MOTOTRBO™ DM1400 AND DM1600 MOBILE RADIOS

YOU'RE SIMPLY MORE EFFICIENT



Your people are on the move, delivering cargo, picking up consignments, driving passengers to their destinations. You need to keep them in touch and on track efficiently. And you want to make sure the radios they use are as affordable and adaptable as possible.

Now there are flexible mobiles that give you great voice communications today, and a path to crisp and clear digital voice communications when you're ready. Versatile and powerful, MOTOTRBO combines the best of two-way radio functionality with the latest analogue and digital technology. The MOTOTRBO portfolio offers the right device for the right user, from voice-only portables to feature-rich voice and data radios.

The rugged MOTOTRBO DM1400 and DM1600 are available as analogue/digital mobile radios that offer all the benefits of the latest technology – from superior audio to greater coverage. These affordable performers are compatible with advanced MOTOTRBO features you'll find are business-essential, for example a transmission can be interrupted to prioritise critical communications.

You can also choose the analogue-only models of the DM1400 and DM1600, and unlock the capabilities of digital when the time is right: all you will need is a simple software upgrade. And whichever model you choose, the DM1400 and DM1600 will work seamlessly with the radios you have today.

With its bright, high contrast alphanumeric screen, the DM1600 allows drivers to see important information such as caller ID at a glance. The DM1400 offers lower channel capacity and a simpler numeric display.

The DM1400 and DM1600 are so easy to use and deliver such clear voice communications, you'll be amazed how efficient your operation can be.

FEATURES

- Analogue / Digital
- Voice Communications
- Dual Capacity Direct Mode[1]
- Numeric Display (DM1400)
- Alphanumeric Display (DM1600)
- Digital Mobile Radio (DMR) Standards Compliant[1]
- Transmit Interrupt (Decode Only)[1]
- Basic Privacy[1]
- Voice Announcement
- IP54 Rated
- Radio Management Suite Compatible

SIMPLE VOICE COMMUNICATIONS FOR THE EVERYDAY USER WHO WANTS TO STAY CONNECTED

CONNECT YOUR CREWS EASILY AND EFFICIENTLY

DM1400 and DM1600 mobile radios are ideal for keeping your people reliably and cost-effectively connected so they can communicate, coordinate and collaborate – whether they're delivering packages or transporting passengers. With easy-to-use ergonomics and crisp, clear audio, now your teams can work more efficiently.

Unleash the power of your DM1400 and DM1600 mobile radios with Motorola Original® accessories. They're the only accessories designed, built and tested with your radio to optimise its performance. (See separate accessory fact sheet for full portfolio.)

KEEP THEM IN CONTACT AND ON COURSE

A lost delivery driver uses his DM1400 mobile radio installation to call the office. The visor microphone and steering wheel-mounted push-to-talk button allow him to communicate safely while driving, and the radio's digital noise-cancelling software filters out the road noise so he can be heard clearly. Soon he's safely back on track.

The bus driver relies on his DM1600 to keep his passengers safe. The digital technology gives excellent coverage along the whole route, and now they're running the MOTOTRBO Dual Capacity Direct Mode, he has no problem getting a channel. The clear, bright alphanumeric screen gives him all the information he needs, and if there's an incident, he can use one of the programmable buttons to call for help – with one touch.

COMMUNICATE WITHOUT DISTRACTING THEM

The DM1400 and DM1600 are designed for the everyday driver and let you connect to your mobile workforce without distracting them. So while they improve efficiency, they also enhance safety.

INTEGRATE YOUR DEVICES SEAMLESSLY

Make sure your new MOTOTRBO radios are ready when you are. We can bring together the right experts and processes to help you integrate MOTOTRBO mobile radios into your business, quickly and cost-effectively. This includes Coverage Mapping, Site Integration and Device Programming.

