With this dynamic evolution of MOTOTRBO digital two-way radios, you’re better connected, safer and more productive. The DGM™ 8000e and DGM™ 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**

MOTOTRBO DGM™ 8000e and DGM™ 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 MOTOTRBO DGM™ 8000e and DGM™ 5000e Series radios summons help with one touch, using Transmit Interrupt to pre-empt other workers when necessary. A range of safe driving accessories allow your workers to communicate hands-free, and Text-to-Speech technology helps your drivers keep their eyes on the road.

**PRODUCTIVE**

Text messaging and Work Order Ticketing simplify complex communications, and data capabilities support advanced applications. Featuring a high power audio amplifier, these radios deliver loud, clear speech, with background noise cancellation for better intelligibility. MOTOTRBO DGM™ 8000e and DGM™ 5000e Series radios are also ideal as a dispatch solution, with desktop microphones and a rugged, durable design for everyday use.

**WHAT’S NEW IN THESE NEXT GENERATION RADIOS**

**SAFER**

- 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
- Improved expandability for future features
### PRODUCT DATA SHEET
MOTOTRBO™ DGM™ 8000e AND DGM™ 5000e SERIES
DIGITAL TWO-WAY RADIOS

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Alphanumeric Model</th>
<th>Numeric Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DGM 8500e*, DGM 5500e</td>
<td>DGM™ 8500e</td>
</tr>
<tr>
<td>Band</td>
<td>VHF</td>
<td>UHF Band 1</td>
</tr>
<tr>
<td>Frequency</td>
<td>136-174 MHz</td>
<td>403-470 MHz</td>
</tr>
<tr>
<td>Low Power Output</td>
<td>1-25 W</td>
<td>1-25 W</td>
</tr>
<tr>
<td>Channel Spacing</td>
<td>12.5, 20, 25 kHz</td>
<td></td>
</tr>
<tr>
<td>Channel Capacity</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>Dimensions (H x W x D)</td>
<td>2.1 x 6.9 x 8.1 in (53 x 175 x 206 mm)</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>3.9 lb (1.8 kg)</td>
<td></td>
</tr>
<tr>
<td>Power Supply (Nominal)</td>
<td>12 V</td>
<td></td>
</tr>
<tr>
<td>Max Current Drain, Standby</td>
<td>0.8 A</td>
<td></td>
</tr>
<tr>
<td>Max Current Drain, Receive</td>
<td>2 A</td>
<td></td>
</tr>
<tr>
<td>Max Current Drain, Transmit (Low Power)</td>
<td>11 A</td>
<td>-</td>
</tr>
<tr>
<td>Max Current Drain, Transmit (High Power)</td>
<td>14.5 A</td>
<td>12 A</td>
</tr>
<tr>
<td>FCC Description (Low Power)</td>
<td>AZ492FT7082</td>
<td>AZ492FT7080</td>
</tr>
<tr>
<td>FCC Description (High Power)</td>
<td>AZ492FT7081</td>
<td>AZ492FT7079</td>
</tr>
<tr>
<td>Frequency Stability</td>
<td>± 0.5 ppm</td>
<td></td>
</tr>
</tbody>
</table>
DIGITAL TWO-WAY RADIOS

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

MOTOTRBO ™ DGM™ 8000 e AND DGM™ 5000 e SERIES

**PRODUCT DATA SHEET**

**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 < 1 GHz, -30 dBm > 1 GHz
- 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
- Analog Sensitivity (12dB SINAD): 0.3 uV (0.22 uV typical)
- Digital Sensitivity (5% BER): 0.25 uV (0.19 uV typical)
- Intermodulation (TIA603D):
  - VHF: 76dB
  - UHF1, UHF2, 350, 800/900: 75dB
- Adjacent Channel Selectivity (TIA603A)-1T:
  - VHF: 65 dB (12.5 kHz channel), 80 dB (25 kHz channel)
  - UHF1, UHF2, 350, 800/900: 75 dB (25 kHz channel)
- Adjacent Channel Selectivity (TIA603D)-2T & (TIA603C)-2T:
  - VHF: 50 dB (12.5 kHz channel), 80 dB (25 kHz channel)
  - UHF1, UHF2, 350, 800/900: 75 dB (25 kHz channel)
- Spurious Rejection (TIA603D):
  - VHF: 80 dB
  - UHF1, UHF2, 350, 800/900: 75 dB

**NOTES**

1. Check for availability in your country for 25kHz channels
2. Specifications are subject to change without notice. All specifications shown are typical values

**AUDIO SPECIFICATIONS**

- Digital Vocoder Type: AMBE+2™
- Audio Response: TIA603D
- Rated Audio:
  - 3 W (internal speaker), 7.5 W (external 8 ohm speaker),
  - 13 W (external 4 ohm speaker)
- Audio Distortion at Rated Audio: 3%

**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
- Maximum Number of SSIDs: 128 (64 for Numeric Models)

**ENVIRONMENTAL SPECIFICATIONS**

- Operating Temperature: -22° F to 140° F (-30° C to +60° C)
- Storage Temperature: -40° F to 185° F (-40° C to +85° C)
- Electrostatic Discharge: IEC 61000-4-2 Level 3
- Dust and Water Intrusion: IEC 60529 - IP54

