MOTOTRBO™ DP4000e SERIES

YOU'RE COMPLETELY CONNECTED

The DP4000e Series is designed for the skilled professional who refuses to compromise. With high performance integrated voice and data, as well as advanced features for efficient operation, these next-generation radios deliver complete connectivity to your organisation.

FEATURES

CONNECTION
- VHF Band, 5 W
- UHF Band, 4 W
- 300 MHz Band, 4 W
- FKP Models: Colour screen, full keypad, 1000 channels
- LKP Models: Colour screen, limited keypad, 1000 channels
- NKP models: No screen or keypad, 32 channels
- Analogue 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 Discoverable Mode
- Bluetooth Indoor Location Tracking
- Voice Announcement
- Text to Speech
- Option Board
- Vibrate alert
- Home Channel Reminder

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

PERSONALISATION
- Wide Range of Accessories
- Multi-Button PTT
- 5 Programmable Buttons (3 for DP4400e/DP4401e)
- Emergency Button

MANAGEMENT
- Radio Management
- Over-the-Air Programming
- Over-the-Air Software Update
- IMPRES Energy
- IMPRES Battery Management
- Over-the-Air Battery Management

SAFETY
- Integrated Accelerometer
- Man Down
- Lone Worker
- Basic Privacy
- Enhanced Privacy
- AES256 Encryption
- Transmit Interrupt (decode)
- Transmit Interrupt (encode)
- Emergency
- Emergency Search Tone
- Remote Monitor
- Radio Disable / Enable
- TIA4950 HazLoc Certification
- Waterproof to IP68
- Rugged to MIL-STD 810

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

MOTOROLA SOLUTIONS

CONNECTED

The MOTOTRBO DP4000e Series is a family of ETSI DMR Standards compliant digital radios that delivers operation-critical voice and data communications. Bluetooth audio lets you talk without wires, integrated Wi-Fi enables remote software updates, and indoor and outdoor location-tracking capabilities give you total visibility of your resources. With support for trunking as well as legacy analogue technology, you can keep your organisation connected as it grows.

SAFE

Safeguard your staff with responsive push-to-talk technology. The prominent orange emergency button on DP4000e Series radios summons help with one touch, using Transmit Interrupt to clear a channel when necessary. An integrated accelerometer senses if you've fallen, and can initiate a call for assistance. The radio is tested to military standards and is waterproof to IP68. It won't let you down.

EFFICIENT

Text messaging and Work Order Ticketing simplify complex communications and data capabilities support advanced applications. Featuring a powerful audio amplifier, these radios deliver loud, clear speech, with industrial noise cancellation for better intelligibility. The latest energy technology delivers up to 28 hours of battery life for 3-shift working, and an improved receiver boosts range by up to 8% compared to previous models.

BLUETOOTH

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

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.

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.

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.

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.

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.

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.

