

# MOTOTRBOTM TWO-WAY RADIO SELECTION GUIDE

REINVENT YOUR WORKFORCE WITH THE RIGHT RADIO







# REACH THE RIGHT PEOPLE, IN THE RIGHT PLACES





#### START WITH COVERAGE AND CAPACITY

Small campus or sprawling facility, single location or satellite work crews, how do you find the right radio for an enterprise? Whether businesses want to connect on site or communicate with a workforce on the go, coverage and capacity needs will drive the system type. First find out how many users, talkgroups and channels a customer will need.

#### **DEFINE WHO WILL USE THE DEVICE**

Tracking inventory throughout the warehouse, transporting equipment to the job site or managing guests across the resort, today's workforce must exchange business-critical voice and data communications. And MOTOTRBO makes efficient information-sharing a reality for businesses on the move.

Are your customers looking for feature-rich solutions in an ultrathin device? Then the SL8550 / SL8050 digital portables are the perfect fit — the ultimate in discreet communication, where function meets style, they complement executive attire.

Are your customers looking for high powered performance combined with day-in, day-out durability? The DGP™8000 Series portable radio meets the challenge, integrating voice and data and offering enhanced features such as GPS, integrated Bluetooth® audio and data, and Intelligent Audio.

Are your customers looking for a scalable, feature-rich solution without GPS? No need to look any further. The DGP™5000 Series offers integrated voice and data offering with the ability to add SW features, such as Transmit Interrupt and Enhanced Privacy, based on the customer's needs.

Are your customers seeking a tough-as-nails mobile that goes the distance and delivers expanded capabilities like integrated GPS, text messaging and Bluetooth® audio and data? Then the DGM™8000 Series is the ideal match.

Are your customers also looking for a scalable, feature-rich solution without GPS that goes the distance? The DGM™5000 Series is the answer.

For customers looking for a portable scalable solution to help them achieve greater productivity, enhanced safety and convenient cost-effectiveness, the DEP™550/DEP™570 Series can help reinvent their workplace and the way people collaborate.

For customers looking for a flexible portable and mobile solution to help them gradually migrate their analog conventional systems to digital systems to achieve greater productivity with clear digital voice communications, the DEP $^{\text{IM}}450/\text{DEM}^{\text{M}}300$ , DEM $^{\text{M}}400$  and DEM $^{\text{M}}500$  products are the perfect fit for basic analog and digital voice communications.

#### FIND THE RADIO THAT FITS

From the front desk to the factory dock, moving across campus or around the country, MOTOTRBO radios are connecting more people effortlessly and efficiently wherever they work. Information is instantaneous. Decision-making becomes easier. Safety gets stronger. Productivity increases. Service improves and customers are more satisfied.

Whether your customers want ultra-thin, rugged, or scalable portables or extra-tough mobiles with integrated Bluetooth® or industry-leading data applications, we have the right radio that fits their needs today and evolves with new features to address their requirements tomorrow.

Our radios are designed with a robust mix of features to increase workforce efficiency, productivity and safety — such as digital telephone patch for talking with a landline or mobile phone, emergency notification for use during critical situations, and intrinsically safe certifications for hazardous work environments.





#### INNOVATIVE FEATURES. INCREASED FUNCTIONALITY

With MOTOTRBO's expanded portfolio of digital radios, you can match the right device to the right worker — in any industry, environment or position. So whether your personnel are supervising a production line or spearheading a special event, covering a crowded stadium or completing a repair, there's a MOTOTRBO with features made for them.

#### **INTELLIGENT AUDIO**

MOTOTRBO's radio volume automatically adjusts to fit the environment's noise level. Now workers won't have to adjust radio volume to avoid missing a call in loud settings or disturb others when they move into quiet places.

#### **INTEGRATED BLUETOOTH**

Bluetooth® audio provides voice communication with exceptional clarity and the freedom to move without wires. Ideal for employees who must communicate discreetly or whose jobs necessitate hands-free communication.

#### **INTEGRATED GPS**

Track vehicles and people effortlessly with integrated location tracking. Unlike other GPS-capable radios, the MOTOTRBO module is incorporated in the handset so there's no additional equipment to attach, carry or maintain.

