clearer voice communications. With Intelligent Audio, drivers don't need to adjust radio volume to avoid missing a call: the DM2600 monitors background noise and automatically adjusts itself.

**COMPATIBLE WITH:** 











#### **DM1000 SERIES**

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

Make sure drivers communicate without distraction. DM1400 and DM1600 mobile radios are ideal for keeping your people reliably and cost-effectively connected so they can communicate, coordinate and collaborate. They offer all the benefits of digital plus business-critical features, such as Transmit Interrupt (decode only) to prioritize critical communication.

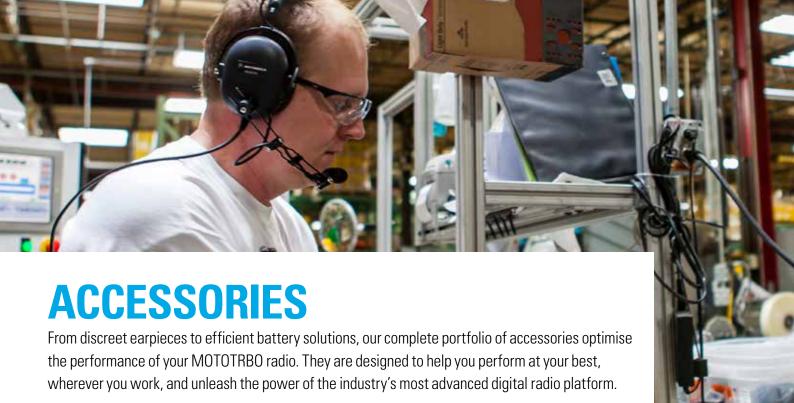
**COMPATIBLE WITH:** 













#### **EARPIECES**

Transmit and receive discreetly with a variety of earpieces that feature a streamlined design and rugged cables that withstand tough conditions. With inline 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 or ATEX environments. Select from a wide range of comfortable, durable, lightweight to heavy-duty headsets with noise-cancelling boom microphones and in-line push-to-talk controls. Temple transducer headsets rest on your temple to convert audio into sound vibration and transmit it to your inner ear. You hear your radio and sounds in the surrounding environment and since the transducer sits in front of your ears, you can also wear earplugs or a helmet.



#### **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 (up to 10 metres / 30 feet away) and stay connected. Choose from covert earpieces, heavy duty wireless headsets, RSMs and Operations Critical Wireless solutions that let you move without constraints around the workplace.



#### **BATTERIES AND CHARGERS**

Motorola's batteries are developed, tested and certified for optimal performance with your MOTOTRBO radios and they outperform other brands even at temperatures as low as -30 degrees C. Reduce the number of spare batteries you buy with Motorola's unique IMPRES™ technology. IMPRES batteries can be charged 150 additional times versus a standard battery − a 43% increase in charge cycles. Get the most out of every battery and eliminate the surprise of "low battery alerts" with IMPRES chargers. Choose from single-unit, multi-unit and travel chargers and be confident your radio is ready when you need it. With the IMPRES Battery Fleet Management app, you can even automatically collect battery information over the air while radios are in use, making battery management easier than ever.



#### REMOTE SPEAKER MICROPHONES

Communicate clearly in loud workplaces. Remote speaker microphones (RSMs) have exclusive audio features for windy outdoor environments (windporting) and noisy environments (noise-cancelling). IMPRES audio ensures your voice is heard louder and more clearly regardless of how you speak into the accessory. The INC RSM suppresses extreme noise (high decibel equipment, 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. You can stay in touch up to 100 metres from your mobile radio using the Long Range Wireless Remote Speaker Microphone that pairs instantly to the mobile microphone with Bluetooth gateway.



#### **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, between seats or on the floor. Remote mount kits allow you to mount the radio in the boot or under a seat when dash space is limited.

# **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.



#### **SLR 5500 REPEATER**

A next-generation MOTOTRBO DMR repeater, the SLR5500 offers high performance and high efficiency. 50W continuous-duty output and high sensitivity give optimum coverage, with high reliability and low power consumption for reduced cost of ownership. With a slim 1U modular design, the repeater is easy to install or service and dynamic mixed mode will automatically switch between digital and analogue performance.



