MOTOROLA

MOTOTRBO™

PROFESSIONAL DIGITAL TWO-WAY RADIO SYSTEM

ACCELERATE PERFORMANCE

MOTOTRBO™ PROFESSIONAL DIGITAL TWO-WAY RADIO SYSTEM THE FUTURE OF TWO-WAY RADIO

Motorola is a company of firsts with a rich heritage of innovation. We continue to invent what's next, connecting people, delivering mobility and making technology personal. Versatile and powerful, MOTOTRBO combines the best in two-way radio functionality with digital technology, making it the ideal communication solution for your business. You get enhanced features, increased capacity, integrated data applications, exceptional voice quality and extended battery performance. This means more productive employees and lower operating costs for your business.

THE DIGITAL DIFFERENCE

Two-way radio has been a successful analogue communication solution for generations, and it proves itself every day in countless deployments around the world.

But in today's technologically advanced environment, a new platform is possible, a digital platform that breaks through to new levels of performance and productivity.

In the same way digital technology has transformed other media, it is now revolutionising the way mobile professionals communicate. The time to take advantage of digital two-way radio technology is now.

TAKE ADVANTAGE OF DIGITAL

Digital two-way radios offer several advantages over analogue solutions, to name a few:

- Clearer audio to help assure messages are understood without background noise and static
- Integrated data applications such as text messaging, GPS-based location tracking, work order ticket management and much more
- 40% longer battery life for extended work shifts
- Increased capacity – twice the number of users for the price of one frequency license

TDMA – THE BEST CHOICE

There are two primary digital radio technologies: Time-Division Multiple-Access (TDMA) and Frequency-Division Multiple-Access (FDMA).

While both digital technologies provide significant benefits over analogue, TDMA is the best choice.

TDMA technology delivers advantages over FDMA

- *Double your capacity per channel with less than half the infrastructure per channel*
  TDMA divides your existing channels into two time slots enabling you to double the number of users on your system or utilise data applications. A second call does not require a second repeater, resulting in lower costs for you, as you do not need to purchase, install and maintain additional infrastructure equipment.
- *Double your capacity without the hassle*
  TDMA provides two time slots on your existing licensed channels, doubling your capacity. There is no increased risk of interference, and there is no need for new licenses, simply amend your existing licenses to specify digital. Compatibility with all legacy radios working in 12.5 kHz analogue channels is also maintained by TDMA.
- *Longer battery life*
  TDMA uses only half of the transmitter's capacity, resulting in longer battery life. During long work shifts or where productivity enhancing data applications place an increased power demand on the radio, this extended battery life is invaluable.
- *Advanced features*
  TDMA enables smart control features like "transmit interrupt" that makes it possible to interrupt lower priority communication so critical instructions can be delivered exactly when they're needed. And to help you maximise your infrastructure investment, TDMA can transmit voice and data on the same channel.

STANDARDS BASED, FUTURE READY SOLUTION

MOTOTRBO is designed to comply with the globally recognised European Telecommunications Standard Institute (ETSI) Digital Mobile Radio (DMR) Tier 2 standard for professional two-way radio users.

DMR is widely backed by industry leading two-way radio manufacturers, and it is the most widely deployed digital mobile radio technology for professional radio users around the world. This open standard assures long-term stability and develops a community of manufacturers who build interoperable equipment that can compete on features, benefits and price.

The DMR Association represents a collection of companies and organisations that manufacture DMR equipment, supply related products and service or support the standard in other ways. Motorola is an active member of the DMR Association so you can be assured that MOTOTRBO will always be a robust and future-ready digital radio solution.

DMR
DIGITAL MOBILE RADIO ASSOCIATION

UNIQUE MOTOTRBO™ SYSTEM BENEFITS FOR ENHANCED PRODUCTIVITY

MOTOTRBO offers a robust, standards-based solution that can be tailored to meet your unique coverage and feature needs. This versatile portfolio provides a complete system of portable radios, mobile radios, repeaters, accessories, data applications, and services, a comprehensive communication solution for your business. MOTOTRBO:

- **Integrates voice and data** into one device to increase your operational efficiency and support integrated applications including MOTOTRBO Text Messaging Services. Also available with an integrated GPS module for use with third-party location-tracking applications.
- Uses Time-Division Multiple-Access (TDMA) digital technology to provide **twice the calling capacity** (as compared to analogue or FDMA radios) for the price of one frequency license. A second call doesn't require a second repeater, saving you equipment costs.
- In digital mode, provides **clearer voice communications** throughout the coverage area, as compared to analogue radios, rejecting static and noise.
- Offers **enhanced battery life.** MOTOTRBO digital two-way portable radios can operate up to 40 percent longer between recharges compared to typical analogue radios.
- Provides **easy migration** from analogue to digital with the ability to operate in both analogue and digital modes.
- **Enables additional functionality** including dispatch data, enhanced call signaling, basic and enhanced privacy-scrambling and option board expandability.
- Features the **transmit interrupt** suite - voice interrupt, remote voice dekey, emergency voice interrupt or data over voice interrupt - to help prioritise critical communication exactly when needed.

EXTENDED COVERAGE WITH IP SITE CONNECT

Imagine using your MOTOTRBO digital two-way radio to speak instantly to a colleague in a plant on the other side of the world.

