

FEATURE COMPARISON CHART

		MOTOTRBO PORTABLE RADIOS												MOTOTRBO MOBILE RADIOS																												
		DP1000 SERIES			DP2000e SERIES			DP4000e SERIES			DP4000 Ex SERIES			DP3000e SERIES			SL SERIES		DM1000 SERIES		DM2000 SERIES		DM4000e SERIES																			
		DP1400	DP2400e	DP2600e	DP4400e/DP4401e	DP4600e/DP4601e	DP4800e/DP4801e	DP4401 Ex	DP4801 Ex	DP4401 Ex Ma	DP4801 Ex Ma	DP3441e	DP3661e	SL1600	SL2600	SL4000e/SL4010e	DM1400	DM1600	DM2600	DM4400e/DM4401e	DM4600e/DM4601e																					
GENERAL SPECIFICATIONS																																										
Protocol	DMR or analogue communications	Analogue/Digital or Analogue Only		Analogue/Digital			Analogue/Digital			Analogue/Digital			Analogue/Digital			Analogue/Digital		Analogue/Digital		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: 403-527MHz 300 ¹² : 300-360, 350-400MHz			VHF: 136-174MHz UHF: 403-527MHz 300 ¹² : 300-360, 350-400MHz			VHF: 136-174MHz UHF: 403-527MHz			VHF: 136-174MHz UHF: 403-527MHz			VHF: 136-174MHz UHF: 403-480MHz		VHF: 136-174MHz UHF: 403-470MHz		VHF: 136-174MHz UHF: 403-470MHz		VHF: 136-174MHz UHF: 403-470MHz		VHF: 136-174MHz UHF: 403-527MHz 300 ¹² : 300-360, 350-400MHz																		
Max. Power Output	Radio's full power rating	4W UHF/5W VHF		4W 300MHz UHF / 5W VHF			4W 300MHz UHF / 5W VHF			1W UHF/VHF			4W UHF/5W VHF			2W(an) / 3W(dig)		2W(an) / 3W ¹⁵ (dig)		3W		25W or 40/45W ¹⁴		25W or 40/45W ¹⁴		25W or 40/45W ¹⁴																
Max. Channel Capacity	Programmable channel capacity	16		16			32			32			32			99		256		1000		16		256		99																
Channel Spacing	Programmable channel spacing	12.5 / 20 / 25 kHz		12.5 / 20 ¹⁵ / 25 kHz			12.5 / 20 ¹⁵ / 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 ¹⁵ / 25 kHz		12.5 / 20 ¹⁵ / 25 kHz																
Display	Displays provide easy access to advanced features	No		No			No			No			No			No		No		No		2-digit numeric		2 line monochrome		2-digit numeric																
Keypad	Keypads provide access to radio controls, texting and telephony	No		No			No			No			No			No		No		No		2-digit numeric		2 line monochrome		2-digit numeric																
Integrated GPS	Embedded GPS receiver for location monitoring	No		No			Yes ¹			Yes			Yes			No		No		No		No		Yes ¹																		
Integrated GLONASS	Embedded GLONASS receiver for location monitoring	No		No			Yes ¹			No			Yes			No		No		No		No		Yes ¹																		
Event Driven Location Updates	Location update based on input from external device (eg door sensor)	No		No			Yes ¹¹			No			No			No		No		No		No		Yes ¹¹																		
Distance Driven Location Updates	Location update transmission based on distance travelled	No		No			Yes ¹¹			No			Yes			No		No		No		No		Yes ¹¹																		
Integrated Bluetooth 2.1	Wireless connection for audio accessories or data comms	No		No			n/a			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 ¹			No			Audio and Data			No		Audio and Data		Audio and Data		No		Audio and Data ¹																		
Permanent Bluetooth Discovery	Bluetooth "always on" mode used by some applications	No		No			Option (Bluetooth models only)			No			Option			No		Option		Option		No		No																		
Dedicated Emergency Button	Orange programmable button for one-touch emergency calling	No		No			Yes			Yes			Option			No		Option		Option		No		No																		
Programmable Buttons	Allow access to most often used features with one press	2		2			4			3			5			2		4		1		2		2		4																
Digital DMR Signalling	DMR standard digital voice communications	Yes ³		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
PL / DPL Signalling	Analogue Private Line / Digital Private Line compatible	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
Quick Call II Signalling	Analogue Quick Call II compatible	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
MDC Signalling	Analogue MDC compatible	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
5 Tone Signalling	Analogue 5 tone compatible	No		Yes			Yes			Yes			Yes			Option		Yes		No		Yes		Yes		Yes																
DTMF Hot Keypad	DTMF tone compatible	No		No			No			No			No			No		No		No		Yes ⁸		Yes ⁸		Yes ⁸																
MPT1327 Signalling	Analogue MPT1327 compatible (requires option board)	No		No			Option ⁷			No			No			No		No		No		No		Option		Option																
Option Board Capability	Supports option boards for third party applications	No		No			Yes			No			Yes			No		No		No		No		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		Yes																
SINCO Noise Cancellation	Integrated, advanced noise cancellation for noisy environments	No		Option			Option			Option			Option			No		Option		Option		Option		Option		Option																
Automatic Gain Control	Modifies microphone performance to produce the best voice quality	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
Microphone Distortion Control	Automatic microphone gain adjustment to reduce distortion	Yes		Yes			Yes			Yes			No			Yes		Yes		Yes		Yes		Yes		Yes																
Trill Enhancement	Additional processing to enhance rolling "r" sound so speech is clearer	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
IMPRES Energy Compatible	Use IMPRES batteries for longer life and optimal performance	Yes		Yes			Yes			Yes			Yes			Yes		No		No		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		No		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																
IEC Ex Certified	IEC Ex certified for use in potentially explosive environments	No		No			No			No			No			No		No		No		No		No		No																
