

**MOTOTRBO MOBILE RADIOS**

GENERAL SPECIFICATIONS	DP1000 SERIES	R2	DP2000e SERIES	DP3000e SERIES	DP4000e SERIES	R7 SERIES	DP4000 Ex SERIES	ION SMART RADIO	SL SERIES	DM1000 SERIES	DM2000 SERIES	DM4000e SERIES
Protocol	DMR or analogue communications											
Frequency	Capable of operating in the following frequency ranges											
Max. Power Output	Radio's full power rating											
Max. Channel Capacity	Programmable channel capacity											
Channel Spacing	Programmable channel spacing											
Display	Displays provide easy access to advanced features											
Keypad	Keypads provide access to radio controls, texting and telephony											
Audio Recording	Enables the radio to record received voice calls											
Integrated GPS	Embedded GPS receiver for location monitoring											
Integrated GLONASS	Embedded GLONASS receiver for location monitoring											
Event Driven Location Updates	Location update based on input from external device (eg door sensor)											
Distance Driven Location Updates	Location update transmission based on distance travelled											
Integrated Bluetooth 2.1	Wireless connection for audio accessories or data comms											
Integrated Bluetooth 4.0	Energy efficient Bluetooth for greater battery life											
Integrated Bluetooth 5.0	Draws less power than Bluetooth 4.2, which helps accessories with small batteries, such as earpieces, to last longer											
Permanent Bluetooth Discovery	Bluetooth "always on" mode used by some applications											
Smartphone Collaboration	M-Radio Control App allows user to view radio status and control selected features											
Dedicated Emergency Button	Orange programmable button for one-touch emergency calling											
Programmable Buttons	Allow access to most often used features with one press											
Digital DMR Signalling	DMR standard digital voice communications											
PL / DPL Signalling	Analogue Private Line / Digital Private Line compatible											
Quick Call II Signalling	Analogue Quick Call II compatible											
MDC Signalling	Analogue MDC compatible											
5 Tone Signalling	Analogue 5 tone compatible											
DTMF Hot Keypad	DTMF tone compatible											
MPT1327 Signalling	Analogue MPT1327 compatible (requires option board)											
Option Board Capability	Supports option boards for third party applications											
IMPRES™ Audio Compatible	IMPRES™ audio ensures your voice is heard clearer and louder											
SINCS+ Noise Cancellation	Integrated, advanced noise cancellation for noisy environments											
Automatic Gain Control	Modifies microphone performance to produce the best voice quality											
Microphone Distortion Control	Automatic microphone gain adjustment to reduce distortion											
Trellis Enhancement	Additional processing to enhance rolling "r" sound so speech is clearer											
IMPRES™ Energy Compatible	Use IMPRES™ batteries for longer life and optimal performance											
IMPRES™ OTA Battery Management	Automatic collection of battery data over the air with radios still in use											
ATEX Certified	ATEX certified for use in potentially explosive environments											
IEC Ex Certified	IEC Ex certified for use in potentially explosive environments											
TIA4950 Certified	Telecommunications Industry Association (TIA) approved for IS use											
SOLAS, MED/5.20, UK/5.20	Meets requirements of Marine Equipment Directive 2014/90/EU Item 5.20 and Merchant Shipping (Marine Equipment) Regulations 2016 Item 5.20											
IP Rating	Rated sealing for dust and water ingress											
MIL-STD 810	Rated to withstand environmental conditions											
Dimensions (HxWxL) mm	Physical size											
Dimensions (Weight)	Physical weight											
Intelligent Audio	Automatic volume control based on background noise levels											
User Selectable Audio Profiles	Optimises audio for specific environments and personal preferences											
Emergency Alarm	Radio can initiate an Emergency call process											
Lone Worker	Initiates emergency if user does not respond to periodic alerts											
Remote Monitor	Radio can remotely activate another radio's microphone											
VOX (supported on radio)	Voice activated calling allows handsfree operation											
Audio Feedback Suppressor	Blocks feedback from other radios to eliminate "howling"											
Freeform Text Messaging	User can enter and send free-form text messages											
Pre-programmed Text Messaging	Radio can send pre-programmed text messages											
Extended Texting	Maximum text message length is 280 character											
Vibrate Alert	Vibrate silently alerts the user to an incoming call											
Covert Mode	Disable display, LEDs and audible tones for ultimate discretion											
All Call	One-way call to all radios on a logical channel											
Radio Check	Check if another radio is active on a system without notifying the user											
Digital Telephone Patch	Ability to connect to telephone system (requires additional hardware)											
Transmit Interrupt Encode	Radio can interrupt transmissions from other radios											
Basic Privacy	MOTOTRBO 16-bit encryption for protection against eavesdropping											
Enhanced Privacy	MOTOTRBO 40-bit encryption for more robust protection											
AES256 Encryption	Advanced Encryption Standard (AES) 256-bit encryption											
Default Voice Announcement	Audible confirmation of selected operations of the radio											
Programmable Voice Announcement	Ability to use customised recordings for voice announcements											
Text-to-Speech Voice Announcement	Radio "reads out" Channel, Zone, Functions, Text Messages, Job Tickets											
Radio Management	Centralised radio configuration and code plug management											
Over the Air Programming (OTAP)	Remote, over-air programming using Radio Management											
Integrated Wi-Fi	Enables remote software updates for easier radio management											
Indoor Location Tracking	Use built-in Bluetooth with iBeacons and suitable apps to locate and track radios											
Restricted Access to System	Prevents unauthorised users from communicating through the repeater											
Radio Enable / Disable	Radio can remotely disable and re-enable another radio											
Integrated Mandown	Built-in accelerometer enhances personnel safety by monitoring movement											
Dual Capacity Direct Mode	Use both TDMA time slots to double system capacity without a repeater											
Telemetry Supported	Integrated basic telemetry capability											
Telemetry I/O Pins	Number of built-in input / output pins to support telemetry											
Telemetry Buttons	Number of buttons that can be configured for telemetry											
Fixed Installation	Mobile radios can be used in a fixed installation such as a control room											
Control Station	Mobile acts as the RF link between an Application Server and the radio network											
Remote Mount Control Head	Controls and display can be located separately from radio chassis											
Data ADKs Available	Data Application Developer Kits are available to ADP members											
Certificate Based Wi-Fi Access	WPA / WPA2 Enterprise Wi-Fi support allowing Wi-Fi enabled MOTOTRBO radios to access certificate based Wi-Fi networks											
Rental Timer	Supports the ability to set a timer where the radio will stop functioning after the timer expires											
Direct Mode Operation	Direct radio-to-radio operation											
Single-Site Conventional	Single-site conventional operation (channel selection by users)											
Extended Range Direct Mode	Single-site conventional range extension via single channel repeater											
IP Site Connect	Multi-site conventional operation (channel selection by users)											
Capacity Plus	Single- or multi-site MOTOTRBO trunking (channel selection managed by system)											
Capacity Max	Multi-site, DMR Tier III compliant trunking with centralised controller											