#### **SLR8000 REPEATER**

Extend coverage and capacity easily with the 100W continuous-duty SLR8000 base station/repeater. Built on the slim next-generation platform, this repeater has high sensitivity for exceptional coverage, supports both analogue and digital operation and its modular design optimises reliability.



#### **CAPACITY MAX SYSTEM SERVER**

As part of the next-generation Capacity Max trunking solution, the System Server hosts control and management functions. Each server can support up to 100 voice/data talkpaths. Redundant servers can be provisioned to increase system resilience.



#### **CONNECT PLUS XRC 9100 CONTROLLER**

Deliver greater coverage and information to mobile teams. The XRC 9100 supports single or multisite Connect Plus systems and handles up to 29 voice and data talk paths (2,900 users) per site. Queue calls during busy times until an open channel is available and assign important users priority status when the system is in high demand.



#### **CONNECT PLUS XRT 9100 GATEWAY**

Reach your large workforce in the field efficiently. The XRT 9100 links Connect Plus with an IP-based wire-line console for centralised dispatch. From a single site to a large multi-site system, it ensures calls come through, even when traffic is high, and manages up to 100 talk paths and 30 simultaneous calls.



#### **CONNECT PLUS XRI 9100 INTERCONNECT GATEWAY**

With the MOTOTRBO Connect Plus Telephone Interconnect feature, you can connect your staff to people inside and outside your business, on their fixed or mobile phones. Handle customer queries direct, and manage inter-company transactions seamlessly. The MOTOTRBO Connect Plus XRI 9100 Interconnect Gateway improves your efficiency and responsiveness.



#### **WAVE 3000 SERVER**

Get robust and secure management of your client accounts. The WAVE 3000 Server provides the interface between public cellular networks and the MOTOTRBO radio network for secure centralised configuration, flexible client management, call history, upgrades and diagnostics.

# **SYSTEMS**

No matter how large or small your organisation, MOTOTRBO offers a wide range of systems specifically designed for your business. And because MOTOTRBO systems are easily scalable, they can meet your needs in the days ahead and expand if necessary in the years beyond. You get the best of two-way radio with digital technology and enjoy integrated voice and data communication, increased capacity, enhanced features and exceptional voice quality, across the city and around the globe.



## SINGLE SITE CONVENTIONAL BASELINE SINGLE SITE CAPACITY AND COVERAGE

A conventional system can operate with direct radio-to-radio communications or radios can communicate via a repeater, giving better coverage. The Digital Voting option allows a network of repeaters to be interconnected to offer even greater coverage for wide areas and difficult geographies.



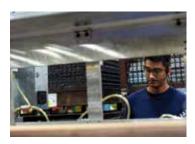
# IP SITE CONNECT COST-EFFECTIVE COVERAGE FOR MULTIPLE SITES

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 sites to create wide area coverage or enhance coverage at a single site that has physical barriers.



# CAPACITY PLUS (SINGLE- AND MULTI-SITE) COST-EFFECTIVE COVERAGE AND CAPACITY FOR SINGLE AND MULTIPLE SITES

Expand the capacity and extend the coverage of MOTOTRBO with this single- or multi-site digital trunking system. Connect up to 15 sites, each with up to 8 voice and data repeaters plus up to 12 dedicated data repeaters, to keep employees at many locations affordably connected.



### CAPACITY MAX COVERAGE, CAPACITY AND CONTROL FOR SINGLE AND MULTIPLE SITES

The next generation of trunking has arrived. MOTOTRBO Capacity Max blends innovation with Motorola's extensive real-world experience of trunked radio systems to deliver a scalable, centralised communications solution that's perfect for your business. Includes ETSI DMR Tier III compliant mode.



#### CONNECT PLUS

#### **EXCEPTIONAL COVERAGE FOR SINGLE AND MULTIPLE SITES**

Unify your entire enterprise with this scalable, multi-site digital trunking system that coordinates resources using a dedicated control channel. Calls can be queued during busy times until an open channel is available, important users can be assigned priority status, and a three-level check helps to prevent unauthorized users from accessing the system.

