

MOTOTRBO™

FEATURE COMPARISON CHART



		MOTOTRBO PORTABLE RADIOS											MOTOTRBO MOBILE RADIOS															
		DP1000 SERIES			DP2000e SERIES			DP3000e SERIES		DP4000e SERIES			DP4000 Ex SERIES		SL SERIES			DM1000 SERIES		DM2000 SERIES	DM4000e SERIES							
Protocol	DMR or analogue communications	Analogue/Digital or Analogue Only			Analogue/Digital			Analogue/Digital		Analogue/Digital			Analogue/Digital		Analogue/Digital	Analogue/Digital	Analogue/Digital	Digital Only	Analogue/Digital		Analogue/Digital	Analogue/Digital						
Frequency	Capable of operating in the following frequency ranges	VHF: 136-174MHz UHF: 403-470MHz			VHF: 136-174MHz UHF: 403-470MHz			VHF: 136-174MHz UHF: 403-470MHz		VHF: 136-174MHz UHF: 403-470MHz			VHF: 136-174MHz UHF: 403-470MHz		VHF: 136-174MHz UHF: 403-470MHz	VHF: 136-174MHz UHF: 403-470MHz	VHF: 136-174MHz UHF: 403-470MHz	UHF: 403-470MHz	VHF: 136-174MHz UHF: 403-470MHz		VHF: 136-174MHz UHF: 403-470MHz	VHF: 136-174MHz UHF: 403-470MHz 300W: 300-360, 350-400MHz						
Max. Power Output	Radio's full power rating	4W UHF/SW VHF			4W 300MHz/UHF / SW VHF			4W UHF/SW VHF		4W 300MHz/UHF / SW VHF			1W UHF/VHF		2W(an) / 3W(dig)	2W(an) / 3W(dig)	3W	25W or 40/45W ¹⁴	25W or 40/45W ¹⁴		25W or 40/45W ¹⁴							
Max. Channel Capacity	Programmable channel capacity	32			32			32		32			32		99	256	3W	16	160	256	99	1000						
Channel Spacing	Programmable channel spacing	12.5 / 20 / 25 kHz			12.5 / 20 ¹³ / 25 kHz			12.5 / 20 / 25 kHz		12.5 / 20 / 25 kHz			12.5 / 20 / 25 kHz		12.5 / 20 / 25 kHz	12.5 / 20 / 25 kHz	12.5 kHz	12.5 / 20 / 25 kHz		12.5 / 20 / 25 kHz	12.5 / 20 ¹³ / 25 kHz							
Display	Displays provide easy access to advanced features	No			No			No		No			No		Single line scrolling ActiveView display	2 line OLED	5 line colour	2-digit numeric	2 line monochrome	2 line monochrome	2-digit numeric	4 line colour						
Keypad	Keypads provide access to radio controls, texting and telephony	No			No			No		No			No		No	4 virtual buttons	Full Keypad	No	Menu buttons	Menu buttons	No	Menu buttons						
Integrated GPS	Embedded GPS receiver for location monitoring	No			No			Yes		Yes ¹			Yes		No	No	No	No	No	No	Yes ¹							
Integrated GLONASS	Embedded GLONASS receiver for location monitoring	No			No			Yes		Yes ¹			No		No	No	No	No	No	No	Yes ¹							
Event Driven Location Updates	Location update based on input from external device (eg door sensor)	No			No			No		Yes ¹¹			No		No	No	No	No	No	No	Yes ¹¹							
Distance Driven Location Updates	Location update transmission based on distance travelled	No			No			Yes		Yes ¹¹			No		No	No	No	No	No	No	Yes ¹¹							
Integrated Bluetooth 2.1	Wireless connection for audio accessories or data comms	No			No			n/a		No			No		n/a	n/a	No	No	No	No	n/a							
Integrated Bluetooth 4.0	Energy efficient Bluetooth for greater battery life	No			No			Audio and Data		Audio and Data ¹			No		Audio and Data	Audio and Data	No	No	No	No	Audio and Data ¹							
Permanent Bluetooth Discovery	Bluetooth "always on" mode used by some applications	No			No			Yes		Option (Bluetooth models only)			No		No	Option	Yes	No	No	No	No							
Dedicated Emergency Button	Orange programmable button for one-touch emergency calling	No			No			Yes		Yes			Yes		No	No	Yes	No	No	No	No							
Programmable Buttons	Allow access to most often used features with one press	2			2			4		3			5		1 ⁹	1	2	2	4	4	4							
Digital DMR Signalling	DMR standard digital voice communications	Yes ⁸			Yes			Yes		Yes			Yes		Yes	Yes	Yes ⁸	Yes	Yes	Yes	Yes							
