



# MOTOTRBO™

## DM3600/DM3601/DM3400/DM3401 Mobile Radios



Mobile radios available in Display and Numeric Display, **GPS and Non-GPS models**.

Uses Time-Division Multiple-Access (TDMA) digital technology which **doubles the number of users** you can have on a single licensed 12.5 kHz channel.

**Integrates voice and data** to increase operational efficiency.

Provides **clearer voice communications** throughout the coverage area as compared to analogue radios.

**Enhanced call management** features include call alert, emergency, remote monitor, push-to-talk ID, radio check, private call, all call and radio disable.

**IP Site Connect** provides automatic roaming from one coverage area to another with no manual intervention or interruption.

The **enhanced privacy** mode further protects the voice and data communications.

Optional **Capacity Plus** trunking enables repeaters to manage the availability of active channels. Users are automatically connected to co-workers without switching channels.

Four programmable buttons (two buttons for DM3400) for **easy access to favorite features**; Replacement Button Kit offers customised feature-specific buttons.

Emergency button (or footswitch) **alerts supervisor** or dispatcher in emergency situations.

**Lone Worker feature** alerts supervisor or dispatch by sending out an alarm when there is no radio activity over a specified duration of time.

DM3601 can **transmit location coordinates** with an emergency call using Location Services application.

Allows **easy migration** from analogue to digital as all units operate in analog and digital modes.

Meets U.S. Military Standards 810 C, D, E, and F, and **Motorola standards** for durability and reliability.

Newly designed and durable IMPRES™ keypad microphone supports unit to unit **short free form and quick text messaging** via programmable buttons.

Utilises the IMPRES Audio System for **enhanced audio functionality**.

DM3600/3601 contacts list accommodates up to **500/1000 contacts** (analogue/digital).

Features the **transmit interrupt** suite—voice interrupt, remote voice dekey, emergency voice interrupt or data over voice interrupt—to help prioritise critical communication exactly when needed.

### Accelerate performance.

The next-generation professional two-way radio communications solution is here, with more performance, productivity and value – thanks to digital technology that delivers increased capacity and spectrum efficiency, integrated data communications and enhanced voice communications.

MOTOTRBO complies with the European Telecommunications Standards Institute (ETSI) Digital Mobile Radio (DMR) tier two standard, a globally recognised and approved standard for the professional two-way radio market.

MOTOTRBO offers you a private, standards-based, cost-effective solution that can be tailored to meet your unique coverage and feature needs. This versatile portfolio provides a complete system of portable radios, mobile radios, repeaters, accessories and data applications.

## General Specifications\*

	DM3600 Display Non-GPS Model DM3601 Display GPS Model			DM3400 Non-Display Non-GPS Model DM3401 Non-Display GPS Model		
	UHF	VHF		UHF	VHF	
Channel Capacity	1000			32		
Frequencies	403-470 MHz	450-527 MHz	136-174 MHz	403-470 MHz	450-527 MHz	136-174 MHz
Dimension (HxWxT)	51 x 175 x 206 mm			51 x 175 x 206 mm		
Weight	1.8 kg (4.0 lbs)			1.8 kg (4.0 lbs)		
Current Drain (High Power)	0.81 A max			0.81 A max		
Standby	2 A max			2 A max		
Rx @ Rated Audio	14.5 A max			14.5 A max		
Tx @ Rated Audio	13.8 VDC			13.8 VDC		
Power Supply	1-25 W : ABZ99FT4081 1-40 W : ABZ99FT4083			1-25 W : ABZ99FT4081 1-40 W : ABZ99FT4083		
FCC Description	1-25 W : ABZ99FT3083			1-25 W : ABZ99FT3083		

