

# MOTOTRBO™ DGP™ 8000e AND DGP™ 5000e SERIES

## YOU'RE COMPLETELY CONNECTED

With this dynamic evolution of MOTOTRBO digital two-way radios, you're better connected, safer and more productive. The DGP™ 8000e and DGP™ 5000e Series is designed for the skilled professional who refuses to compromise. With high performance integrated voice and data, and advanced features for efficient operation, these next-generation radios deliver complete connectivity to your organization.

### CONNECTED

The MOTOTRBO DGP™ 8000e and DGP™ 5000e Series is a family of DMR standard digital radios that delivers operations-critical voice and data. Bluetooth® audio lets you talk without wires, integrated Wi-Fi enables remote management, and indoor and outdoor location-tracking capabilities give you total visibility of your resources. With support for trunking as well as legacy analog technology, you can keep your organization connected as it grows.

### SAFE

Safeguard your staff with responsive push-to-talk technology. The prominent emergency button on DGP™ 8000e and DGP™ 5000e Series radios summons help with one touch, using Transmit Interrupt to pre-empt other workers when necessary. An integrated accelerometer senses if you've fallen, and can automatically call for assistance. The radio is tested to military standards and is waterproof to IP68: it won't let you down.

### PRODUCTIVE

Text messaging and Work Order Ticketing simplify complex communications, and data capabilities support advanced applications. Featuring a redesigned audio amplifier, these radios deliver louder, clearer speech, with industrial noise cancellation for better intelligibility. The latest energy technology delivers up to 27 hours of battery life for 3-shift working, and an improved receiver boosts range by up to 8%.



### WHAT'S NEW IN THESE NEXT GENERATION RADIOS

#### SAFER

- Integrated accelerometer for optional Man Down feature
- Bluetooth® 4.0 with indoor location tracking capability
- Multi-constellation GPS for increased location accuracy

#### MORE EFFICIENT

- Integrated Wi-Fi with over-the-air firmware update capability
- Upgraded audio for greater clarity at high volume
- Improved expandability for future features

#### MORE EFFECTIVE

- New energy technology for up to 27 hours battery life
- Improved receiver for up to 8% greater range
- IP68 rating (2 meters, 2 hours) to shrug off dust and water



	Full Keypad (FKP) Model				No Keypad (NKP) Model			
Model Number	DGP™ 8550e*, DGP™ 5550e				DGP™ 8050e*, DGP™ 5050e			
Band	VHF	350	UHF	800	VHF	350	UHF	800
<b>GENERAL SPECIFICATIONS</b>								
Frequency	136-174 MHz	350-400 MHz	403-527 MHz	806-825 MHz, 851 -870 MHz	136-174 MHz	350-400 MHz	403-527 MHz	806-825 MHz, 851 -870 MHz
High Power Output	5 W	4 W	4 W	2.5 W	5 W	4 W	4 W	2.5 W
Low Power Output	1 W	1 W	1 W	1 W	1 W	1 W	1 W	1 W
Channel Spacing	12.5, 20, 25 kHz							
Channel Capacity	1000				32			
Dimensions (H x W x D), Radio + Slim Battery	130 x 55 x 36 mm (5.1 x 2.2 x 1.4 in)				130 x 55 x 34 mm (5.1 x 2.2 x 1.3 in)			
Weight, Radio + Slim Battery	315 g (11 oz)				290 g (10 oz)			
Dimensions (H x W x D), Radio + High Capacity Battery	130 x 55 x 41 mm (5.1 x 2.2 x 1.6 in)				130 x 55 x 40 mm (5.1 x 2.2 x 1.6 in)			
Weight, Radio + High Capacity Battery	347 g (12 oz)				322 g (11 oz)			
FCC Description	AZ489FT7066	-	AZ489FT7065	AZ489FT7067	AZ489FT7066	-	AZ489FT7065	AZ489FT7067
Digital / Analog Battery Life <sup>1</sup> , Slim 1650 mAh Battery	16.0 / 12.0 hrs	15.5 / 11.5 hrs		15.5 / 12.0 hrs	16.0 / 12.0 hrs	15.5 / 11.5 hrs		15.5 / 12.0 hrs
Digital / Analog Battery Life <sup>1</sup> , High Capacity 2250 mAh Battery	22.0 / 16.5 hrs	21.0 / 16.0 hrs		21.0 / 17.5 hrs	22.0 / 16.5 hrs	21.0 / 16.0 hrs		21.0 / 17.5 hrs
Digital / Analog Battery Life <sup>1</sup> , High Capacity LV 3000 mAh Battery	29.0 / 22.0 hrs	28.0 / 21.5 hrs		28.0 / 23.0 hrs	29.0 / 22.0 hrs	28.0 / 21.5 hrs		28.0 / 23.0 hrs
Power Supply (Nominal)	7.5 V							
<b>RECEIVER SPECIFICATIONS</b>								
Analog Sensitivity (12dB SINAD)	0.16 uV		0.22 uV		0.16 uV		0.22 uV	
Digital Sensitivity (5% BER)	0.14 uV		0.19 uV		0.14 uV		0.19 uV	
Frequency Stability	± 0.5 ppm							