# MOTOTRBO CONTROL ROOM SOLUTIONS

With options designed for your business, this portfolio of control room solutions has the features you need to make quick decisions, mobilize a fleet and keep teams informed.





#### TRBONET PLUS

With TRBOnet PLUS, operators can monitor audio, data and asset location, as well as provide record management and review events that have taken place. It's easy to track staff and key assets on a live map, send and receive private text messages to personnel in the field and respond quickly and effectively to emergency situations. Dispatchers can also link multiple agencies or departments with a single touch for even greater flexibility.



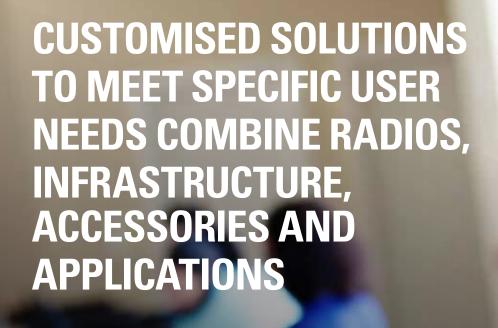


#### **SMARTPTT PLUS**

SmartPTT PLUS provides a flexible range of services to dispatchers, executives and team leaders, helping them manage their fleet and optimise productivity of workers and assets. The customisable user interface with hot keys enables quick and easy control. Monitor audio, data and asset location, access up-to-the-minute records and review events. Track staff and send or receive private text messages to personnel in the field for a quick response to emergencies.



Products bearing the "Motorola Solutions Sold and Supported" logo are premium products developed by Motorola Solutions partners to fulfill critical functions in MOTOTRBO systems. These products are tested and integrated in direct cooperation with Motorola. They are sold through Motorola Channel Partners and supported through Motorola's customer service teams.





# WAVE™ WORK GROUP COMMUNICATIONS

With wireline integration to MOTOTRBO systems, WAVE Work Group Communications lets your mobile and office workers connect with simple, secure and affordable broadband push-to-talk (PTT), wherever they are.

#### **WAVE 3000**

#### **EXTEND MOTOTRBO TO SMARTPHONES AND TABLETS**

WAVE 3000 delivers instantaneous and secure broadband PTT communications for small to medium businesses. Whether you're communicating with MOTOTRBO radio users or with other smartphone users, WAVE 3000 makes it simple. WAVE 3000 can be integrated with your MOTOTRBO Connect Plus and Capacity Plus systems, but can also be used as a standalone broadband PTT solution where radios are not required.

#### TURN YOUR APPLE OR ANDROID DEVICE INTO A MULTI-CHANNEL PTT HANDSET

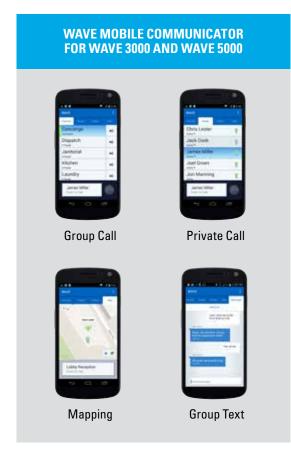
Not everyone needs or wants to carry a radio handset. But they do want instant, secure access to important communications wherever they are. With a WAVE Mobile Communicator installed on a smartphone, tablet or custom handheld, any user can access MOTOTRBO communications from any location, talking with groups of other users or individuals as required.

#### **WAVE 5000**

## INTEGRATE MOTOTRBO WITH ENTERPRISE IT AND EXTEND TO PCs, TELEPHONY, SMARTPHONES AND TABLETS

WAVE 5000 enables highly scalable, feature rich, enterprise grade PTT on broadband networks and devices so that critical, time-sensitive information flows quickly and securely between mobile workers, teams and citizens.

From two-way radios to smartphones, laptops to landlines, tablets to rugged handhelds, WAVE 5000 lets your users use the devices they already have and the networks they already subscribe to connect and talk to others both inside and outside of your communications environment. Wireline or donor radio integrations with MOTOTRBO ensure system scalability and deployment flexibility.