### Receiver

	403-470 MHz	450-527 MHz	136-174 MHz	403-470 MHz	450-527 MHz	136-174 MHz
Frequencies	12.5 kHz/ 25 kHz			12.5 kHz/ 25 kHz		
Channel Spacing	+/- 1.5 ppm (DM3600)			+/- 1.5 ppm (DM3400)		
Frequency Stability (-30°C, +60°C, +25°C)	+/- 0.5 ppm (DM3601)			+/- 0.5 ppm (DM3401)		
Analog Sensitivity	0.3 uV (12 dB SINAD)			0.3 uV (12 dB SINAD)		
	0.4 uV (20 dB SINAD)			0.4 uV (20 dB SINAD)		
	0.22 uV (typical)			0.22 uV (typical)		
Digital Sensitivity	5% BER: 0.3 uV			5% BER: 0.3 uV		
Intermodulation	75 dB			78 dB		
TIA603C	60 dB			60 dB		
ETS	60 dB @ 12.5 kHz			60 dB @ 12.5 kHz		
Adjacent Channel Selectivity (TIA603, ETS)	70 dB @ 25 kHz			70 dB @ 25 kHz		
Spurious Rejection	75 dB			80 dB		
TIA603C	70 dB			70 dB		
ETS	3 W (Internal)			3 W (Internal)		
Rated Audio	7.5 W (External - 8 ohms)			7.5 W (External - 8 ohms)		
	13 W (External - 4 ohms)			13 W (External - 4 ohms)		
Audio Distortion @ Rated Audio	3% (typical)			3% (typical)		
Hum and Noise	-40 dB @ 12.5 kHz			-40 dB @ 12.5 kHz		
	-45 dB @ 25 kHz			-45 dB @ 25 kHz		
Audio Response	+1, -3 dB			+1, -3 dB		
Conducted Spurious Emission	-57 dBm			-57 dBm		

### Transmitter

	403-470 MHz	450-527 MHz	136-174 MHz	403-470 MHz	450-527 MHz	136-174 MHz
Frequencies	12.5 kHz/ 25 kHz			12.5 kHz/ 25 kHz		
Channel Spacing	+/- 1.5 ppm (DM3600)			+/- 1.5 ppm (DM3400)		
Frequency Stability (-30°C, +60°C, +25°C)	+/- 0.5 ppm (DM3601)			+/- 0.5 ppm (DM3401)		
Power Output	1-25 W	1-40 W	1-25 W	1-25 W	1-40 W	1-25 W
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz			+/- 2.5 kHz @ 12.5 kHz		
	+/- 5.0 kHz @ 25 kHz			+/- 5.0 kHz @ 25 kHz		
FM Hum and Noise	-40 dB @ 12.5 kHz			-40 dB @ 12.5 kHz		
	-45 dB @ 25 kHz			-45 dB @ 25 kHz		
Conducted / Radiated Emission	-36 dBm < 1 GHz			-36 dBm < 1 GHz		
	-30 dBm > 1 GHz			-30 dBm > 1 GHz		
Adjacent Channel Power	-60 dB @ 12.5 kHz			-60 dB @ 12.5 kHz		
	-70 dB @ 25 kHz			-70 dB @ 25 kHz		
Audio Response	+1, -3 dB			+1, -3 dB		
Audio Distortion	3%			3%		
FM Modulation	12.5 kHz : 11K0F3E			12.5 kHz : 11K0F3E		
	25 kHz: 16K0F3E			25 kHz: 16K0F3E		
4FSK Digital Modulation	12.5 kHz Data Only: 7K60FXD			12.5 kHz Data Only: 7K60FXD		
	12.5 kHz Data & Voice: 7K60FXE			12.5 kHz Data & Voice: 7K60FXE		
Digital Vocoder Type	AMBE+2™			AMBE+2™		
Digital Protocol	ETSI-TS102 361-1			ETSI-TS102 361-1		

### GPS

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

### 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-801-2KV
Water Intrusion	IEC 60529 - IP54
Packaging Test	MIL-STD 810D and E

\*Availability subject to country law and regulations. Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements.

Conforms to  
EC 1999/5/EC (R&TTE - Radio and Telecommunications Terminal Equipment)  
EN 300 086  
EN 300 113



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