**MILITARY STANDARDS**

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Low Pressure</td>
<td>500.1 I</td>
<td>500.2 II</td>
<td>500.3 II</td>
<td>500.4 II</td>
</tr>
<tr>
<td>High Temp</td>
<td>502.1 I, II</td>
<td>502.2 I/A1, II/A1</td>
<td>502.3 III/A1</td>
<td>502.4 III/A1</td>
</tr>
<tr>
<td>Low Temp</td>
<td>502.3 I</td>
<td>502.4 I/C</td>
<td>502.5 III/C</td>
<td>502.6 III/C</td>
</tr>
<tr>
<td>Temp Shock</td>
<td>503.1 I</td>
<td>503.2 A/C</td>
<td>503.3 A/C</td>
<td>503.4 I</td>
</tr>
<tr>
<td>Solar Radiation</td>
<td>505.1 II</td>
<td>505.2</td>
<td>505.3</td>
<td>505.4</td>
</tr>
<tr>
<td>Rain</td>
<td>506.1 I, II</td>
<td>506.2 I, II</td>
<td>506.3 I, II</td>
<td>506.4 I, II</td>
</tr>
<tr>
<td>Humidity</td>
<td>507.1 I</td>
<td>507.2</td>
<td>507.3</td>
<td>507.4</td>
</tr>
<tr>
<td>Salt Fog</td>
<td>509.1 I</td>
<td>509.2 I</td>
<td>509.3 I</td>
<td>509.4 I</td>
</tr>
<tr>
<td>Dust</td>
<td>510.1 I</td>
<td>510.2 I</td>
<td>510.3 I, II</td>
<td>510.4 I, II</td>
</tr>
<tr>
<td>Vibration</td>
<td>514.2 IV/Cat/W</td>
<td>514.3</td>
<td>514.4</td>
<td>514.5</td>
</tr>
<tr>
<td>Shock</td>
<td>516.2 I, II</td>
<td>516.3 I, IV</td>
<td>516.4 I, IV</td>
<td>516.5 I, IV</td>
</tr>
</tbody>
</table>

**CONNECTION**

- VHF Band, 45 W
- UHF Band, 40 W
- 800/900 Band, 30 W
- 45, 40, 30 W Transmit Power
- Alphanumeric Model: Color Screen, 1000 Channels
- Numeric Model: Numeric Display, 32 Channels
- Analog and Digital
- Voice and Data
- Integrated Wi-Fi
- Canned Text Messaging
- Freeform Text Messaging (Requires Keypad Mic)
- Work Order Ticketing
- Indoor Location-Tracking
- Event-Driven Location Update
- Bluetooth Audio
- Bluetooth Data
- Voice Announcement
- Text to Speech
- Option Board
- Home Channel Reminder

**AUDIO**

- Intelligent Audio
- IMPRES Audio
- Acoustic Feedback Suppressor
- Microphone Distortion Control
- User-Selectable Audio Profiles
- Trill Enhancement
- SINC+ Noise Cancellation

**PERSONALIZATION**

- Wide Range of Accessories
- Multi-Button PTT
- 4 Programmable Buttons

**MANAGEMENT**

- Radio Management
- Over-the-Air Software Update

**SAFETY**

- Lone Worker
- Basic Privacy
- Enhanced Privacy
- Transmit Interrupt
- Digital Emergency
- Emergency Search Tone
- Remote Monitor
- Radio Disable / Enable
- Waterproof to IP54
- Rugged to MIL-STD 810

**SYSTEMS**

- Dual Capacity Direct Mode
- Conventional
- IP Site Connect
- Capacity Plus
- Capacity Max
- Connect Plus
LONG RANGE WIRELESS MOBILE MICROPHONE

Designed for customers who depend on their high power mobile radio but must work outside of their vehicle, the Long Range Wireless Mobile Microphone keeps you connected and communicating up to 330 ft (100 m) from your vehicle. With instant touch pairing and in-vehicle charging cradles, you can maintain critical communications even on remote job sites.

HANDHELD CONTROL HEAD

When space is tight, and you need the flexibility to operate your radio from anywhere in the vehicle, opt for the Handheld Control Head. Its color screen, full keypad and extendable cord gives you complete control within 8 m (26 ft) of the radio.

BLUETOOTH AUDIO

Improve the mobility of your work teams without wires getting tangled. Your delivery driver can sort through packages on the back of the delivery truck, your bus driver can check students in the back of the bus, and your limousine driver can open the door for their passengers and stay connected.

CONNECT AND COORDINATE EFFORTLESSLY

IMPRES™ Smart Audio accessories communicate with the radio to suppress ambient noise, improve voice intelligibility and amplify loudness. Choose from a range of standard and heavy duty microphones, with or without keypads and navigation buttons.

INTERACT SAFELY WITHOUT DISTRACTIONS

To help your drivers keep their eyes on the road, you can customize your installation with the IMPRES Visor Microphone and Remote Push-to-Talk.

To get connected with MOTOTRBO, please contact your local Motorola representative or visit motorolasolutions.com/mototrbo