



**DIGITAL, NOW WITHIN REACH** 

# MOTOTRBO™ DP2000 SERIES DIGITAL TWO-WAY PORTABLE RADIOS



Monitoring supply needs on a manufacturing line or reporting an incident on a construction site, how do you keep employees connected and safe? MOTOTRBO digital radio solutions can help by putting the power of digital communications within reach.

Versatile and powerful, MOTOTRBO combines the best of two-way radio functionality with the latest digital technology. DP2000 Series radios offer best-in-class audio in a scalable solution to meet your communication needs. Because they are also analogue interoperable, you can make the transition to digital at your own pace and budget.

The DP2000 Series radios can remaster your workplace and the way people collaborate to help you achieve even greater productivity, safety and cost-effectiveness.

#### **INDUSTRY-LEADING AUDIO**

When it comes to exceptional audio clarity, the quality of digital can't be denied. With the DP2000 Series portables, you get digital quality throughout your coverage area 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. Now, 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 the rumble of forklifts to the buzz of traffic noise. And IMPRES™ audio accessories enhance noise suppression and improve voice intelligibility for smarter audio than they've ever experienced before.

#### **HIGH-POWERED PERFORMANCE**

Because the DP2000 Series uses TDMA digital technology, it delivers twice the calling capacity plus clearer voice communications. When it comes to battery performance, these radios operate up to 40 percent longer between recharges compared to analogue. In fact, the leading-edge IMPRES™ technology in our batteries, chargers and audio accessories also ensures longer talk time and clearer audio.

The DP2000 Series offers plenty of features to make workers more efficient. Voice announcement provides audible confirmation so they can be notified of channel and zone changes as well as programmable button features without having to view the radio display. The display and easy to use navigation menu makes the radio intuitive to use so they can stay focused on the job at hand - from the hotel receptionist confirming rooms to security covering a sporting event.

#### **MIGRATE AT YOUR OWN PACE**

Keeping operations running smoothly during a change in communication systems is vital to your operation. It's easy to migrate to digital because the DP2000 Series radios 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**

The DP2000 Series meets demanding specs, including IP55 for water protection and U.S. Military Standard 810 C, D, E, F and G. DP2000 radios have a two-year Standard Warranty with 1-year warranty for batteries and accessories. In addition, 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<sup>1</sup>; all backed by Motorola's globally integrated services infrastructure, highly qualified support technicians and certified repair facilities.





# **DP2000 SERIES SPECIFICATIONS**

GENERAL SPECIFICATIONS	S*					
		DISPLAY DP2600		NON DISPLAY DP2400		
		VHF	UHF	VHF	UHF	
Channel Capacity		128	128	16	16	
Frequency		136-174MHz	403-527 MHz	136-174 MHz	403-527 MHz	
IMPRES Hi-Cap Li-ion (2250 mAH) Battery	Height (H)	122 mm		122 mm		
	Width (W)	56 mm		56 mm		
	Thickness (T)	41.7 mm		41.7 mm		
	Weight	305 g		285 g		
IMPRES Li-ion Slim (1600mAH) Battery	Height (H)	122 mm		122 mm		
	Width (W)	56 mm		56 mm		
	Thickness (T)	36.4 mm		36.4 mm		
	Weight	285 g		265 g		
Power Supply		7.5 V (Nominal)				
Operating Temperature		-30°~+60 °C²				
Average battery life		5/5/90 duty cycle with carrier squelch and transmitter in high power <sup>3</sup>				
IMPRES Hi-Cap Li-ion (2250 mAH) Battery		Analogue: 11.5 hrs / Digital: 16.5 hrs		Analogue: 11.5 hrs / Digital: 16.5 hrs		
IMPRES Li-ion Slim (1600 mAH) Battery		Analogue: 8 hrs / Digital: 11.5 hrs		Analogue: 8 hrs	Analogue: 8 hrs / Digital: 11.5 hrs	