## ALL MODELS

### TRANSMITTER SPECIFICATIONS

Hum and Noise	-40 dB (12.5 kHz channel), -45 dB (25 kHz channel)
Conducted Spurious Emissions (TIA603D)	-57 dBm
4FSK Digital Modulation	12.5 kHz Data: 7K60F1D and 7K60FXD 12.5 kHz Voice: 7K60F1E and 7K60FXE Combination of 12.5 kHz Voice and Data: 7K60F1W
Digital Protocol	ETSI TS 102 361-1, -2, -3
Conducted/Radiated Emissions (TIA603D)	-36 dBm < 1GHz, -30 dBm > 1GHz
Adjacent Channel Power	60dB (12.5 kHz channel), 70dB (25 kHz channel)

### RECEIVER SPECIFICATIONS

Hum and Noise	-40 dB (12.5 kHz channel), -45 dB (25 kHz channel)
Conducted Spurious Emissions (TIA603D)	-57 dBm
Intermodulation (TIA603D)	70 dB
Adjacent Channel Selectivity, (TIA603A)-1T	60 dB (12.5 kHz channel), 70 dB (25 kHz channel)
Adjacent Channel Selectivity, (TIA603D)-2T and (TIA603C)-2T	45 dB (12.5 kHz channel), 70 dB (25 kHz channel)
Spurious Rejection (TIA603D)	70 dB

### AUDIO SPECIFICATIONS

Digital Vocoder Type	AMBE+2™
Audio Response	TIA603D
Rated Audio	0.5 W
Audio Distortion at Rated Audio	3%

#### NOTES

1: Typical battery life, 5/5/90 profile at maximum transmitter power with GPS, Bluetooth, Wi-Fi and Option Board applications disabled. Actual observed runtimes may vary.  
2: Specialized low-temperature battery required for operation below 14 °F (-10 °C).

Specifications are subject to change without notice. All specifications shown are typical values.

\* Check for availability in your country for 25 kHz channels

### BLUETOOTH SPECIFICATIONS

Version	4.0*
Range	Class 2, 33 ft (10 m)
Supported Profiles	Bluetooth Headset Profile (HSP), Serial Port Profile (SPP), Motorola fast push-to-talk.
Simultaneous Connections	1 x audio accessory and 1 x data device
Permanent Discoverable Mode	Optional

### GPS SPECIFICATIONS

Constellation Support	GPS
Time To First Fix, Cold Start	< 60 s
Time To First Fix, Hot Start	< 10 s
Horizontal Accuracy	< 16.5 ft (< 5 m)

### Wi-Fi SPECIFICATIONS

Standards Supported	IEEE 802.11b, 802.11g, 802.11n
Security Protocol Supported	WPA, WPA-2, WEP
Maximum Number of SSIDs	128 (64 for NKP Models)

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature <sup>2</sup>	-22° F to 140° F (-30° C to +60° C)
Storage Temperature	-40° F to 185° F (-40° C to +85° C)
Thermal Shock	Per MIL-STD table
Humidity	Per MIL-STD table
Electrostatic Discharge	IEC 61000-4-2 Level 3
Dust and Water Intrusion	IEC 60529 - IP68, 6.6 ft (2 m) for 2 hrs
Salt Fog	Per MIL-STD table
Packaging Test	MIL-STD 810D and E

### HAZLOC CERTIFICATION

TIA-4950	UL-Approved for use in Hazardous Locations, Division 1, Class I, II, III, Groups C, D, E, F, G; Division 2, Class1, Groups A, B, C, D when properly equipped with Motorola UL-Approved battery.
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\*Option board and GPS ready in DGP8550e and DGP8050e only