#### **INSTANT TEXT MESSAGING**

Quickly and easily share information when voice isn't an option. Text messaging is ideal for sending messages that don't need an immediate response, or when voice conversation could be disruptive. Messages are easy to read with large, full color, high resolution screens in the DGP™8000/DGP™5000 and DGM™8000/DGM™5000 Series.

#### **WORK ORDER TICKET MANAGEMENT**

The SL8550/SL8050 portable eliminates a number of steps to read work order tickets, with a five-line display that presents data at a glance — saving time and eliminating multiple scrolls through screens.

#### **MOTOTRBO MAKES IT HAPPEN**

Our expanded portfolio of MOTOTRBO radios, repeaters, accessories, data applications, software and services is reinventing digital communications and redefining everything a two-way radio can be. Whether workers are making deliveries, managing guests, repairing roads or restoring power lines, the right radio can change the way employees collaborate and transform an enterprise.

# **MOTOTRBO SYSTEMS**

# THE BEST FIT FOR ANY BUSINESS FOOTPRINT

Want to increase the number of users on a system, extend coverage, connect employees in different locations or deliver voice and data without adding new frequencies? MOTOTRBO has a scalable solution that fits your customers' locations, facilities and workforce.

- Conventional systems combine the best of two-way radio with analog and digital technology to deliver integrated voice and data communication, increased capacity, enhanced features, exceptional voice quality and extended battery performance.
- **IP Site Connect** uses the Internet to extend MOTOTRBO's voice and data capabilities. Link up to 15 sites at geographically dispersed locations, create wide-area coverage or enhance coverage at a single site with physical barriers.
- Capacity Plus is the single site digital trunking solution that maximizes
  the capacity of MOTOTRBO. Use it for a high volume of voice and data
  communication and link over a thousand users at a single site without
  adding new frequencies.
- Linked Capacity Plus is a multi-site digital trunking system configuration. It leverages the high capacity of Capacity Plus, with the



wide area coverage capabilities of IP Site Connect to keep your staff at various locations connected with an affordable high capacity, wide area trunking solution.

Connect Plus. Using site controllers, Connect Plus is a multi-site
high-capacity digital trunking system that helps you keep your mobile
workforce connected. Calls can queue during busy times until an
open channel is available, assign important users a priority status
when the system is in high demand, and use a wire-line console for
centralized dispatch.

	CONVENTIONAL	IP SITE CONNECT	CAPACITY PLUS TRUNKING Premium Feature	LINKED CAPACITY PLUS TRUNKING Función Premium	CONNECT PLUS TRUNKING
Number of Sites	1	Up to 15	1	15	70
Number of Users	100 per channel	100 per channel	Up to 1200	Up to 1200	Up to 2900 per site
Voice and Data Capacity	2 talk paths	2 talk paths	12 voice paths plus 24 additional dedicated data paths	16 voice paths and 8 data paths per site	29 voice or data paths per site
Architecture	Conventional	Conventional-based	Shared-trunking	Shared-trunking	Controller-based trunking
Transmit Interrupt	Yes	Yes	Yes	Yes	No
Digital Telephone Patch	Yes	Yes	Yes	Yes	Future
Enhanced Privacy	Yes	Yes	Yes	Yes	Yes
Priority Calling	No	No	No	No	Yes
Call Queuing	No	No	No	No	Yes
Automatic Roaming	N/A	Yes	N/A	Yes	Yes
Dynamic Site Assignment	N/A	No	No	No	Yes
Site Restriction	N/A	No	N/A	No	Yes
Third Party Data Applications	Yes	Yes	Yes	Yes	Yes
Frequency Bands	UHF, VHF, 800/900 MHz, 360 MHz	UHF, VHF, 800/900 MHz, 360 MHz	UHF, VHF, 800/900 MHz, 360 MHz	VHF, UHF, 800/900 MHz, 360 MHz	UHF, VHF, 800/900 MHz, 360 MHz
Restricted Access	Yes	Yes	Yes	Yes	Yes
Over-the-Air Programming	Yes	Yes	Yes	Yes	Yes

## **MOTOTRBO RADIOS**

#### SPECIFICALLY MADE FOR THE WAY PEOPLE WORK

## WHERE FUNCTION AND STYLE MEET SL SERIES

Optimize data applications, from enhanced work ticket management to text messaging, on a large, full-color screen that's easy to read. Experience integrated Bluetooth® data and Intelligent Audio, in a shape so sophisticated, it's unlike any radio you've ever used.

