YOUR MOBILE VOICE JUST GOT STRONGER

MOTOTRBO™ DM4000 SERIES DIGITAL TWO-WAY MOBILE RADIOS

From the delivery driver crisscrossing the city to the sanitation crew clearing streets, MOTOTRBO™ can transform your enterprise and make employee interactions smarter and safer. Our best-in-class audio and exceptional data capabilities empower people like never before.

Versatile and powerful, MOTOTRBO combines the best of two-way radio functionality with the latest digital technology. DM4000 Series radios integrate voice and data seamlessly, offer enhanced features that are easy to use, and deliver operations-critical advantages like integrated Bluetooth® and Intelligent Audio.

The DM4000 Series can remaster your workplace and the way people collaborate to help you achieve even greater efficiency.

AUDIO BEYOND EXPECTATIONS

When it comes to exceptional audio clarity, the quality of digital can't be denied. With the DM4000 Series mobiles, you get digital quality plus unique features to help your employees hear and speak clearly, wherever they work.

With Intelligent Audio, the radio volume automatically adjusts to compensate for background noise so workers don't have to adjust their radio volume to avoid missing a call in loud situations or disturbing others when they move into quiet places. Increased background noise suppression filters out unwanted external clamour – from road traffic to the roar of engines.

Bluetooth® audio, built in to the radio, provides voice communication with exceptional clarity – giving your people the freedom to move without wires. Also, IMPRES™ audio accessories enhance noise suppression and improve voice intelligibility for smarter audio than they've ever experienced before.

INTEGRATED DATA SOLUTIONS

DM4000 Series radios are available with integrated GPS that enables location tracking of mobile work teams and text messaging between radios enables communication when voice isn't feasible. The large, full-colour display operates in day or night mode, for easy viewing of contact lists, text messages and work order tickets even in bright sunlight. Models are also available that feature integrated Bluetooth enabling the radio to wirelessly interface with Bluetooth-enabled devices such as barcode scanners and magnetic card readers to facilitate the collection of critical information in the field.

MOTOTRBO's Application Developer Program is the largest in the industry and offers customised data applications that allow you to adapt your radios to your business challenges. With a wide range of solutions available, data applications answer your objectives—from work order ticket management to telephony integration, and more.

HIGH-POWERED PERFORMANCE

Because MOTOTRBO uses TDMA digital technology, you get integrated voice and data, twice the calling capacity and clearer voice communications. Also, the smart IMPRES™ technology in our high-powered accessories enables easier communications – everywhere your people travel.

RICH FUNCTIONALITY

DM4000 Series radios offer plenty of features your business seeks – including enhanced call signalling, basic and enhanced privacy-scrambling, option board expandability, the Motorola-unique transmit interrupt suite to prioritise critical communication the moment you need it and compatibility with SCADA solutions for utility and public service monitoring and alarms. Programmable button features appear on the display for easy viewing and quick access. And when workers can't be distracted, customisable voice announcement provides audible confirmation of channel and zone changes as well as programmable button features, eliminating the need to view the display.

EXPANDED CAPACITY AND COVERAGE

Your work crews are on the go – picking up loads, dropping off cargo, repairing roads or restoring power after a storm. That's why you need the far-reaching performance of MOTOTRBO.

IP Site Connect helps to dramatically improve customer service and productivity by using the Internet to extend coverage to create a wide area network, enhance single site coverage or link geographically dispersed locations. Capacity Plus provides single-site trunking expanding capacity to over 1,000 users. Combining the benefits of both solutions, Linked Capacity Plus is an entry-level, multi-site trunking solution that expands capacity and extends coverage so large work teams can stay connected across a wide area. So whether you want expanded coverage at a single site or across multiple ones, MOTOTRBO can be scaled to your needs.

MIGRATE AT YOUR OWN PACE

Keeping operations running smoothly during a change in communication systems is vital to business. It's easy to migrate to digital with DM4000 Series radios because they operate in analogue and digital mode while the dynamic mixed mode repeater functionality streamlines automatic switching between analogue and digital calls. So you can begin using MOTOTRBO radios and repeaters on your existing analogue system, and when your time and budget allow, move to digital at your own pace.

DAY-IN, DAY-OUT DURABILITY

DM4000 Series mobile radios undergo Motorola's unique Accelerated Life Testing to help ensure they will stand up to the hard knocks of everyday use. For even greater peace of mind, they are backed by a two-year Standard Warranty.

BE READY FOR THE FUTURE WITH THE RIGHT STANDARD

MOTOTRBO complies with the globally-recognised European Telecommunications Standard Institute (ETSI) Digital Mobile Radio (DMR) Tier 2 standard for professional two-way radio users.

DMR is widely supported by the leading two-way manufacturers in the industry and the most widely deployed digital mobile radio technology worldwide. This open standard assures long-term sustainability and creates a community of manufacturers who build interchangeable equipment that can compete on features, benefits and price.