1 Integrated Bluetooth, GPS, GLONASS and Wi-Fi are supported on DP4401e, DP4801e, DP4801e and DM4401e & DM4801e only
2 Based on NIMH battery
3 Based on standard Li-Ion battery
4 Option board capability on SL401De only
5 SL401De only

6 Requires keypress microphone
7 DP4401e, DP4801e, DP4801e, DP4801e Ex are available with MPT Option Board factory fitted
8 DP1400, DM1400 and DM1600 analogue-only models can be upgraded to MOTOTRBO digital by purchasing a software license
9 SL1600 Programmable Button can scroll through up to 7 features

10 Requires IMPRES™ battery
11 DP4401e, DP4801e, DP4801e, DP4801e Ex are available with MPT Option Board
12 Even with distance driven location updates only supported on models with built-in GPS / GLONASS
13 Only DP2400e, DP4401e, DP4801e, DM4401e and DM4801e available in 3000MHz versions
14 Integrated man down on DP4401e, DP4801e and DP4801e only

15 VHF models: 45W / 300MHz & UHF models: 40W / 300MHz
16 Even with distance driven location updates only supported on models with built-in GPS / GLONASS
17 Maximum output RF power is 2W for frequencies >470MHz
18 Feature is standard on "Premium" models and optional on "Capable" models
19 DP4401e, DP4801e and DP4801e with software earlier than R02.21.04.3002 supported this feature
20 Only supported on DP4401e, DP4801e and DP4801e with software R02.21.04.3002 or greater
21 Single Site, 2 Repeaters

22 Gas: Class II 2G Ex ib IIC T4 Gb / Dust: Class II 2D Ex ib IIIC T130 °C Db Mining: I M2 Ex ib I Mb
23 Gas: Ex ib IIC T4 Gb / Dust: Ex ib IIIC T130°C Db / Mining: Ex ib I Mb
24 Gas: Ex ib IIC T4 Gb / Dust: Ex ib IIIC T130°C Db / Mining: Ex ib I Mb