#### **OUTSTANDING DIGITAL AUDIO WITHIN YOUR REACH**

#### DEP™450 AND DEP™550/DEP™570 SERIES

The DEP™450 and DEP™550/DEP™570 Series offers best-in-class audio in a scalable solution that allows users to migrate at their own pace. With analog/digital interoperability and the ability to expand features with a simple software upgrade, you can make the transition to digital at your own pace and budget.

# TAKE YOUR ENTERPRISE EVEN FURTHER WITH FULL-FEATURED PORTABLES AND MOBILES

#### DGP™8550/DGP™8050 AND DGM™8500/DGM™8000 SERIES

Enjoy exceptional voice and data communication with integrated Bluetooth® audio and data; integrates GPS and text messaging, full color displays with day/night mode, and best-in-class audio that includes Intelligent Audio and customizable voice announcement.

#### DGP™5550/DGP™5050 AND DGM™5000/DGM™5500 SERIES

The DGP™5550/DGP™5050 portable and DGM™5000/DGM™5500 mobile Series offer exceptional voice and data solutions with integrated Bluetooth® technology and scalable software and hardware features.

# OUTSTANDING DIGITAL MOBILE AUDIO WITHIN YOUR REACH

#### DEM™300/DEM™400 AND DEM™500 SERIES

The DEM™300/DEM™400 and DEM™500 Series offer best-in-class audio in a scalable mobile solution that allows users to migrate at their own pace. With analog/digital interoperability and the possibility to expand features with a simple software upgrade, you can make the transition to digital at your own pace and budget.

FEATURE	DGP™8000 SERIES	DGP™5000 SERIES	
GPS	Included	Not Available	
Battery	2100 mAh	1500 mAh/2100 Optional	
IMPRES™ Battery and charger	Included	Optional	
Expansion Card	Integrated	Field install	
Enhanced Privacy	Included	Premium Feature	
IP Site Connect	Included	Premium Feature	
Transmit Interrupt	Included	Premium Feature	
Bluetooth® Data	Included	Premium Feature	
Bluetooth® Voice	Included	Included	
Capacity Plus	Premium Feature	Premium Feature	
Linked Capacity Plus	Premium Feature	Premium Feature	
Connect Plus	Premium Feature*	Premium Feature*	

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	PORTABLE RADIOS				
	DEP™450	SL Series	DEP™570/DEP™550 Series	DGP™6150/ DGP™4150 Series	DGP™8000/ DGP™5000 Series (*)
GENERAL SPECS					
Protocol	Analog/Digital	Digital	Analog/Digital	Analog/Digital	Analog/Digital
Max Power Output	4W UHF/5W VHF	2W UHF	4W UHF/5W VHF	4W 360 MHz/UHF 5W VHF 2,5W 800/900 MHz	4W 350MHz/UHF, 5W VHF
Max Channel Capacity	16	1000	128	1000	1000
Display	Without display	5 line color	5 line color; 2 line monochrome (DEP™570)	2 line black and white	5 line color
Bluetooth Capability	No	Integrated Audio and Data	No	Audio Only Via External Adapter	Integrated Audio and Data
Integrated GPS	No	No	No	Yes	Yes (**)
Intrinsically Safe	No	No	No	FM	FM
Expansion Card	No	Available only on SL8550	No	Yes	Yes
IP Rating	IP54	IP54	IP55	IP57	IP57
SOFTWARE FEATURES					
Optional Board Capability	No	Yes	No	Yes	Yes
Intelligent Audio	No	Yes	Yes	No	Yes
Text Messaging	No	Yes	Future	Yes	Yes
Vibrate Alert	No	Yes	No	No	No
Covert Mode	No	Yes	No	No	No
Digital Telephone Patch	No	Yes	No	Yes	Yes
Emergency Alarm	Yes	Yes	Yes	Yes	Yes
Transmit Interrupt	No	Yes	Premium Feature	Yes	Yes
Enhanced Privacy	No	Yes	Premium Feature	Yes	Yes
Voice/Channel Announcement	Default and Customizable Files	Default and Customizable Files	Default and Customizable Files	No	Default and Customizable Files
SYSTEM CONFIGURATION					
Conventional	Yes	Yes	Yes	Yes	Yes
IP Site Connect	No	Yes	Yes	Yes	Yes
Capacity Plus	No	Yes	No	Yes	Yes
Linked Capacity Plus	No	Yes	No	Yes	Yes
Connect Plus	No	Future	No	Yes	End of 2013

