



# MOTOTRBO™ DP540 PORTABLE RADIOS

## EASY TO USE, EASY TO MIGRATE

Simple and practical voice communications for the basic user who values ease and efficiency.

The MOTOTRBO DP540 is a practical, cost-effective portable two-way radio for professionals wanting to communicate with greater ease and efficiency.

The DP540 radio offers all the benefits of digital technology – up to 35% longer talk-time, twice the voice capacity in a 12.5 kHz licensed channel, wider radio coverage and superior audio.

The DP540 is easy to use and migrate from analogue. Your radio users can operate and communicate on their new digital radios while on the job, as your business transitions to digital technology. With a complete range of accessories you can design the DP540 to fit perfectly into your work day.

Experience MOTOTRBO digital voice communications, trusted by millions of users for exceptional voice quality and exceptional performance.

### FEATURES

- Digital / Analogue Voice Communications
- Dual Capacity Direct Mode
- IP Site Connect Capable
- Transmit Interrupt (Decode only)
- Voice Announcement
- Digital Mobile Radio (DMR) Standards Compliant<sup>1</sup>
- IP54 Rated
- 16 channels
- Durable polycarbonate housing
- Receive Audio Leveling
- Up to 20 hours runtime<sup>2</sup>

<sup>1</sup> Features only available in Digital mode

<sup>2</sup> Using high-capacity battery; actual battery runtime observed may vary



## VERSATILE SOLUTION TO START AND GROW

The ability to operate in both digital and analogue modes also makes it easy and affordable to adapt your new digital radios to work along with your existing analogue radios. You can migrate to a digital two-way radio platform at your own pace.

The DP540 supports Direct Mode, Conventional (single-site repeater) and IP Site Connect\* which means you can scale your operation up from small, radio-to-radio communications to multi-site repeater communications as the demands of your business change and grow.

## INCREASED EFFICIENCY WITHOUT INCREASED COSTS

Powered by Time Division Multiple Access (TDMA) technology and meeting ETSI's Digital Mobile Radio (DMR) Tier II Standard, your DP540 radios provide twice the calling capacity of analogue for the price of one frequency license.

The DP540 features Dual Capacity Direct Mode which unlocks the full capacity of your digital radio system by doubling your channels without the cost of a repeater and its associated infrastructure. In order for both time slots of a 12.5kHz DMR channel to carry simultaneous and independent traffic, you usually need a repeater to provide the timing reference. With Dual Capacity Direct Mode, your radios are able to synchronize automatically and collaboratively, eliminating the requirement for a timing reference. Now you can use both time slots, thereby doubling capacity and increasing spectrum efficiency without the cost of a repeater and its associated infrastructure.

## CLEARER AUDIO, BETTER PERFORMANCE

When it comes to exceptional audio clarity, the quality of digital cannot be denied. The DP540 radios give you clear digital audio performance throughout your coverage area. The digital voice processing with enhanced call signalling ensures faster and more reliable calls.

## VERSATILE FOR MANY ENVIRONMENTS

No matter what environment you are using the radio in, you can connect more people effortlessly wherever they work.

Easy to carry and operate, hotel housekeepers can quickly update the supervisors from inside the guest rooms or on the hotel floors. Their DP540 radios deliver voice throughout the entire coverage area of your sprawling resort or high-rise hotel buildings.

With DP540 radios, your on-site crew can double their call capacity on the same radio spectrum, giving them more open lines for instant updates. If there is an emergency, you can communicate quickly and send the closest security employee to any part of the venue to speed up response time.

Your assembly line workers can rely on the clear digital audio of their DP540 radios and advanced Motorola Solutions technology to filter out background noise. Employees can hear clearly anywhere in the busy factory or use one of the programmable buttons to send pre-programmed text messages.