	No Keypad (NKP) Model			Limited Keypad (LKP) Model			Full Keypad (FKP) Model		
Model Number	DP4401e, DP4400e[1]			DP4601e, DP4600e[1]			DP4801e, DP4800e[1]		
Band	VHF	300MHz	UHF	VHF	300MHz	UHF	VHF	300MHz	UHF
GENERAL SPECIFICATIONS									
Frequency	136-174 MHz	300-360 MHz	403-527 MHz	136-174 MHz	300-360 MHz	403-527 MHz	136-174 MHz	300-360 MHz	403-527 MHz
High Power Output	5 W	4 W	4 W	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	1 W	1 W	1 W
Channel Spacing				12.5, 20[2], 25 kHz					
Channel Capacity		32			1000			1000	
NiMH 1400mAh IP68 Battery									
Dimensions with Radio (H x W x D)		130 x 55 x 37 mm			130 x 55 x 39 mm			130 x 55 x 39 mm	
Weight with Radio		380 g			405 g			405 g	
Digital / Analogue Battery Life[3]	13.0 / 10.0 hrs		12.0 / 9.5 hrs	13.0 / 10.0 hrs		12.0 / 9.5 hrs	13.0 / 10.0 hrs		12.0 / 9.5 hrs
IMPRES Li-Ion 1950mAh IP68 Battery									
Dimensions with Radio (H x W x D)		130 x 55 x 40 mm			130 x 55 x 41 mm			130 x 55 x 41 mm	
Weight with Radio		319g			344g			344g	
Digital / Analogue Battery Life[3]	19 / 14.0 hrs		18 / 13.5 hrs	19 / 14.0 hrs		18 / 13.5 hrs	19 / 14.0 hrs		18 / 13.5 hrs
IMPRES Li-Ion 2100mAh IP68 Battery									
Dimensions with Radio (H x W x D)		130 x 55 x 34 mm			130 x 55 x 36 mm			130 x 55 x 36 mm	
Weight with Radio		295 g			330 g			330 g	
Digital / Analogue Battery Life[3]	20.0 / 15.0 hrs		19.0 / 14.5 hrs	20.0 / 15.0 hrs		19.0 / 14.5 hrs	20.0 / 15.0 hrs		19.0 / 14.5 hrs
IMPRES Li-Ion 2450mAh IP68 Battery									
Dimensions with Radio (H x W x D)		130 x 55 x 40 mm			130 x 55 x 41 mm			130 x 55 x 41 mm	
Weight with Radio		322g			347g			347g	
Digital / Analogue Battery Life[3]	22.0 / 17.0 hrs		21.5 / 16.5 hrs	22.0 / 17.0 hrs		21.5 / 16.5 hrs	22.0 / 17.0 hrs		21.5 / 16.5 hrs
IMPRES Li-Ion 2900mAh IP68 Battery									
Dimensions with Radio (H x W x D)		130 x 55 x 40 mm			130 x 55 x 41 mm			130 x 55 x 41 mm	
Weight with Radio		380 g			405 g			405 g	
Digital / Analogue Battery Life[3]	28.0 / 21.0 hrs		27.0 / 20.5 hrs	28.0 / 21.0 hrs		27.0 / 20.5 hrs	28.0 / 21.0 hrs		27.0 / 20.5 hrs
IMPRES Li-Ion 3000mAh IP67 Battery									
Dimensions with Radio (H x W x D)		130 x 55 x 40 mm			130 x 55 x 41 mm			130 x 55 x 41 mm	
Weight with Radio		325 g			350 g			350 g	
Digital / Analogue Battery Life[3]	29.0 / 21.5 hrs		28.0 / 21.5 hrs	29.0 / 21.5 hrs		28.0 / 21.5 hrs	29.0 / 21.5 hrs		28.0 / 21.5 hrs

ALL MODELS

TRANSMITTER SPECIFICATIONS

Channel Spacing	12.5, 20[1], 25 kHz
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 DMR Tier II DMR Tier III
Conducted/Radiated Emissions (TIA603D)	-36 dBm < 1GHz, -30 dBm > 1GHz
Adjacent Channel Power	60dB (12.5 kHz), 70dB (20[2] / 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[2] / 25 kHz channel)
Adjacent Channel Selectivity, (TIA603D)-2T & (TIA603C)-2T	45 dB (12.5 kHz), 70 dB (20[2] / 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[2] / 25 kHz)
Conducted Spurious Emissions (TIA603D)	-57 dBm

BLUETOOTH SPECIFICATIONS

Version	4.0
Range	Class 2, 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

GNSS SPECIFICATIONS

Constellation Support	GPS, GLONASS
Time To First Fix, Cold Start	< 60 s
Time To First Fix, Hot Start	< 10 s
Horizontal Accuracy	< 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 LKP and NKP models)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature[4]	-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 - IP68, 2 m for 2 hrs
Packaging Test	MIL-STD 810D and E

HAZLOC CERTIFICATION

When properly equipped with Motorola UL-Approved battery, 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°

NOTES
1: Bluetooth, GNSS and Wi-Fi only included on DP4401e, DP4601e and DP4801e.
2: 20 kHz channel not available for 300MHz models.
3: Typical battery life, 5/5/90 profile at maximum transmitter power with GNSS, Bluetooth, Wi-Fi and Option Board applications disabled. Actual observed runtimes may vary.
4: Radio only. Specialised low-temperature battery required for operation below -10 °C.

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

For more information on the MOTOTRBO DP4000e, visit
www.motorolasolutions.com/mototrbo or find your closest Motorola Solutions
representative or authorised Partner at www.motorolasolutions.com/contactus

MOTOROLA SOLUTIONS