



# MOTOTRBO™ DP2000e SERIES

YOU'RE MORE PRODUCTIVE, CONNECTED

With this dynamic evolution of MOTOTRBO digital two-way radios, you're better connected, safer and more efficient. The DP2000e Series is designed for the everyday worker who needs effective communications. With systems support and loud, clear audio, these next-generation radios deliver cost-effective connectivity to your organisation.

## CONNECTED

The MOTOTRBO DP2000e Series is a family of ETSI DMR Standards compliant digital radios that delivers operation-critical voice communications. With a single button push, workers can communicate for greater efficiency and enhanced safety. With support for basic trunking as well as legacy analogue technology, you can keep your organisation connected as it grows.

## SAFE

The DP2000e Series is designed to improve safety in your organisation, with the rapid response capability of instantaneous push-to-talk communications. Even if a worker is unresponsive, you can remotely activate the radio to check that your worker is safe. Privacy options are available to prevent others listening in on your communications, and radios can be remotely disabled if they are misplaced or stolen. New TIA4950 certified models are available for use in hazardous locations where flammable or explosive materials are present.

## EFFICIENT

With new noise cancellation technology and enhanced clarity, the DP2000e Series delivers excellent audio quality to make your workplace communications clearly intelligible. The latest energy technology delivers up to 28 hours of battery life for 3-shift working, and the optional IMPRES Over-the-Air Battery Management tool helps you maximise battery lifetime. An improved receiver boosts range by up to 8%, allowing you to reach further than ever.



## WHAT'S NEW IN THESE NEXT GENERATION RADIOS

- Enhanced audio quality
- Improved expandability
- Better battery life (up to 28 hours)
- Better range (up to 8%)
- Better waterproofing (IP67)
- TIA4950 certified HazLoc models available