	MOBILE RADIOS				
	DEM™300	DEM™400	DEM™500	DGM™8000/DGM™5000 Series (*)	DGM™6100/DGM™4100 Series
GENERAL SPECS					
Protocol	Analog/Digital	Analog/Digital	Analog/Digital	Analog/Digital	Analog/Digital
Max Power Output	40W UHF/45W VHF	40W UHF/45W VHF	40W UHF/45W VHF	40W 350 MHz/UHF/45W VHF	40W 36 MHz/UHF 45W VHF 35W 800 MHz / 30W 900 MHz
Max Channel Capacity	16	64	128	1000	1000
Display	Numeric	2 line monochrome	2 line monochrome	4 line color	2 line black and white
Bluetooth Capability	No	No	No	Integrated Audio and Data	No
Integrated GPS	No	No	No	Yes	Yes
Intrinsically Safe	No	No	No	N/A	N/A
Expansion Card	No	No	Optional	Yes	Yes
IP Rating	IP54	IP54	IP54	IP54	IP54
SOFTWARE FEATURES					
Optional Board Capability	No	No	Yes	Yes	Yes
Intelligent Audio	No	No	Yes	Yes	No
Text Messaging	No	No	Yes	Yes	Yes
Vibrate Alert	No	No	No	No	No
Covert Mode	No	No	No	No	No
Digital Telephone Patch	No	No	No	Yes	Yes
Emergency Alarm	Yes	Yes	Yes	Yes	Yes
Transmit Interrupt	No	No	Premium Feature	Yes	Yes
Enhanced Privacy	No	No	Premium Feature	Yes	Yes
Voice/Channel Announcement	Default and Customizable Files	Default and Customizable Files	Default and Customizable Files	Default and Customizable Files	No
SYSTEM CONFIGURATION					
Conventional	Yes	Yes	Yes	Yes	Yes
IP Site Connect	No	No	Yes	Yes	Yes
Capacity Plus	No	No	No	Yes	Yes
Linked Capacity Plus	No	No	No	Yes	Yes
Connect Plus	No	No	No	Future	Yes

<sup>\*</sup> The DGP"5550/DGP" 5050 portable and DGM" 5000/DGM"5500 mobile Series offer voice and data solutions with integrated Bluetooth® technology and scalable software and hardware features.
\*\* GPS is not available in the DGP"5000 Series

### **MOTOTRBO REPEATERS**

#### **INCREASE USERS, EXTEND COVERAGE AND CONNECT WORKERS**

#### **DGR 6175 REPEATER**

Delivers 100% continuous duty at 35W/350 MHz, 40W/UHF, 45W/VHF and 35W/800 MHz and two simultaneous voice or data paths in digital TDMA mode. Operates in analog or digital mode and has an integrated power supply with connector for external DC battery backup.

# MTR3000 BASE STATION/REPEATER AND MTR2000 DIGITAL UPGRADE KIT

The MTR3000 is the ideal high power base station/repeater solution with its integrated 100W power amplifier and integrated AC/DC power supply. It has minimal cabling, rack space, expense and overall complexity. Features analog voting capability to improve subscriber talk in performance. The MTR2000 Digital Upgrade Kit allows your customers to begin enjoying the benefits of the MOTOTRBO system, while still leveraging their current investment in MTR2000 base station/repeaters equipment.

