

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
GENERAL SPECIFICATIONS						
Frequency	136-174 MHz	300-360 MHz 350-400 MHz	403-527 MHz	136-174 MHz	300-360 MHz 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 ¹ , 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 ³	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 ³	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 ³	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 ³	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 ³	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 ³	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 ³	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 ³	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, 12.5 kHz Voice: 7K60F1E and 7K60FXE, Combination of 12.5 kHz Voice and Data: 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) 70dB (20 ¹ / 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) 70 dB (20 ¹ / 25 kHz)
Adjacent Channel Selectivity, (TIA603D)-2T	45 dB (12.5 kHz) 70 dB (20 ¹ / 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) -45 dB (20 ¹ / 25 kHz)
Conducted Spurious Emissions (TIA603D)	-57 dBm

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature ²	-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.

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

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

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 or find your closest Motorola representative or authorised Partner at www.motorolasolutions.com/contactus

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