**PRODUCT DATA SHEET**  
**MOTOTRBO™ DP2000e SERIES**  
**DIGITAL TWO-WAY RADIOS**



|  | Limited Keypad (LKP) Model     |                            |             | No Keypad (NKP) Model |                            |             |
|--|--------------------------------|----------------------------|-------------|-----------------------|----------------------------|-------------|
| Model Number                                     | DP2600e                        |                            |             | DP2400e               |                            |             |
| Band   | VHF                            | 300MHz                     | UHF         | VHF                   | 300MHz                     | UHF         |
| <b>GENERAL SPECIFICATIONS</b>                    |                                |                            |             |                       |                            |             |
| Frequency  | 136-174 MHz                    | 300-360 MHz<br>350-400 MHz | 403-527 MHz | 136-174 MHz           | 300-360 MHz<br>350-400 MHz | 403-527 MHz |
| High Power Output                                | 5 W                            | 4 W                        | 4 W         | 5 W                   | 4 W                        | 4 W         |
| Low Power Output                                 | 1 W                            | 1 W                        | 1 W         | 1 W                   | 1 W                        | 1 W         |
| Channel Spacing                                  | 12.5, 20 <sup>1</sup> , 25 kHz |                            |             |                       |                            |             |
| Channel Capacity                                 | 128                            |                            |             | 16                    |                            |             |
| NiMH 1400mAh IP67 Battery                        |                                |                            |             |                       |                            |             |
| Dimensions with Radio (H x W x D)                | 122 x 56 x 39 mm               |                            |             | 122 x 56 x 39 mm      |                            |             |
| Weight with Radio                                | 367 g                          |                            |             | 350 g                 |                            |             |
| Digital / Analogue Battery Life <sup>3</sup>     | 13.0 / 9.5 hrs                 | 12.0 / 9.5 hrs             |             | 13.0 / 9.5 hrs        | 12.0 / 9.5 hrs             |             |
| Li-ion 1400mAh Low Temp IP57 Battery             |                                |                            |             |                       |                            |             |
| Dimensions with Radio (H x W x D)                | 122 x 56 x 42 mm               |                            |             | 122 x 56 x 42 mm      |                            |             |
| Weight with Radio                                | 307 g                          |                            |             | 290 g                 |                            |             |
| Digital / Analogue Battery Life <sup>3</sup>     | 13.0 / 9.5 hrs                 | 12.0 / 9.5 hrs             |             | 13.0 / 9.5 hrs        | 12.0 / 9.5 hrs             |             |
| Slim IMPRES Li-ion 1650mAh IP67 Battery          |                                |                            |             |                       |                            |             |
| Dimensions with Radio (H x W x D)                | 122 x 56 x 36 mm               |                            |             | 122 x 56 x 36 mm      |                            |             |
| Weight with Radio                                | 282 g                          |                            |             | 265 g                 |                            |             |
| Digital / Analogue Battery Life <sup>3</sup>     | 16.0 / 11.5 hrs                | 15.0 / 11.5 hrs            |             | 16.0 / 11.5 hrs       | 15.0 / 11.5 hrs            |             |
| IMPRES Li-ion 2100mAh IP68 Battery               |                                |                            |             |                       |                            |             |
| Dimensions with Radio (H x W x D)                | 122 x 56 x 36 mm               |                            |             | 122 x 56 x 36 mm      |                            |             |
| Weight with Radio                                | 292 g                          |                            |             | 275 g                 |                            |             |
| Digital / Analogue Battery Life <sup>3</sup>     | 19.5 / 14.0 hrs                | 18.5 / 14.0 hrs            |             | 19.5 / 14.0 hrs       | 18.5 / 14.0 hrs            |             |
| IMPRES Li-ion 2250mAh IP67 Battery               |                                |                            |             |                       |                            |             |
| Dimensions with Radio (H x W x D)                | 122 x 56 x 42 mm               |                            |             | 122 x 56 x 42 mm      |                            |             |
| Weight with Radio                                | 307 g                          |                            |             | 290 g                 |                            |             |
| Digital / Analogue Battery Life <sup>3</sup>     | 21.5 / 16.0 hrs                | 20.5 / 16.0 hrs            |             | 21.5 / 16.0 hrs       | 20.5 / 16.0 hrs            |             |
| IMPRES TIA4950 Li-ion 2900mAh IP68 Battery       |                                |                            |             |                       |                            |             |
| Dimensions with Radio (H x W x D)                | 122 x 56 x 42 mm               |                            |             | 122 x 56 x 42 mm      |                            |             |
| Weight with Radio                                | 367 g                          |                            |             | 350 g                 |                            |             |
| Digital / Analogue Battery Life <sup>3</sup>     | 27.5 / 20.0 hrs                | 26.5 / 20.0 hrs            |             | 27.5 / 20.0 hrs       | 26.5 / 20.0 hrs            |             |
| IMPRES Li-ion 3000mAh LV IP68 Battery            |                                |                            |             |                       |                            |             |
| Dimensions with Radio (H x W x D)                | 122 x 56 x 42 mm               |                            |             | 122 x 56 x 42 mm      |                            |             |
| Weight with Radio                                | 312 g                          |                            |             | 295 g                 |                            |             |
| Digital / Analogue Battery Life <sup>3</sup>     | 28.5 / 21.0 hrs                | 27.5 / 21.0 hrs            |             | 28.5 / 21.0 hrs       | 27.5 / 21.0 hrs            |             |
| IMPRES Li-ion 3000mAh LV IP68 Battery w/Vibrator |                                |                            |             |                       |                            |             |
| Dimensions with Radio (H x W x D)                | 122 x 56 x 42 mm               |                            |             | 122 x 56 x 42 mm      |                            |             |
| Weight with Radio                                | 312 g                          |                            |             | 295 g                 |                            |             |
| Digital / Analogue Battery Life <sup>3</sup>     | 28.5 / 21.0 hrs                | 27.5 / 21.0 hrs            |             | 28.5 / 21.0 hrs       | 27.5 / 21.0 hrs            |             |
| Power Supply (Nominal)                           | 7.5 V                          |                            |             |                       |                            |             |

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**DIGITAL TWO-WAY RADIOS**

**ALL MODELS**

**TRANSMITTER SPECIFICATIONS**

|  |   |
|--|---|
| 4FSK Digital Modulation                | 12.5 kHz Data: 7K60F1D and 7K60FXD,<br>12.5 kHz Voice: 7K60F1E and 7K60FXE,<br>Combination of 12.5 kHz Voice and Data:<br>7K60F1V |
| 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)<br>70dB (20 <sup>1</sup> / 25 kHz)  |
| Frequency Stability                    | ± 0.5 ppm   |

