MOTOTRBO™ DP4000e SERIES

YOU'RE COMPLETELY CONNECTED

With this dynamic evolution of MOTOTRBO digital two-way radios, you're better connected, safer and more productive. The DP4000e 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 organisation.

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 tough 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 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.

WHAT'S NEW IN THESE NEXT GENERATION RADIOS

- Integrated accelerometer for optional Man Down
- Bluetooth[1] 4.0
- Indoor location tracking
- Multi-constellation GNSS for increased location accuracy[1]
- Integrated Wi-Fi[1]
- Over-the-air software updates
- Enhanced audio quality
- Improved expandability
- Better battery life (up to 28 hrs)
- Better range (up to 8%)
- Better waterproofing (IP68)

	Full Keypad (FKP) Model			Limited Keypad (LKP) Model			No Keypad (NKP) Model		
Model Number	DP4801e, DP4800e[1]			DP4601e, DP4600e[1]			DP4401e, DP4400e[1]		
Band	VHF	300MHz	UHF	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	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	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	1000			1000			32		
NiMH 1400mAh IP67 Battery									
Dimensions with Radio (H x W x D)	130 x 55 x 39 mm			130 x 55 x 39 mm			130 x 55 x 37 mm		
Weight with Radio	405 g			405 g			380 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	
Li-ion 1400mAh Low Temp IP57 Battery									
Dimensions with Radio (H x W x D)	130 x 55 x 41 mm			130 x 55 x 41 mm			130 x 55 x 40 mm		
Weight with Radio	345 g			345 g			320 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	
Slim IMPRES Li-ion 1650mAh IP67 Battery									
Dimensions with Radio (H x W x D)	130 x 55 x 36 mm			130 x 55 x 36 mm			130 x 55 x 34 mm		
Weight with Radio	330 g			330 g			295 g		
Digital / Analogue Battery Life[3]	16.0 / 12.0 hrs	15.5 / 11.5 hrs		16.0 / 12.0 hrs	15.5 / 11.5 hrs		16.0 / 12.0 hrs	15.5 / 11.5 hrs	
IMPRES Li-ion 2100mAh IP68 Battery									
Dimensions with Radio (H x W x D)	130 x 55 x 36 mm			130 x 55 x 36 mm			130 x 55 x 34 mm		
Weight with Radio	330 g			330 g			295 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 2250mAh IP67 Battery									
Dimensions with Radio (H x W x D)	130 x 55 x 41 mm			130 x 55 x 41 mm			130 x 55 x 40 mm		
Weight with Radio	345 g			345 g			320 g		
Digital / Analogue Battery Life[3]	21.5 / 16.5 hrs	21.0 / 16.0 hrs		21.5 / 16.5 hrs	21.0 / 16.0 hrs		21.5 / 16.5 hrs	21.0 / 16.0 hrs	
IMPRES TIA4950 Li-ion 2900mAh IP68 Battery									
Dimensions with Radio (H x W x D)	130 x 55 x 41 mm			130 x 55 x 41 mm			130 x 55 x 40 mm		
Weight with Radio	405 g			405 g			380 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 LV IP68 Battery									
Dimensions with Radio (H x W x D)	130 x 55 x 41 mm			130 x 55 x 41 mm			130 x 55 x 40 mm		
Weight with Radio	350 g			350 g			325 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	
IMPRES Li-ion 3000mAh LV IP68 Battery w/Vibrator									
Dimensions with Radio (H x W x D)	130 x 55 x 41 mm			130 x 55 x 41 mm			130 x 55 x 40 mm		
Weight with Radio	350 g			350 g			325 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
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, (TIA603C)-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

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.

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°C .

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
- ○ Connect Plus

- ● Standard feature
- ○ Optional feature

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

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.

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

MOTOTRBO™
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