\*Optional feature



GENERAL SPECIFICATIONS		
	DP540	
	VHF	UHF BAND 1
Channel Capacity	16	
Typical RF Output		
Low Power	1 W	1 W
High Power	5 W	4 W
Frequency	136-174 MHz	403-480 MHz
Radio Dimensions (H x W x D) with battery:		
Li-Ion 1750mAh	120.0 x 55.0 x 34.7 mm	
High Cap Li-Ion 2250mAh	120.0 x 55.0 x 39.9 mm	
Weight with battery:		
Slim Li-Ion 1750mAh	276 g	
Li-Ion 2250mAh	281 g	
Power Supply	7.5V (Nominal)	
BATTERY		
Average battery life at 5/5/90 duty cycle with carrier squelch and transmitter in high power. <sup>1</sup>		
Li-Ion 1750mAh	Analogue: 10.7 hrs / Digital: 14.4 hrs	
High Cap Li-Ion 2250mAh	Analogue: 15.0 hrs / Digital: 20.0 hrs	
RECEIVER		
Frequency	136-174 MHz	403-480 MHz
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz	
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 1.5 ppm	
Analogue Sensitivity (12 dB SINAD)	0.3 uV / 0.22 uV (typical)	
Digital Sensitivity (5% BER)	0.25 uV / 0.19 uV (typical)	
Intermodulation (TIA603D)	70 dB	
Adjacent Channel Selectivity (TIA603D)	45 dB @ 12.5 kHz / 70 dB @ 25 kHz	
Spurious Rejection (TIA603D)	70 dB	
Rated Audio	0.5 W (Internal)	
Audio Distortion @ Rated Audio	5% (3% typical)	
Hum and Noise	-40 dB @ 12.5 kHz / -45 dB @ 25 kHz	
Audio Response	TIA603D	
Conducted Spurious Emissions (TIA603D)	-57 dBm	
TRANSMITTER		
Frequency	136-174 MHz	403-480 MHz
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz	
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 1.5 ppm	
Low Power Output	1W	1W
High Power Output	5W	4W
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% (typical)	
4FSK Digital Modulation	12.5 kHz Data: 7K60F1D and 7K60FXD 12.5 kHz Voice: 7K60F1E and 7K60FXE Combination of 12.5 kHz Voice and Data: 7K60F1W	
Digital Vocoder Type	AMBE +2™	
Digital Protocol	ETSI TS 102 361-1, -2, -3	
ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature	-30°C <sup>2</sup> / +60°C	
Storage Temperature	-40°C <sup>2</sup> / +85°C	
ESD	IEC 61000-4-2 Level 3	
Dust and Water Intrusion	IP54	

<sup>1</sup> Actual battery runtime observed may vary

<sup>2</sup> Radio only - Li-Ion battery -10°C

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





## FEATURED ACCESSORIES



### HLN6602A

Universal Chest Pack with  
Radio Holder, Pen Holder and  
Velcro Secured Pouch



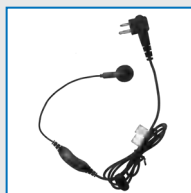
### MDRLN4941

Receiver-Only Earpiece with  
Translucent Tube and Eartip for  
Remote Speaker Microphone



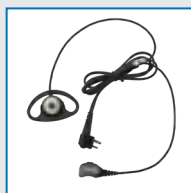
### NTN5243A

Adjustable Black Nylon  
Carrying Strap



### PMLN6534

Mag One Earbud



### PMLN6535

2-Wire D-Style Earpiece  
with Separate PTT Wire



### PMLN4029A

Remote Speaker Microphone,  
IP57 with 2-pin connector

For more information on the MOTOTRBO DP540, visit [motorolasolutions.com/mototrbo](https://motorolasolutions.com/mototrbo)

To find your nearest Motorola Solutions Channel Partner, go to [motorolasolutions.com/contactus](https://motorolasolutions.com/contactus)

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Availability is subject to individual country law and regulations. All specifications shown are typical unless otherwise stated and are subject to change without notice.

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