DMR
DIGITAL MOBILE RADIO ASSOCIATION

DM4000 SERIES SPECIFICATIONS

GENERAL SPECIFICATIONS

		DM4600 / DM4601		DM4400 / DM4401	
		VHF	**UHF**	**VHF**	**UHF**
Channel Capacity		Up to 1,000		99	
Typical RF Output	Low Power	1-25 W	1-25 W	1-25 W	1-25 W
	High Power	25-45 W	25-40 W	25-45 W	25-40 W
Dimensions (H x W x L)		53.3 x 175.3 x 205.7 mm (2.1 x 6.9 x 8.1 in)		53.3 x 175.3 x 205.7 mm (2.1 x 6.9 x 8.1 in)	
Weight		1.8 kg (3.9 lbs)		1.8 kg (3.9 lbs)	
Current Drain	Standby	0.81 A max	0.81 A max	0.81 A max	0.81 A max
	Rx @ Rated Audio	2 A max	2 A max	2 A max	2 A max
	Transmit	1-25 W: 11.0 A max 25-45 W: 14.5 A max	1-25 W: 11.0 A max 25-40 W: 14.5 A max	1-25 W: 11.0 A max 25-45 W: 14.5 A max	1-25 W: 11.0 A max 25-40 W: 14.5 A max

RECEIVER: DM4000 SERIES

	VHF	**UHF**
Frequencies	136-174 MHz	403-470 MHz 450-527 MHz
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz	
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 0.5 ppm	
Analogue Sensitivity (12dB SINAD)	0.3uV 0.22uV (typical)	
Digital Sensitivity	5% BER : 0.3uV	
Intermodulation (TIA603D)	78 dB	75 dB
Adjacent Channel Selectivity (TIA603D)	50 dB @ 12.5 kHz 80 dB @ 25 kHz	50 dB @ 12.5 kHz 75 dB @ 25 kHz
Spurious Rejection (TIA603D)	80 dB	75 dB
Rated Audio	3 W (Internal) 7.5 W (External - 8 ohms) 13 W (External - 4 ohms)	
Audio Distortion @ Rated Audio	3% (typical)	
Hum and Noise	-40 dB @ 12.5 kHz/-45 dB @ 25 kHz	
Audio Response	TIA603D	
Conducted Spurious Emission (TIA603D)	-57dBm	

TRANSMITTER: DM4000 SERIES

	VHF	**UHF**
Frequencies	136-174 MHz	403-470 MHz 450-527 MHz
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz	
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 0.5 ppm	
Low Power Output	1-25 W	1-25 W
High Power Output	25-45 W	25-40 W
Modulation Limiting	± 2.5 kHz @ 12.5 kHz/± 5.0 kHz @ 25 kHz	
FM Hum and Noise	-40 dB @ 12.5 kHz/-45 dB @ 25 kHz	
Conducted/Radiated Emission	-36 dBm < 1 GHz/-30 dBm > 1 GHz	
Adjacent Channel Power	60 dB @ 12.5 kHz/70 dB @ 25 kHz	
Audio Response	TIA603D	
Audio Distortion	3%	
FM Modulation	12.5 kHz: 11K0F3E / 25 kHz: 16K0F3E	
4FSK Digital Modulation	12.5 kHz Data: 7K60F1D & 7K60FXD	
	12.5 kHz Voice: 7K60F1E & 7K60FXE	
	Combination of 12.5 kHz Voice & Data: 7K60F1W	
Digital Vocoder Type	AMBE+2™	
Digital Protocol	ETSI TS 102 361-1, -2, -3	

MILITARY STANDARDS: DM4000 SERIES

	810C		810D		810E		810F		810G	
APPLICABLE MIL-STD	**METHOD**	**PROCEDURES**	**METHOD**	**PROCEDURES**	**METHOD**	**PROCEDURES**	**METHOD**	**PROCEDURES**	**METHOD**	**PROCEDURES**
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.5	II
High Temperature	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
Low Temperature	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
Temperature Shock	503.1	-	503.2	I/A1/C3	503.3	I/A1/C3	503.4	I	503.5	I/C
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I	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	507.3	II	507.4	-	507.5	II - Aggravated
Salt fog	509.1	-	509.2	-	509.3	-	509.4	-	509.5	-
Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24	514.6	I/24
Shock	516.2	I, II	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV, V, VI

GPS: DM4401 / DM4601

Accuracy specs are for long-term tracking (95th percentile values > 5 satellites visible at a nominal -130 dBm signal strength)	
TTFF (Time To First Fix) Cold Start	< 1 minute
TTFF (Time To First Fix) Hot Start	< 10 seconds
Horizontal Accuracy	< 5 metres

BLUETOOTH: DM4401 / DM4601

Version	Supports Bluetooth® 2.1 + EDR Specification
Profiles Supported	Bluetooth Headset Profile (HSP), Serial Port Profile (SPP), Motorola fast push-to-talk.
Devices Supported	Radio supports 1 Bluetooth audio accessory and 1 Bluetooth data device simultaneously
Range	Class 2, 10 metres

ENVIRONMENTAL SPECIFICATIONS: DM4000 SERIES

Operating Temperature	-30° C / +60° C
Storage Temperature	-40° C / +85° C
Thermal Shock	Per MIL-STD
Humidity	Per MIL-STD
ESD	IEC 61000-4-2 Level 3
Dust and Water Intrusion	IP54, MIL-STD

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

Radio meets applicable regulatory requirements.

For more information on how to make sleek and stylish work for you, visit www.motorolasolutions.com/mototrbo or find your closest Motorola representative or authorised Partner at www.motorolasolutions.com/contactus

MOTOTRBO DIGITAL REMASTERED.

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EMEA version 2 (06/2013)

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