	DGR 6175	MTR3000	MTR3000	MTR2000 DIGITAL UPGRADE KIT
GENERAL SPECS				
Frequency Supported (MHz)	800 MHz 806-925 MHz (Rx) 851-870 MHz (Tx) 900 MHz 896-902 MHz (Rx) 935-941 MHz (Tx) VHF, UHF y 350 MHz	VHF: 136-174 MHz UHF1: 403-470 MHz UHF2: 470-524 MHz	800 MHz 806-925 MHz (Rx) 851-870 MHz (Tx)  900 MHz 896-902 MHz (Rx) 935-941 MHz (Tx)  Note: 800/900 MHz both supported in one base station	VHF:136-154MHz, 150-174MHz UHF1: 403-470MHz 800 MHz 806-825 MHz (Rx) 851-870 MHz (Tx) 900 MHz 896-902 MHz (Rx) 935-941 (Tx)
Power Output	800 MHz 10-35 W 900 MHZ 10-30 W VHF 1-25W/25-45W UHF R1 1-25W/25-40W UHF R2 1-40W	8-100 W	8-100 W	VHF 1-30/40W, 25-100W UHF1 2-30/40W, 25-100W 800/900 MHz 20-75W
Channel Spacing	12.5 kHz, 25 kHz (6.25e compliant) 12.5 kHz only for 900 MHz	12.5 kHz, 25 kHz 12.5 kHz (6.25e compliant)	12.5 kHz, 25 kHz 12.5 kHz (6.25e compliant)	12.5 kHz, 25 kHz 12.5 kHz (6.25e compliant)
Modes of Operation	Half-Duplex/Duplex	Simplex/Half-Duplex/Duplex	Half-Duplex/Duplex	Simplex (UHF/VHF only)/Half-Duplex/Duplex
RECEIVER				
Selectivity (TIA603D) (typical) 25 kHz/12.5 kHz	75 dB/50 dB VHF 80dB/50dB	VHF: 90dB/60dB UHF: 85dB/60dB	87dB/62dB	Same as MTR3000 for Respective Bands
Intermod Rejection 25 kHz/12.5 kHz	78dB UHF 75dB	85dB	90dB	Same as MTR3000 for Respective Bands
Spurious Rejection	75 dB VHF 80dB	85dB	90dB	Same as MTR3000 for Respective Bands
Analog Sensitivity 12 dB SINAD	0.30 uV (0.22 uV typical)	0.30 uV (0.22 uV typical)	0.28 uV (0.21 uV typical)	Same as MTR3000 for Respective Bands
Digital Sensitivity (5% BER)	0.30 uV (0.22 uV typical)	0.30 uV (0.20 uV typical)	0.28 uV	Same as MTR3000 for Respective Bands
TRANSMITTER				
Rated Output Power	40 W per band	100 W	100 W	Same as original MTR2000 specifications
Intermodulation Attenuation	40 dB	55 dB	55 dB	Same as original MTR2000 specifications
Adjacent Channel Power 25 kHz/12.5 kHz	70dB/60dB 800MHz 60dB/50dB	75 dB/60 dB	75 dB/60 dB	75 dB/60 dB
Spurious Harmonics and Emissions	-76 dBc	90 dB	800MHz: 90dB 900MHz: 86dB	Same as original MTR2000 specifications
FEATURES				
Battery Backup	Yes - Trickle Charge	Yes	Yes	Yes
Analog Voting	No	Yes	Yes	Requires backplane upgrade
Satellite Receiver	No	Yes	Yes	No
Wireline	Analog mode only via DC or TRC adapter	Integrated TRC and DC Remote Control	Integrated TRC and DC Remote Control	Requires backplane upgrade Integrated TRC and DC Remote Control

A more detailed product comparison matrix is available on Motorola Online. For more information on how to reinvent your workforce with the right radio, visit

www.motorolasolutions.com/caribbean/mototrbo

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