

# FEATURE COMPARISON CHART



|                                  | GENERAL SPECIFICATIONS   |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| 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            |  |  |  |  |  |  |  |  |  |  |  |
| 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                        |  |  |  |  |  |  |  |  |  |  |  |
| Permanent Bluetooth Discovery    | Bluetooth "always on" mode used by some applications                       |  |  |  |  |  |  |  |  |  |  |  |
| 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                |  |  |  |  |  |  |  |  |  |  |  |
| SINCo 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                  |  |  |  |  |  |  |  |  |  |  |  |
| Trill 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             |  |  |  |  |  |  |  |  |  |  |  |
| FM Intrinsically Safe            | Factory Mutual (FM) approved for intrinsically safe use                    |  |  |  |  |  |  |  |  |  |  |  |
| TIA4950 Intrinsically Safe       | Telecommunications Industry Association (TIA) approved for IS use          |  |  |  |  |  |  |  |  |  |  |  |
| 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  |  |  |  |  |  |  |  |  |  |  |  |

|                                   | FEATURES AND FUNCTIONS   |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| 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                    |  |  |  |  |  |  |  |  |  |  |  |
| 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                | Enhance 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                   |  |  |  |  |  |  |  |  |  |  |  |

|                          | SYSTEM CONFIGURATIONS   |  |  |  |  |  |  |  |  |  |  |  |
|--------------------------|---|--|--|--|--|--|--|--|--|--|--|--|
| Direct Mode Operation    | Direct radio-to-radio operation   |  |  |  |  |  |  |  |  |  |  |  |
| Single-Site Conventional | Single site conventional operation (channel selection by users)               |  |  |  |  |  |  |  |  |  |  |  |
| 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       |  |  |  |  |  |  |  |  |  |  |  |
| Connect Plus             | Multi-site MOTOTRBO trunking with dedicated control channel                   |  |  |  |  |  |  |  |  |  |  |  |

<sup>1</sup> Integrated Bluetooth, GPS, GLONASS and Wi-Fi are supported on DP4401e, DP4601e, DP4801e, DM4401e & DM4601e only  
<sup>2</sup> Based on NiMH battery  
<sup>3</sup> Based on standard Li-Ion battery  
<sup>4</sup> Option board capability on SL4010e only  
<sup>5</sup> SL4010e only  
<sup>6</sup> Requires keypad microphone  
<sup>7</sup> DP4401e, DP4801e, DP4801 Ex are available with MPT Option Board factory fitted  
<sup>8</sup> DP1400, DM1400 and DM1600 analogue-only models can be upgraded to MOTOTRBO digital by purchasing a software license  
<sup>9</sup> SL1600 Programmable Button can scroll through up to 7 features  
<sup>10</sup> Requires IMPRES battery  
<sup>11</sup> Event & distance driven location updates only supported on models with built-in GPS/GLONASS  
<sup>12</sup> Only DP2400e, DP4401e, DP4801e, DM4401e and DM4601e available in 300MHz versions  
<sup>13</sup> Integrated mandown on DP4401e, DP4601e and DP4801e only  
<sup>14</sup> VHF models: 45W / 300MHz & UHF models: 40W  
<sup>15</sup> 20 kHz not supported for all 300MHz models or DM4000e 450-527MHz models