PL / DPL Signalling	Analogue Private Line / Digital Private Line compatible	Yes			Yes			Yes		Yes			Yes		Yes	Yes	No	Yes	Yes	Yes	Yes							
Quick Call II Signalling	Analogue Quick Call II compatible	Yes			Yes			Yes		Yes			Yes		Yes	Yes	No	Yes	Yes	Yes	Yes							
MDC Signalling	Analogue MDC compatible	Yes			Yes			Yes		Yes			Yes		Yes	Yes	No	Yes	Yes	Yes	Yes							
5 Tone Signalling	Analogue 5 tone compatible	No			Yes			Yes		Yes			Yes		Option	Yes	No	No	Yes	Yes	Yes							
DTMF Hot Keypad	DTMF tone compatible	No			No			No		No			No		No	No	Yes ⁶	Yes ⁶	Yes ⁶	Yes ⁶	Yes ⁶							
MPT1327 Signalling	Analogue MPT1327 compatible (requires option board)	No			No			No		Option ⁷			No		Option ⁷	No	No	No	Option	No	Option							
Option Board Capability	Supports option boards for third party applications	No			No			Yes		Yes			No		Yes	No	Yes ⁴	No	Yes	Yes	Yes							
IMPRES™ Audio Compatible	IMPRES™ audio ensures your voice is heard clearer and louder	No			Yes			Yes		Yes			Yes		No	No	No	No	No	No	Yes							
SINCR+ Noise Cancellation	Integrated, advanced noise cancellation for noisy environments	No			Yes			Yes		Yes			Yes		No	Option	Yes	No	Yes	Yes	Yes							
Automatic Gain Control	Modifies microphone performance to produce the best voice quality	Yes			Yes			Yes		Yes			Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes							
Microphone Distortion Control	Automatic microphone gain adjustment to reduce distortion	No			No			No		Yes			Yes		No	No	No	No	No	No	No							
Trill Enhancement	Additional processing to enhance rolling "r" sound so speech is clearer	Yes			Yes			Yes		Yes			Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes							
IMPRES™ Energy Compatible	Use IMPRES™ batteries for longer life and optimal performance	No			Yes			Yes		Yes			Yes		No	No	n/a	n/a	n/a	n/a	n/a							
IMPRES™ OTA Battery Management	Automatic collection of battery data over the air with radios still in use	No			Yes ¹⁰			Yes ¹⁰		Yes ¹⁰			Yes ¹⁰		No	No	n/a	n/a	n/a	n/a	n/a							
ATEX Certified	ATEX certified for use in potentially explosive environments	No			No			No		No			No		No	No	No	No	No	No	No							
IEC Ex Certified	IEC Ex certified for use in potentially explosive environments	No			No			No		No			No		No	No	No	No	No	No	No							
FM Intrinsically Safe	Factory Mutual (FM) approved for intrinsically safe use	No			No			No		Factory Mutual (FM)			No		No	No	No	No	No	No	No							
TIA4950 Intrinsically Safe	Telecommunications Industry Association (TIA) approved for IS use	No			TIA4950			TIA4950		TIA4950			No		No	No	No	No	No	No	No							
IP Rating	Rated sealing for dust and water ingress	IP54			IP67			IP68		IP68			IP67		IP54	IP54	IP54	IP54	IP54	IP54	IP54							
MIL-STD 810	Rated to withstand environmental conditions	C, D, E, F & G			C, D, E, F & G			C, D, E, F & G		C, D, E, F & G			C, D, E, F & G		C, D, E, F & G	C, D, E, F & G	C, D, E, F & G	C, D, E, F & G	C, D, E, F & G	C, D, E, F & G	C, D, E, F & G							
Dimensions (HxWxL) mm	Physical size	128 x 62 x 39 ¹			122 x 56 x 36 ¹			100 x 55 x 30 ¹		100 x 55 x 36 ¹			130 x 55 x 34 ¹		130 x 55 x 36 ¹		130 x 55 x 36 ¹	138 x 57 x 38 ¹	138 x 57 x 40 ¹	126 x 55 x 22 ¹	126 x 55 x 23 ¹	121 x 55 x 17 ¹	44 x 169 x 134	44 x 169 x 134	53 x 175 x 206			
Dimensions (Weight)	Physical weight	341g ¹			265g ¹			282g ¹		254g ¹			290g ¹			295 g ¹		330 g ¹		330 g ¹	456g ³	456g ³	U:166g ¹ V:169g ³	190g ¹	154g ¹	1.3kg	1.3kg	1.8kg
FEATURES AND FUNCTIONS																												
Intelligent Audio	Automatic volume control based on background noise levels	No			Yes			Yes		Yes			Yes		No	Yes	Yes	Yes	No	Yes	Yes	Yes						