#### **WAVE COMMUNICATORS**

#### **ENABLE YOUR WORKFORCE TO CONNECT AND COLLABORATE**

Whatever the device or available network, WAVE has client applications that meet the needs of all types of users. Called WAVE Communicators, these applications provide the user interface to a WAVE communications system.



Define and manage your MOTOTRBO communications environment with WAVE Advanced Desktop Communicator.



Give authorized PC users controlled access to MOTOTRBO communications channels with the WAVE Desktop Communicator.



With WAVE Web Communicator you can use a web browser to access your MOTOTRBO radio channels.



With a wide range of applications and an expert Application Developer 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.



#### **ALARM MANAGEMENT**

Be alerted and respond rapidly with tracking applications that can monitor and remotely operate doors, gates, lights, sprinklers and more.



#### **INTEROPERABILITY SOLUTIONS**

Interoperate seamlessly and efficiently with other radio systems, telephony systems and mobile computing devices. Patch private calls, group calls and All Calls.



#### 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.



#### **SYSTEM MONITORING**

Stay in control of your communication system, with applications that track performance by site, channel, slot and talkgroup. Send automatic alerts to system administrators, and generate reports for long term trend analysis.



#### TEXT MESSAGING AND EMAIL

Quickly and easily share information when voice communication isn't practical. Send messages or directions that don't need an immediate response, or when voice calls are disrupting to employees in the field or on the road.



#### **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 to track assets over wide areas outdoors, and use beacons to track indoors.



#### **VOICE DISPATCH**

Control your mobile workforce from a centralised location. Dispatchers can be notified each time a radio is turned on and display a comprehensive view of who is available and who is not. GPS coordinates allow the dispatcher to immediately see where the user is on a map.



#### **WORK ORDER MANAGEMENT**

Manage workflows directly on the radio. Mobile workers can notify dispatch when the job is done, letting you track cycle time. Resolve customer issues faster, speed up response time and use your workforce more efficiently.



# **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.



#### **SERVICE FROM THE START (SFS)**

This multi-year repair programme offers you a choice of normal wear and tear or comprehensive coverage. No matter what happens to your MOTOTRBO device, you're covered.



#### PROGRAMMING SERVICES

These on-site or remote consultative technical support services optimize the operational efficiency of MOTOTRBO. They are ideal for programming and configuring MOTOTRBO systems and devices at the time of installation.



#### RF COVERAGE MAPPING SERVICE

These informational RF coverage maps increase the efficiency of the MOTOTRBO system during the design and deployment phase.



#### SITE INTEGRATION SERVICE

This on-site or remote consultative technical support service is ideal for integrating MOTOTRBO systems into your existing infrastructure. It reduces time during system deployment.



# INFRASTRUCTURE REPAIR/ INFRASTRUCTURE REPAIR WITH ADVANCED REPLACEMENT

This service provides expert repair of MOTOTRBO Controller (XRC) and Gateway (XRT) devices. As an option, you can receive a next-business-day replacement unit to minimize system downtime.



#### **IP NETWORKING**

This on-site or remote consultative technical support service maximizes your system's uptime. It validates and optimizes the IP network and site connectivity of your MOTOTRBO system during integration.