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

MILITARY STANDARDS										
		810C		B10D		810E		B10F		810G
APPLICABLE MIL-STD	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES
Low Pressure	500.1	ı	500.2	II	500.3	II	500.4	II	500.5	II
High Temperature	501.1	1, 11	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	ı	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I-C3, II/C1	502.5	I, II
Temperature Shock	503.1	-	503.2	I/A1/C3	503.3	I/A1/C3	503.4	ı	503.5	I-C
Solar Radiation	505.1	II	505.2	I	505.3	ı	505.4	I	505.5	I-A1
Rain	506.1	1, 11	506.2	1, 11	506.3	1, 11	506.4	I, III	506.5	I, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	-	507.5	II
Salt fog	509.1	-	509.2	-	509.3	-	509.4	-	509.5	-
Dust	510.1	ı	510.2	ı	510.3	ı	510.4	ı	510.5	I
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	1/24	514.6	I-cat 24, II/5
Shock	516.2	I, II	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV, VI



#### PRODUCT SPEC SHEET

# MOTOTRBO™ DP2000 SERIES PORTABLE RADIOS

	VHF	UHF		
	VIII	Oili		
Frequencies	136-174 MHz	403-527 MH		
Channel Spacing	12.5/20/25kHz			
Frequency Stability	± 0.5 ppm			
Analogue Sensitivity (12dB SINAD) Typical	0.3uV 0.22uV (typical)			
Digital Sensitivity	0.25 uV (0.19 uV typical)			
Intermodulation (TIA603D)	70	70 dB		
Adjacent Channel Selectivity (TIA603A)-1T	60dB @ 12.5kHz / 70dB @ 20/25kHz			
Adjacent Channel Selectivity (TIA603D)-2T	45dB @ 12.5kHz / 70dB @ 20/25kHz			
Spurious Rejection (TIA603D)	70 dB			
Rated Audio	0.5W			
Audio Distortion @ Rated Audio	5% 3% (typical)			
Hum and Noise	-40dB @ 12.5kHz / -45dB @ 20/25kHz			
Audio Response	TIA603D			
Conducted Spurious Emission (TIA603D)	-57 (	dBm		

ENVIRONMENTAL SPECIFICATIONS				
Operating Temperature	-30° C / +60 °C²			
Storage Temperature $-40^{\circ}$ C $/ +85^{\circ}$ C				
Thermal Shock	Per MIL-STD			
Humidity	Per MIL-STD			
ESD IEC 61000-4-2 Level				
Dust and Water Intrusion	IEC60529 - IP55			

Testing completed using portable radio with attached battery and antenna.

	VHF	UHF		
Frequencies	136-174 MHz	403-527 MHz		
Channel Spacing	12.5/20/25kHz			
Frequency Stability	± 0.5 ppm			
Low Power Output	1W	1W		
High Power Output	5W	4W		
	± 2.5 kHz @	12.5 kHz		
Modulation Limiting	±4.0kHz @ 20 kHz			
	± 5.0 kHz @ 25 kHz			
FM Hum and Noise	-40 dB@ 1	2.5 kHz		
rivi num anu ivoise	-45 dB@ 20/25 kHz			
Conducted/Radiated Emission	-36 dBm < 1 GHz			
Conducted/hadiated Emission	-30 dBm > 1 GHz			
Adjacent Channel Power	60 dB @ 12.5 kHz			
Aujacent Channel Power	70 dB @ 20/25 kHz			
Audio Response	TIA603D			
Audio Distortion	3%			
	12.5kHz Data: 7K60	F1D & 7K60FXD		
4FSK Digital Modulation	12.5kHz Voice: 7K60F1E & 7K60FXE			
<b>3</b> · · · · · · ·	Combination of 12.5 kHz Voice and Data: 7K60F1W			
Digital Vocoder Type	AMBE-	-2 <sup>TM</sup>		

<sup>&</sup>lt;sup>1</sup> Software release covers patches and maintenance releases of the current version to the operating system i.e. that shipped with the terminal.

For more information on how to strengthen your mobile voice, visit motorolasolutions.com/mototrbo

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<sup>&</sup>lt;sup>2</sup> Radio only - Li-lon battery -10C

<sup>&</sup>lt;sup>3</sup> Actual battery runtime observed may vary based on the specific radio configuration.