User Selectable Audio Profiles	Optimises audio for specific environments and personal preferences	No			Yes			Yes		Yes			Yes		No	Yes	Yes	Yes	No	Yes	Yes	Yes						
Emergency Alarm	Radio can initiate an Emergency call process	Yes			Yes			Yes		Yes			Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
Lone Worker	Initiates emergency if user does not respond to periodic alerts	Yes			Yes			Yes		Yes			Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
Remote Monitor	Radio can remotely activate another radio's microphone	Decode Only			Decode Only			Yes		Yes			Decode Only		Yes	Yes	Yes	Yes	Decode Only	Yes	Yes	Yes						
VOX (supported on radio)	Voice activated calling allows handsfree operation	Yes			Yes			Yes		Yes			Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
Audio Feedback Suppressor	Blocks feedback from other radios to eliminate "howling"	Yes			Yes			Yes		Yes			Yes		Yes	Yes	No	Yes	Yes	Yes	Yes	Yes						
Freeform Text Messaging	User can enter and send free-form text messages	No			No			No		No			No		No	No	Yes	Yes	No	No	No	Yes ⁶						
Pre-programmed Text Messaging	Radio can send pre-programmed text messages	Yes			Yes			Yes		Yes			Yes		Yes	Yes	Yes	Yes	No	Yes	Yes	Yes						
Extended Texting	Maximum text message length is 280 character	No			Yes			Yes		Yes			Yes		No	Yes	Yes	Yes	No	Yes	Yes	Yes						
Vibrate Alert	Vibrate silently alerts the user to an incoming call	No			Option			No		Option			No		No	No	Yes	No	No	No	No	No						
Covert Mode	Disable display, LEDs and audible tones for ultimate discretion	No			No			No		No			No		No	No	Yes	Yes	No	No	No	No						
All Call	One-way call to all radios on a logical channel	Decode Only			Yes			Yes		Yes			Yes		Decode Only	Yes	Yes	Yes	Decode Only	Yes	Yes	Yes						
Radio Check	Check if another radio is active on a system without notifying the user	Decode Only			Decode Only			Yes		Decode Only			Yes		Decode Only	Yes	Yes	Yes	Decode Only	Yes	Yes	Yes						
Digital Telephone Patch	Ability to connect to telephone system (requires additional hardware)	No			Option			Yes		Yes			Yes		No	Option	Yes	Yes	No	Option	Yes	Yes						
Transmit Interrupt Encode	Radio can interrupt transmissions from other radios	Decode Only			Yes			Yes		Yes			Yes		Decode Only	Option	Yes	Yes	Decode Only	Yes	Yes	Yes						
Basic Privacy	MOTOTRBO 16-bit encryption for protection against eavesdropping	Yes			Yes			Yes		Yes			Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
Enhanced Privacy	MOTOTRBO 40-bit encryption for more robust protection	No			Yes			Yes		Yes			No		Option	Yes	Yes	No	Yes	Yes	Yes	Yes						
AES256 Encryption	Advanced Encryption Standard (AES) 256-bit encryption	No			No			Option		Option			Option		No	No	Option	No	No	No	Option	Option						
Default Voice Announcement	Audible confirmation of selected operations of the radio	Yes			Yes			Yes		Yes			Yes		Yes	Yes	Yes	Yes	No	Yes	Yes	Yes						
Programmable Voice Announcement	Ability to use customised recordings for voice announcements	Yes			Yes			Yes		Yes			Yes		Yes	Yes	Yes	Yes	No	Yes	Yes	Yes						
Text-to-Speech Voice Announcement	Radio "reads out" Channel, Zone, Functions, Text Messages, Job Tickets	No			No			Yes		Yes			Yes		No	No	Yes	Yes	No	No	No	Yes						
Radio Management	Centralised radio configuration and code plug management	Yes			Yes			Yes		Yes			Yes		No	Yes	Yes	Yes	No	Yes	Yes	Yes						
Over the Air Programming (OTAP)	Remote, over-air programming using Radio Management	No			Yes			Yes		Yes			Yes		No	Yes	Yes	Yes	No	Yes	Yes	Yes						
Integrated Wi-Fi	Enables remote software updates for easier radio management	No			No			Yes		Yes			No		No	Yes	Yes	Yes	No	No								