# **MOTOTRBO PORTABLE RADIO FEATURES**

		DP1000 SERIES DP2000e SERIES		DP4000e SERIES			DP4000 Ex SERIES		DP3441e	SL SI	SL SERIES	
FEATURE	DESCRIPTION	DP1400	DP2400e	DP2600e	DP4400e/ DP4401e	DP4600e/ DP4601e	DP4800e/ DP4801e	DP4401 Ex	DP4801 Ex	DP3441e	SL1600	SL4000e/ SL4010e
GENERAL SPECIFICATIONS												
Protocol	DMR digital or analogue communication	Analogue/ Digital or Analogue Only	Analogue/Digital		Analogue/Digital		Analogue/Digital		Analogue/ Digital	Analogue/ Digital	Digital	
Frequency Range	Capable of operating in the following frequency ranges	VHF & UHF 9	VHF, 300MHz & UHF <sup>9</sup>		VHF, 300MHz & UHF <sup>9</sup>		VHF & UHF9		VHF & UHF <sup>9</sup>	VHF & UHF 9	UHF <sup>9</sup>	
Max. Power Output	Radio's full power rating	4W UHF/ 5W VHF	4W UHF/5W VHF		4W UHF/5W VHF		1W UHF/VHF		4W UHF/ 5W VHF	3W	3W	
Max. Channel Capacity	Programmable channel capacity	16	16	128 2 Line	32	1000 5 Line	1000 5 Line	32	1000 5 Line	32	99 Active	1000 5 Line
Display	Displays provide easy access to advanced features	No	No	Monochrome	No	Colour	Colour	No	Colour	No	View	Colour
Keypad	Keypads provide access to radio controls, texting and telephony	No	No	Buttons	No	Buttons	Keypad	No	Keypad	No	No	Keypad
Integrated Wi-Fi	Enables remote updates for easier radio management	No		No		Yes1		N	lo	Yes	No	Yes
Integrated GPS	Embedded GPS receiver for location monitoring	No	No		Yes <sup>1</sup>		Yes		Yes	No	No	
Integrated GLONASS	Embedded GLONASS receiver for location monitoring	No	No		Yes <sup>1</sup>		No		Yes	No	No	
Integrated Bluetooth Capability	Wireless connection for audio accessories or data comms	No	No		Audio and Data <sup>1</sup>		No		Yes	No	Yes	
Permanent Bluetooth Discovery	"Always on" mode used by some location tracking applications		No		Option		No		Option	No	Option	
Dedicated Emergency Button	Orange programmable button for one-touch emergency calling	No	No		Yes		Yes		Yes	No	Yes	
Programmable Buttons	Allow access to most often used features with one press	2	2	4	3	5	5	3	5	2	1	2
Digital DMR Signalling	DMR standard digital voice communications	Yes <sup>8</sup>		Yes		Yes		Yes		Yes	Yes <sup>8</sup>	Yes
PL / DPL Signalling	Analogue Private Line / Digital Private Line compatible	Yes	Yes			Yes		Yes		Yes	Yes	No
Quick Call II Signalling	Analogue Quick Call II compatible	Yes	Yes		Yes		Yes		Yes	Yes	No	
MDC Signalling	Analogue MDC compatible	Yes		Yes	Yes		Yes		Yes	Yes	No	
5 Tone Signalling	Analogue 5 tone compatible	No		ption	NIa	Yes	Va-		es Von	Yes	No	No
DTMF Hot Keypad	DTMF tone compatible	No	No	No	No	No Oution7	Yes	No	Yes	No	No	No
MPT1327 Signalling	Analogue MPT1327 compatible (requires option board)	No No		No No	Option <sup>7</sup>		No No	Option <sup>7</sup> Yes	No	No No	No Yes <sup>4</sup>	
Option Board Capability  IMPRES Audio Compatible	Supports option boards for third party applications  IMPRES audio ensures your voice is heard clearer and louder	No	Yes		Yes Yes		Yes		Yes Yes	No	No	
IMPRES Energy Compatible	Use IMPRES batteries for longer life and optimal performance	No	Yes		Yes		Yes		No	No	No	
ATEX/IEC Ex Certified	Certified for use in potentially explosive environments	No		No		No		Yes		No	No	No
FM Intrinsically Safe	Factory Mutual (FM) approved for intrinsically safe use	No	No		Factory Mutual (FM)		No		No	No	No	
IP Rating	Rated sealing for dust and water ingression	IP54		P67	IP68		IP67		IP68	IP54	IP54	
Dimensions <sup>3</sup> (HxWxL)	Physical size	128 x 62 x 39 mm <sup>2</sup>	DP440xe: 130: 122 x 56 x 36 mm <sup>2</sup> DP460xe/ DP480xe: 130:		e: 130 x 55		34 mm		100 x 56 x 30 mm <sup>3</sup>		121 x 55 x 17 mm <sup>3</sup>	