**RECEIVER SPECIFICATIONS**

|  |  |
|--|--|
| Analogue Sensitivity (12dB SINAD)          | 0.16 uV  |
| Digital Sensitivity (5% BER)               | 0.14 uV  |
| Intermodulation (TIA603D)                  | 70 dB  |
| Adjacent Channel Selectivity, (TIA603A)-1T | 60 dB (12.5 kHz)<br>70 dB (20 <sup>1</sup> / 25 kHz) |
| Adjacent Channel Selectivity, (TIA603D)-2T | 45 dB (12.5 kHz)<br>70 dB (20 <sup>1</sup> / 25 kHz) |
| 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%   |
| Hum and Noise                          | -40 dB (12.5 kHz)<br>-45 dB (20 <sup>1</sup> / 25 kHz) |
| Conducted Spurious Emissions (TIA603D) | -57 dBm  |

**ENVIRONMENTAL SPECIFICATIONS**

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Operating Temperature <sup>2</sup> | -30 °C to +60 °C                  |
| Storage Temperature                | -40 °C to +85 °C                  |
| Electrostatic Discharge            | IEC 61000-4-2 Level 4             |
| Dust and Water Intrusion           | IEC 60529 - IP67, 1 m for 30 mins |
| Packaging Test                     | MIL-STD 810D and E                |

**HAZLOC CERTIFICATION**

When properly equipped with Motorola UL-Approved battery, DP2000e Series radios are UL-Approved to TIA-4950 for use in Hazardous Locations, Division 1, Class I, II, III, Groups C, D, E, F, G; Division 2, Class 1, Groups A, B, C, D, T3C. Tamb -25°C to +60°C.

- NOTES  
1: 20 kHz channel not available for 300MHz models.  
2: Specialized low-temperature battery required for operation below -10 °C.  
3: Typical battery life, 5/5/90 profile at maximum transmitter power. Actual observed runtimes may vary.

**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 Temp       | 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 Temp        | 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  |
| Temp 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        |

**CONNECTION**

- VHF Band, 5 W
- UHF Band, 4 W
- 300/350 Band, 4 W
- LKP Models: Mono screen, limited keypad, 128 channels
- NKP Models: No screen or keypad, 16 channels
- Analogue and Digital
- Voice and text only
- Canned Text Messaging
- Voice Announcement
- Home Channel Reminder

**AUDIO**

- Intelligent Audio
- IMPRES Audio
- SYNC+ Noise Cancellation
- Acoustic Feedback Suppressor
- User-Selectable Audio Profiles
- Switch Speaker
- Trill Enhancement

**PERSONALISATION**

- Wide range of Accessories
- 4 Programmable Buttons (2 for NKP model)

**MANAGEMENT**

- Radio Management
- Over-the-Air Programming
- IMPRES Energy
- IMPRES Battery Management
- Over-the-Air Battery Management

**SAFETY**

- Lone Worker
- Basic Privacy
- Enhanced Privacy
- Transmit Interrupt (decode)
- Transmit Interrupt (encode)
- Emergency
- Emergency Search Tone
- Remote Monitor (Decode only)
- Radio Disable / Enable (Decode)
- Waterproof to IP67
- Rugged to MIL-STD 810
- TIA4950 HazLoc certification

**SYSTEMS**

- Direct Mode (including Dual Capacity Direct Mode)
- IP Site Connect (Single and Multi-Site)
- Capacity Plus (Single and Multi-Site)

- Standard feature
- Optional feature

## REMOTE SPEAKER MICROPHONES

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



## ENERGY SOLUTIONS

Make sure your radio is powered and charged properly, with our range of energy solutions. Choose from single and multi-unit chargers, and slim and high capacity batteries.



## 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.



## COVERT ACCESSORIES

When you need to stay in touch discreetly, choose from our range of covert audio accessories. From clear tube earpieces to virtually invisible wireless in-ear units.



## 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, visit [www.motorolasolutions.com/mototrbo](http://www.motorolasolutions.com/mototrbo) or find your closest Motorola representative or authorised Partner at [www.motorolasolutions.com/contactus](http://www.motorolasolutions.com/contactus)

**MOTOTRBO™**  
DIGITAL REMASTERED.

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