FM Intrinsically Safe	Factory Mutual (FM) approved for intrinsically safe use	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			No			TIA4950			No		No		No		No		No		No																
IP Rating	Rated sealing for dust and water ingress	IP54		IP67			IP67			IP67			IP68			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																
Dimensions (HxWxD) mm	Physical size	128 x 62 x 39 ³		122 x 56 x 36 ³			122 x 56 x 36 ³			130 x 55 x 34 ³			130 x 55 x 36 ³			130 x 55 x 36 ³			138 x 57 x 38 ³		138 x 57 x 40 ³		138 x 57 x 38 ³		138 x 57 x 40 ³		100 x 55 x 30 ³		100 x 55 x 36 ³		126 x 55 x 22 ³		126 x 55 x 23 ³		121 x 55 x 17 ³		44 x 169 x 134		44 x 169 x 134		53 x 175 x 206	
Dimensions (Weight)	Physical weight	341g ³		265g ³			282g ³			295g ³			330g ³			330g ³			456g ³		482g ³		456g ³		482g ³		254g ³		290g ³		U:166g ³ V:169g ³		190g ³		154g ³		1.3kg		1.3kg			
FEATURES AND FUNCTIONS																																										
Intelligent Audio	Automatic volume control based on background noise levels	No		Yes			Yes			Yes			Yes			No		Yes		Yes		No		Yes		Yes																
User Selectable Audio Profiles	Optimises audio for specific environments and personal preferences	No		Yes			Yes			Yes			Yes			No		Yes		Yes		No		Yes		Yes																
Emergency Alarm	Radio can initiate an Emergency call process	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																
Remote Monitor	Radio can remotely activate another radio's microphone	Decode Only		Decode Only			Decode Only			Yes			Yes			Decode Only		Yes		Yes		Decode Only		Yes		Yes																
VOX (supported on radio)	Voice activated calling allows handsfree operation	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		Yes		No		Yes		Yes																
Freeform Text Messaging	User can enter and send free-form text messages	No		No			No			Yes			No			No		No		Yes		No		Yes ⁵		Yes ⁵																
Pre-programmed Text Messaging	Radio can send pre-programmed text messages	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
Extended Texting	Maximum text message length is 280 character	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
Vibrate Alert	Vibrate silently alerts the user to an incoming call	No		Option			Option			No			No			No		No		Yes		No		No		No																
Covert Mode	Disable display, LEDs and audible tones for ultimate discretion	No		No			No			No			No			No		Yes		Yes		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		Decode Only		Decode Only		Yes																
Radio Check	Check if another radio is active on a system without notifying the user	Decode Only		Decode Only			Yes			Yes			Decode Only			Yes		Yes		Yes		Decode Only		Decode Only		Yes																
Digital Telephone Patch	Ability to connect to telephone system (requires additional hardware)	No		Option			Yes			Yes			Yes			No		Option		Yes		No		Option		Yes																
Transmit Interrupt Encode	Radio can interrupt transmissions from other radios	Decode Only		Option			Yes			Yes			Yes			Decode Only		Option		Yes		Decode Only		Option		Yes																
Basic Privacy	MOTOTRBO 16-bit encryption for protection against eavesdropping	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
Enhanced Privacy	MOTOTRBO 40-bit encryption for more robust protection	No		Option			Yes			Yes			Yes			No		Option		Yes		No		Option		Yes																
AES256 Encryption	Advanced Encryption Standard (AES) 256-bit encryption	No		Option			Option			Option			Option			No		No		Option		No		No		Option																
Default Voice Announcement	Audible confirmation of selected operations of the radio	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
Programmable Voice Announcement	Ability to use customised recordings for voice announcements	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
Text-to-Speech Voice Announcement	Radio "reads out" Channel, Zone, Functions, Text Messages, Job Tickets	No		No			Option			Option			Option			No		No		Option		No		No		Option																
Radio Management	Centralised radio configuration and code plug management	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
Over the Air Programming (OTAP)	Remote, over-air programming using Radio Management	No		Yes			Yes			Yes			Yes			No		Yes		Yes		No		Yes		Yes																
Integrated Wi-Fi	Enables remote software updates for easier radio management	No		Option ¹			Option ¹			Option ¹			Option ¹			No		Yes		Option		No		No		Option ¹																
Indoor Location Tracking	Use built-in Bluetooth with iBeacons and suitable apps to locate and track radios	No		No			Option ¹			Option ¹			Option ¹			No		Option		Option		No		No		Option ¹																
Restricted Access to System	Prevents unauthorised users from communicating through the repeater	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
Radio Enable/Disable	Radio can remotely disable and re-enable another radio	Decode Only		Decode Only			Yes			Yes			Decode Only			Yes		Yes		Yes		Decode Only		Decode Only		Yes																
Integrated Mandown	Built-in accelerometer enhances personnel safety by monitoring movement	No		No			Yes ¹³			Yes			Yes			No		No		Yes		No		No		No																
Dual Capacity Direct Mode	Use both TDMA time slots to double system capacity without a repeater	Yes		Yes			Yes			Yes			Yes			Yes		Yes		Yes		Yes		Yes		Yes																
Telemetry Supported	Integrated basic telemetry capability	Yes		No			Yes			Yes			No			No		No		Yes		No		Yes		Yes																
Telemetry I/O Pins	Number of built-in input/output pins to support telemetry	n/a		n/a			3			3			n/a			n/a		n/a		0		n/a		4		5																
Telemetry Buttons	Number of buttons that can be configured for telemetry	n/a		n/a																																						