Dimensions³ (Weight)	Physical weight	341 g	265 g	282 g	295 g	330 g	330 g	456 g	482 g	254 g	169 g	154 g
FEATURES AND FUNCTIONS												
Intelligent Audio	Automatic volume control based on background noise levels	No	Yes		Yes		Yes		Yes	No	Yes	
Emergency Alarm	Radio can initiate a Emergency call process	Yes	Yes		Yes		Yes		Yes	Yes	Yes	
Lone Worker	Initiates emergency if user does not respond to periodic alerts	Yes	,	Yes	Yes		Yes		Yes	Yes	Yes	
Remote Monitor	Radio can remotely activate another radio's microphone	Decode Only	Decode Only	Yes	Yes		Yes		Yes	Decode Only	Yes	
Freeform Text Messaging	User can enter and send free-form text messages	No		No	No	No	Yes	No	Yes	No	No	Yes
Pre-programmed Text Messaging	Radio can send pre-programmed text messages	Yes		Yes		Yes			es	Yes	Yes	Yes
Vibrate Alert	Vibrate silently alerts the user to an incoming call	No		ption	Option			No No		No	No	Yes
Covert Mode	Disable display, LEDs and audible tones for ultimate discretion	No	No		No		No		No	No	Yes	
Digital Telephone Patch	Ability to connect to telephone system (requires additional hardware)	No	Option		Yes		Yes		Yes	No	Yes	
Transmit Interrupt Decode Transmit Interrupt Encode	Radio transmissions can be interrupted by other radios  Radio can interrupt transmissions from other radios	Yes No	Yes Option		Yes		Yes		Yes Yes	Yes No	Yes Yes	
Basic Privacy	MOTOTRBO 16-bit encryption for protection against eavesdropping	Yes			Yes Yes			Yes Yes		Yes	Yes	Yes
Enhanced Privacy	MOTOTRBO 40-bit encryption for protection against eavesdropping	Yes		Yes Option		Yes		Yes		Yes	Yes	Yes
AES256 Encryption	Advanced Encryption Standard (AES) 256-bit encryption	No		No		Option		Option		Option	No	Option
Default Voice Announcement	Audible confirmation of selected operations of the radio	Yes		Yes	Yes			Yes		Yes	Yes	Yes
Programmable Voice Announcement	· · · · · · · · · · · · · · · · · · ·	Yes		Yes	Yes		Yes		Yes	Yes	Yes	
Radio Management	RM provides centralised radio configuration and code plug management	Yes	Yes		Yes		Yes		Yes	Yes	Yes	
Over the Air Programming (OTAP)	Remote, over-air programming using Radio Management	No	Yes		Yes		Yes		Yes	No	Yes	
Restricted Access to System	Prevents unauthorised users from communicating through the repeater	Yes	Yes		Yes		Yes		Yes	Yes	Yes	
Radio Enable/Disable	Radio can remotely disable and re-enable another radio	Decode Only	Decode Only	Yes	Decode Only	Yes	Yes	Decode Only	Yes	Decode Only	Decode Only	Yes
Integrated Mandown	Enhance personnel safety by monitoring movement	No		No		No			es	No	No	No
Dual Capacity Direct Mode	Use both TDMA time slots to double capacity without using	Yes	Yes		Yes		Yes		Yes	Yes	Yes	
	a repeater			-								
SYSTEM CONFIGURATIONS	Direct radio to radio approvide	V		V		V				V	V- :	V.
Direct Mode Operation	Direct radio-to-radio operation	Yes	Yes		Yes		Yes		Yes	Yes	Yes	
Single-Site Conventional	Single site conventional operation (channel selection by users)  Multi-site conventional operation (channel selection by users)	Yes Option	Yes		Yes Yes		Yes Yes		Yes Yes	Yes Option	Yes Yes	
IP Site Connect Capacity Plus	Single- or multi-site trunking (channel selection managed by	No	Yes Option		Yes		Yes		Yes	No	Yes	
Capacity Max	system) Multi-site DMR Tier III trunking with centralised controller	No			Option		Option		Option	No	Option	
	With the plant the mind anking with controlled	140	No No				No Option		Option	140	· -	
Connect Plus	Multi-site MOTOTRBO trunking with distributed controllers	No		No		Option		No	Ontion	No	No	Option <sup>5</sup>