GET DURABILITY THAT ENDURES

The DM1400 and DM1600 are made to last. They are backed by a two-year standard warranty and a minimum one-year warranty for Motorola-branded accessories. Moreover, the design has been proven tough in Motorola's unique and gruelling Accelerated Life Test program, in which the radio must survive a simulated 5 years of hard service before it is accepted. In addition, optional Service from the Start provides multi-year peace of mind with fast repair turnaround times, expert telephone technical support and access to the latest software releases[2]; all backed by Motorola's globally integrated services infrastructure, highly qualified support technicians and certified repair facilities.



PRODUCT SPEC SHEET
MOTOTRBO™ DM1400 AND DM1600 MOBILE RADIOS


DM1600


DM1400

GENERAL SPECIFICATIONS

	ALPHANUMERIC DISPLAY DM1600		NUMERIC DISPLAY DM1400	
	VHF	**UHF 1**	**VHF**	**UHF 1**
Channel Capacity	160		16	
Typical RF Output Low Power High Power	 1-25 W 25-45 W	 1-25 W 25-40 W	 1-25 W 25-45 W	 1-25 W 25-40 W
Frequency	136-174 MHz	403-470 MHz	136-174 MHz	403-470 MHz
Dimensions (H x W x L)	44 x 169 x 134 mm			
Weight	1.3 kg			
Operating Voltage	10.8-15.6 VDC, 13.2 VDC Nominal			
Current Drain Standby Rx @ Rated Audio Transmit	 0.81 A max 2 A max 1-25 W: 11.0 A max 25-45 W: 14.5 A max	 0.81 A max 2 A max 1-25 W: 11.0 A max 25-40 W: 14.5 A max	 0.81 A max 2 A max 1-25 W: 11.0 A max 25-45 W: 14.5 A max	 0.81 A max 2 A max 1-25 W: 11.0 A max 25-40 W: 14.5 A max

RECEIVER

Frequency	136-174 MHz	403-470 MHz	136-174 MHz	403-470 MHz
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz			
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 0.5 ppm			
Analogue Sensitivity	0.3 uV (12 dB SINAD) 0.22 uV (typical) (12 dB SINAD) 0.4 uV (20 dB SINAD)			
Digital Sensitivity	0.25 uV (5% BER) 0.19 uV (typical) (5% BER)			
Intermodulation	65 dB			
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz
Spurious Rejection	70 dB			
Rated Audio	4 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 @ 20/25 kHz			
Audio Response	+1, -3 dB			
Conducted Spurious Emissions (TIA603D)	-57 dBm			

TRANSMITTER

Frequency	136-174 MHz	403-470 MHz	136-174 MHz	403-470 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			
High Power Output	25-45 W	25-40 W	25-45 W	25-40 W
Modulation Limiting	± 2.5 kHz @ 12.5 kHz / ± 4.0 kHz @ 20 kHz / ± 5.0 kHz @ 25 kHz			
FM Hum and Noise	-40 dB @ 12.5 kHz / -45 dB @ 20/25 kHz			
Conducted / Radiated Emission	-36 dBm < 1 GHz / -30 dBm > 1 GHz			
Adjacent Channel Power	60 dB @ 12.5 kHz / 70 dB @ 20/25 kHz			
Audio Response	+1, -3 dB			
Audio Distortion	3%			
Digital Vocoder Type	AMBE +2™			
Digital Protocol	ETSI TS 102 361-1, -2, -3			

MILITARY STANDARDS

	810C		810D		810E		810F		810G	
	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

ENVIRONMENTAL SPECIFICATIONS

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[3]
Packaging Test	Per MIL-STD

[1] Features only available in Digital mode
[2] Software release covers patches and maintenance releases of the current version to the operating system i.e. that shipped with the terminal.
[3] Radio meets IP54 and MIL-STD rating with microphone sealing boot and rear accessory connector cover properly installed.

Specifications subject to change without notice.
All specifications shown are typical unless otherwise stated.
Radio meets applicable regulatory requirements.

For more information on the MOTOTRBO DM1400 or DM1600, visit motorolasolutions.com/mototrbo or find your closest Motorola representative or authorised Partner at motorolasolutions.com/contactus

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