



# MOTOTRBO™

## DP3600/DP3601/DP3400/DP3401 Portable Radios



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

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

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

Provides **clearer voice communications** throughout the coverage area.

Up to **40 percent longer** battery life between recharges.

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

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.

**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.

**Emergency button** alerts supervisor or dispatcher in an emergency situation.

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

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

Allows an **easy migration** from analogue to digital with the ability to operate in both modes.

DP3601 can **transmit location coordinates** with an emergency call.

Send short free-form and quick **text messaging** via programmable buttons.

DP3600/DP3601 contacts list allows up to **500/1000 contacts** (analogue/digital).

Meets **IP57 submersibility** standard along with U.S. Military Standards 810 C, D, E, and F and Motorola standards for durability and reliability.

Offered with an **intrinsically safe** option certified by Factory Mutual Approvals (FM) for use in hazardous classified areas. Can be used in locations where flammable gas, vapors or combustible dust may be present.

Accessory connector meets IP57 submersibility specifications, incorporates RF, and USB and utilises the IMPRES™ Audio System for **enhanced audio functionality**.

Utilises Motorola's state-of-the art **IMPRES** technology—providing **longer talk times and clearer audio delivery**.

### 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\*

	DP3600 Display Non GPS Model DP3601 Display GPS Model			DP3400 Non-Display Non-GPS Model DP3401 Non-Display GPS Model		
	UHF	VHF		UHF	VHF	
Channel Capacity	1000			32		
Frequency	403 - 470 MHz	450 - 527 MHz	136 - 174 MHz	403 - 470 MHz	450 - 527 MHz	136-174 MHz
Dimension (HxWxT) w/ 1500 mAh Lilon Battery	131.5 x 63.5 x 35.2 mm			131.5 x 63.5 x 35.2 mm		
Weight (with 1500 mAh Lilon Battery)	360g (12.7 oz)			360g (12.7 oz)		
(with 2200 mAh Lilon Battery)	361g (12.8 oz)			361g (12.8 oz)		
(with 1400 mAh Lilon FM Battery)	370g (13 oz)			370g (13 oz)		
Power Supply	75 VDC (nominal)			75 VDC (nominal)		
FCC Description	AZ489FT4876	AZ489FT4884	AZ489FT3815	AZ489FT4876	AZ489FT4884	AZ489FT3815
Average battery life at 5/5/90 duty cycle with battery saver enabled in carrier squelch and transmitter in high power.						
IMPRES 1500 mAh Lilon Battery	Analog: 9 hrs Digital: 13 hrs			Analog: 9 hrs Digital: 13 hrs		
IMPRES 2200 mAh Lilon Battery	Analog: 13.5 hrs Digital: 19 hrs			Analog: 13.5 hrs Digital: 19 hrs		
IMPRES FM 1400 mAh Battery	Analog: 8.5 hrs Digital: 12 hrs			Analog: 8.5 hrs Digital: 12 hrs		

<b>Receiver</b>						
Frequencies	403 - 470 MHz	450 - 527 MHz	136 - 174 MHz	403 - 470 MHz	450 - 527 MHz	136-174 MHz
Channel Spacing	12.5 kHz/ 25 kHz			12.5 kHz/ 25 kHz		
Frequency Stability (-30°C, +60°C, +25°C)	+/- 1.5 ppm (DP3600) +/- 0.5 ppm (DP3601)			+/- 1.5 ppm (DP3400) +/- 0.5 ppm (DP3401)		
Analog Sensitivity	0.35 uV (12 dB SINAD) 0.4 uV (20 dB SINAD) 0.22 uV (typical)			0.35 uV (12 dB SINAD) 0.4 uV (20 dB SINAD) 0.22 uV (typical)		
Digital Sensitivity	5% BER: 0.3 uV			5% BER: 0.3 uV		
Intermodulation TIA603C	70 dB			70 dB		
ETSI	65 dB			65 dB		
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 25 kHz			60 dB @ 12.5 kHz 70 dB @ 25 kHz		
Spurious Rejection	70 dB			70 dB		
Rated Audio	500 mW			500 mW		
Audio Distortion @ Rated Audio	3% (typical)			3% (typical)		
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz			-40 dB @ 12.5 kHz -45 dB @ 25 kHz		
Audio Response	+ 1, -3 dB			+ 1, -3 dB		
Conducted Spurious Emission	-57 dBm			-57 dBm		

<b>Transmitter</b>						
Frequencies	403 - 470 MHz	450 - 527 MHz	136 - 174 MHz	403 - 470 MHz	450 - 527 MHz	136-174 MHz
Channel Spacing	12.5 kHz/ 25 kHz			12.5 kHz/ 25 kHz		
Frequency Stability (-30°C, +60°C, +25°C)	+/- 1.5 ppm (DP3600) +/- 0.5 ppm (DP3601)			+/- 1.5 ppm (DP3400) +/- 0.5 ppm (DP3401)		
Power Output						
Low Power	1W		1W	1W		1W
High Power	4W		5W	4W		5W
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz +/- 5.0 kHz @ 25 kHz			+/- 2.5 kHz @ 12.5 kHz +/- 5.0 kHz @ 25 kHz		
FM Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz			-40 dB @ 12.5 kHz -45 dB @ 25 kHz		
Conducted / Radiated Emission	-36 dBm < 1 GHz -30 dBm > 1 GHz and < 4GHz			-36 dBm < 1 GHz -30 dBm > 1 GHz and < 4GHz		
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 25 kHz			-60 dB @ 12.5 kHz -70 dB @ 25 kHz		
Audio Response	+1, -3 dB			+1, -3 dB		
Audio Distortion	3%			3%		
FM Modulation	12.5 kHz : 11K0F3E 25 kHz: 16K0F3E			12.5 kHz : 11K0F3E 25 kHz: 16K0F3E		
4FSK Digital Modulation	12.5 kHz Data Only: 7K60FXD 12.5 kHz Data & Voice: 7K60FXE			12.5 kHz Data Only: 7K60FXD 12.5 kHz Data & Voice: 7K60FXE		
Digital Vocoder Type	AMBE+2™			AMBE+2™		
Digital Protocol	ETSI-TS102 361-1			ETSI-TS102 361-1		

<b>GPS</b>	
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

<b>Factory Mutual Approvals</b>	
MOTOTRBO DP Portable series radios have been certified by FM Approvals in accordance with Canada and U.S. Codes as intrinsically safe for use in Class I, II, III, Division 1, Groups C,D,E,F,G, when properly equipped with a Motorola FM approved battery option. They are also approved for use in Class I, Division 2, Groups A, B, C, D.	

<b>Environmental Specifications</b>	
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 - IP57
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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