# **MOTOTRBO MOBILE RADIO FEATURES**

			1000 RIES	DM2000 SERIES	DM4000e SERIES		
FEATURE	DESCRIPTION	DM1400		DM2600	DM4400e/ DM4401e	DM4600e/ DM4601e	
GENERAL SPECIFICATIONS							
Protocol	otocol DMR digital or analogue communication		ıe/Digital	Analogue/Digital	Analogu	e/Digital	
Frequency Range	Capable of operating in the following frequency ranges	VHF & UHF9		VHF & UHF <sup>9</sup>	VHF, 300M		
Max. Power Output	Radio's full power rating	25W or 45W VHF		25W or 45W VHF		5W VHF	
Max. Channel Capacity	Programmable channel capacity	25W or 40W UHF 16 160		25W or 40W UHF 256	32 32	1000	
Display	Displays provide easy access to advanced features	2-digit numeric	2 Line Monochrome	2 Line Monochrome	2-digit numeric	4 line full colour	
Keypad	Keypads provide access to radio controls, texting and telephony	No	Menu Buttons	Menu Buttons	No	Menu Buttons	
Integrated Wi-Fi	Enables remote updates for easier radio management	No		No	Ye	S <sup>1</sup>	
Integrated GPS	Embedded GPS receiver for location monitoring	No		No	Yes1		
Integrated GLONASS	Embedded GLONASS receiver for location monitoring	No		No	Yes1		
Integrated Bluetooth Capability	Wireless connection for audio accessories or data comms	No		No	Audio and Data <sup>1</sup>		
Permanent Bluetooth Discovery	"Always on" mode used by some location tracking applications	No		No	N	0	
Dedicated Emergency Button	Orange programmable button for one-touch emergency calling	No		No	N	0	
Programmable Buttons	Allow access to most often used features with one press	2	4	3	4	ļ	
Digital DMR Signalling	DMR standard digital voice communications	Y	es <sup>8</sup>	Yes	Ye	es	
PL / DPL Signalling	Analogue Private Line / Digital Private Line compatible	Y	es	Yes	Ye	Yes	
Quick Call II Signalling	Analogue Quick Call II compatible	Yes		Yes	Yes		
MDC Signalling	Analogue MDC compatible	Yes		Yes	Yes		
5 Tone Signalling	Analogue 5 tone compatible	No		Option	Yes		
DTMF Hot Keypad	DTMF tone compatible	Yes <sup>6</sup>		Yes <sup>6</sup>	Yes <sup>6</sup>		
MPT1327 Signalling	Analogue MPT1327 compatible (requires option board)	No		No	Option		
Option Board Capability	Supports option boards for third party applications	No		Yes	Yes		
IMPRES Audio Compatible	IMPRES audio ensures your voice is heard clearer and louder	No		No	Yes		
IP Rating	Rated sealing for dust and water ingression	IP54		IP54	IP:	54	
Dimensions (HxWxL)	Physical size	44 x 169 x 134 mm		44 x 169 x 134 mm	53 x 175 x 206 mm		
Dimensions (Weight)	sions (Weight) Physical weight		3 kg	1.3 kg	1.8 kg		
FEATURES AND FUNCTIONS							
Intelligent Audio	Automatic volume control based on background noise levels	1	No	Yes	Ye	es	
Emergency Alarm	Radio can initiate a Emergency call process	Yes		Yes	Yes		
Lone Worker	Initiates emergency if user does not respond to periodic alerts	Yes		Yes	Yes		
Remote Monitor	Radio can remotely activate another radio's microphone	Deco	de Only	Yes	Yes		
Freeform Text Messaging	User can enter and send free-form text messages	No		No	Yes		
Pre-programmed Text Messaging	rammed Text Messaging Radio can send pre-programmed text messages		es	Yes	Yes		
Digital Telephone Patch	ital Telephone Patch Ability to connect to telephone system (requires additional hardware)		No	Option	Yes		
Transmit Interrupt Decode	Radio transmissions can be interrupted by other radios	Yes		Yes	Yes		
Transmit Interrupt Encode	Radio can interrupt transmissions from other radios	No		Option	Yes		
Basic Privacy	MOTOTRBO 16-bit encryption for protection against eavesdropping	Yes		Yes	Yes		
Enhanced Privacy	MOTOTRBO 40-bit encryption for more robust protection	1	No	Option	Yes		
AES256 Encryption	Advanced Encryption Standard (AES) 256-bit encryption		No	No	Option		
Default Voice Announcement			es	Yes	Yes		
Programmable Voice Announcement			es	Yes	Yes		
Radio Management	RM provides centralised radio configuration and code plug management		es	Yes	Yes		
Over the Air Programming (OTAP)	Remote, over-air programming using Radio Management		No	Yes	Yes		
Restricted Access to System	Prevents unauthorised users from communicating through the repeater	Yes		Yes	Ye		
Radio Enable/Disable	Radio can remotely disable and re-enable another radio	Decode Only		Yes	Decode Only	Yes	
Dual Capacity Direct Mode	Use both TDMA time slots to double capacity without using a repeater		es	Yes	Ye		
Fixed Installation	Mobile radios can be used in a fixed installation such as a control room		es	Yes	Yes	Yes	
Control Station	Mobile acts as RF link between Application Server and radio network		No .	Yes	Yes Yes		
Remote Mount Control Head	Controls and display can be located separately from radio chassis		No	No	Opt	ion	
SYSTEM CONFIGURATIONS	Direct and in the continue	,		V			
Direct Mode Operation	Direct radio-to-radio operation	Yes		Yes	Yes		
Single-Site Conventional	Single site conventional operation (channel selection by users)	Yes		Yes	Yes		
IP Site Connect	Multi-site conventional operation (channel selection by users)	No		Yes	Yes		
Capacity Plus	Single- or multi-site trunking (channel selection managed by system)	No		Option	Yes		
Capacity Max	Multi-site DMR Tier III trunking with centralised controller		No .	Option	Yes		
Lonnect Plus	BAUUTI CITO BALLILLI WELL trupking with distributed controllers		مام	No	l ∩nt		