### CONNECTION

- VHF Band, 5 W
- UHF Band, 4 W
- 350 Band, 4W
- 800 Band, 2.5 W
- FKP models: Colour screen, full keypad, 1000 channels
- NKP models: No screen or keypad, 32 channels
- Analog and Digital
- Voice and Data
- Integrated Wi-Fi
- Canned Text Messaging
- Freeform Text Messaging (FKP models)
- Work Order Ticketing
- Multi-constellation GNSS
- High Efficiency GNSS
- Event-Driven Location Update
- Bluetooth Audio
- Bluetooth Data
- Bluetooth Permanent Discovery Mode (optional)
- Bluetooth Indoor Location Tracking
- Voice Announcement
- Text to Speech (optional)
- Option Board
- Home Channel Reminder

### AUDIO

- Intelligent Audio
- IMPRES Audio
- SINC+ Noise Cancellation (optional)
- Acoustic Feedback Suppressor
- Microphone Distortion Control
- User-Selectable Audio Profiles
- Switch Speaker
- Trill Enhancement

### CUSTOMIZATION

- Customized Accessories
- Multi-Button PTT (optional)
- 5 Programmable Buttons (3 for NKP model)
- Emergency Button

### MANAGEMENT

- Radio Management (optional)
- OTAP (optional)
- IMPRES Energy
- IMPRES Battery Management (optional)
- Over the Air Battery Management (optional)

### SAFETY

- Integrated Accelerometer
- Man Down (optional)
- Lone Worker
- Basic Privacy
- Enhanced Privacy
- AES Encryption (optional)
- Transmit Interrupt
- Emergency
- Emergency Search Tone
- Remote Monitor
- Radio Disable / Enable
- HazLoc certification (optional)
- Waterproof to IP68
- Rugged to MIL-STD

### SYSTEMS

- Dual Capacity Direct Mode
- Conventional
- IP Site Connect
- Capacity Plus Single Site (optional)
- Capacity Plus Multi-Site (optional)
- Capacity Max (optional)
- Connect Plus (optional)

### MILITARY STANDARDS

	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F		MIL-STD 810G	
	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.5	II
High Temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot	501.5	I/A1, II/A1
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1	502.5	I/C3, II/C1
Temperature Shock	503.1	I	503.2	A1/C3	503.3	A1/C3	503.4	I	503.5	I-C
Solar Radiation	505.1	II	505.2	I/Hot-Dry	505.3	I/Hot-Dry	505.4	I/Hot-Dry	505.5	I/A1
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III	506.5	I, III
Humidity	507.1	II	507.2	II/Hot-Humid	507.3	II/Hot-Humid	507.4	-	507.5	II/Hot-Humid
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	-	509.5	-
Dust	510.1	I, II	510.2	I, II	510.3	I, II	510.4	I, II	510.5	I, II
Vibration	514.2	VIII/F, W, XI	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24, II/5	514.6	I/24, II/5
Shock	516.2	II	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV

## PRODUCT DATA SHEET

MOTOTRBO™ DGP™ 8000e/DGP™ 5000e SERIES  
DIGITAL TWO-WAY RADIOS

### BLUETOOTH

Connect to your radio without wires, for extra comfort and safety. A full portfolio of Bluetooth headsets and earpieces is available.



### REMOTE SPEAKER MICROPHONE

Improve usability with a Remote Speaker Microphone (RSM). Choose from standard, heavy duty and noise-cancelling models, with or without secondary earpiece connector.



### SMART ENERGY

Motorola's patented IMPRES™ Energy technology gives you smart batteries to keep your radio powered for longer. Choose from a range of batteries, chargers, and management tools.



### EARPIECES

For all-day comfort, choose from our range of earpieces. Lightweight or heavy duty, discreet or rugged, with or without built-in hearing protection.



### CARRY SOLUTIONS

However you choose to wear or carry your radio, we have a solution for you. From leather cases to belts and belt clips to bags, straps and pouches.



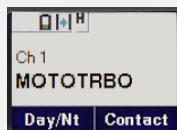
### HEADSETS

In a noisy workplace, you need to protect your workers' hearing. Whether it's heavy duty noise reduction or innovative temple transducer technology, our headsets can help.



### SCREEN PROTECTORS

In ultra-harsh environments, your radio's screen can get scratched and abraded. Keep it clear and readable with these durable pre-cut screen protectors.



### VIBRATING BELTCLIP

When it's unacceptable to miss calls in a noisy environment, equip your radios with a powerful vibrating belt clip for an extra physical alert.



To get connected with MOTOTRBO, please contact your local Motorola representative or visit [motorolasolutions.com/MOTOTRBO](http://motorolasolutions.com/MOTOTRBO)

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