 $\label{lem:multi-site} \textbf{MOTOTRBO} \ trunking \ with \ distributed \ controllers$ 

**Connect Plus** 

No

No

Option

- <sup>1</sup> Integrated Bluetooth, GPS, GLONASS and Wi-Fi are supported on DP3441e, DP4401e, DP4601e, DP4801e, DM4401e & DM4601e only
- <sup>2</sup> Based on NiMH battery
- <sup>3</sup> Based on standard Li-Ion battery
- 4 Option board capability on SL4010e Only
- 5 SL4010e Only
- 6 Requires keypad microphone
- <sup>7</sup> DP4401e, DP4801e, DP4801 Ex are available with MPT Option Board factory fitted
- 8 Analogue-only models of DP1400, DM1400 and DM1600 also available. Analogue models can be upgraded to MOTOTRBO digital by purchasing a software license
- 9 VHF frequency range 136-174MHz. 300MHz range is 300-380MHz and 350-400HMz. UHF range is 403-527MHz, except DP1000, DP4000 Ex, SL1600, SL4000e Series, DM1000 and DM2000 Series when UHF range is 403-470MHz.

Whilst care has been taken to ensure the accuracy of the information contained in this bulletin, Motorola Solutions retains the right to make changes at any time without notice.

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

Today, from the production line 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.

To do more with digital throughout your enterprise, visit **www.motorolasolutions.com/mototrbo** or find your closest Motorola representative or authorised Partner at **www.motorolasolutions.com/contactus.** 

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Availability is subject to individual country law and regulations. All specifications shown are typical unless otherwise stated and are subject to change without notice.

Within the EU, radios and accessories must be ATEX certified for use in potentially explosive environments.

 $^{2}$  DP4801 Ex only - DP4401Ex is not compatible with Connect Plus.

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