The IP Site Connect digital solution uses an IP network to extend the coverage of your MOTOTRBO communication system no matter where you may be located.

You can communicate easily among geographically dispersed locations located across the city, state or country. You can create wide area coverage and automatically roam from one coverage area to another with no manual intervention. Or you can simply enhance coverage at a single site like a high-rise building that contains physical barriers.

IP Site Connect enables you to extend the voice and data communication capability of your workforce far beyond what two-way radio has ever achieved before. This means dramatically improved customer service and increased productivity.

INCREASED CAPACITY WITH CAPACITY PLUS SINGLE-SITE TRUNKING

As a scalable, single-site digital trunking solution, Capacity Plus expands the capacity of your MOTOTRBO communication system even further. Over a thousand radio users can quickly and efficiently share business-critical voice and data communication on the same system without impacting on call set-up times or reliability.

MOTOTRBO INTEGRATED DATA ENABLES ADVANCED APPLICATIONS

ONE DEVICE FOR VOICE AND DATA

In addition to voice, MOTOTRBO supports text messaging, GPS location tracking capability, and custom applications from Motorola's Professional Radio Application Partner Programme such as telephony, dispatch, work order ticket solutions and much more. MOTOTRBO keeps your employees connected to the information they need to be more efficient, with the convenience of one device.

CONVENIENT AND DISCRETE MOTOTRBO TEXT MESSAGING

Text messaging enables your employees to quickly and easily share information when voice communication isn't practical. It is ideal in loud environments, for delivering messages that don't need an immediate response, or when voice communication could be disrupting to guests, students, customers, or patients.

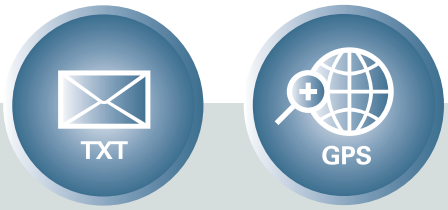
MOTOTRBO text messaging communicates between radios, radios and dispatch systems, and even radios to any email capable device.

TRACK VEHICLES AND PEOPLE WITH INTEGRATED GPS

MOTOTRBO radios are available with an integrated GPS module to use for tracking people outside your facility, vehicles or other remote assets operating in your coverage area. Unlike other GPS capable radios, MOTOTRBO's module is integrated into the handset so there is no clumsy additional equipment to attach, carry or maintain.

This enables you to better manage your mobile work force and quickly respond to incidents by locating the nearest employee and dispatching them to the scene. It also makes it easier to manage your fleet so you can make deliveries and drive routes more efficiently.

For utility crews, taxi services, the hospitality industry, and countless other industries, the ability to see where your vehicles and employees are located with just a glance is invaluable. Your employees will be far more efficient and your customer service can improve significantly.



CUSTOM DATA APPLICATIONS WITH MOTOROLA'S PROFESSIONAL RADIO APPLICATION PARTNER PROGRAMME

MOTOTRBO can accommodate custom data applications that adapt the radios to support your specific business tasks.

You can, for example, work with third-party developers or your own IT staff to extend the functionality of MOTOTRBO using Motorola's Professional Radio Application Partner Programme.

With this development tool you can create unique applications such as a program to help you manage your work order tickets, to integrate your dispatch and billing systems, to link your MOTOTRBO radios to your telephone system, or to connect to email.

MOTOTRBO is a powerful tool for communication with the flexibility to adapt to your work force, your customers and your business.

MOTOTRBO™ SYSTEM COMPONENTS AND BENEFITS

DP 3600 / DP 3601
DISPLAY PORTABLE RADIO

1 Flexible, menu-driven interface with user-friendly icons or two lines of text for ease of reading text messages* and navigating through the menus.

2 Tri-color LED indicator for clear, visible feedback of calling, scanning, roaming and monitoring features.

3 Emergency button to alert supervisor or dispatcher in an emergency situation.

4 Accessory connector meets IP57 submersibility specifications and incorporates RF, USB and IMPRES™ audio capability.

5 Integrated GPS module (DP 3601) enables the use of location-tracking data applications.*

6 Large, easy-to-use navigation buttons allow easy access to intuitive menu-driven interfaces.

7 Radio housing meets IP57 specifications; submersible in 1 meter of fresh water up to 30 minutes. Offers intrinsically safe FM battery options for use in locations where flammable gas, vapors or combustible dust may be present.

8 Powerful, front projecting speaker.

9 Three side and two front programmable buttons for easy access to frequently used features.

10 Large, textured push-to-talk button provides good tactile response and easy access, even when wearing gloves.

11 Up to 1,000 channels.

ADDITIONAL FEATURES

- Enhanced call management
  Digital calling features*
  Encode/Decode: call alert, emergency, push-to-talk ID, radio check, remote monitor, private call, all call, transmit interrupt (voice interrupt, remote voice dekey, emergency voice interrupt or data over voice interrupt), radio disable
  Quik-Call II™ analogue calling features
  Encode/decode: call alert, call alert with voice, select call
- Dual-mode analogue and/or digital scan and mixed mode priority scan* facilitates a smooth migration from analogue to digital
- Option board for added capabilities
- Basic or Enhanced privacy, built-in scrambling for increased security*
- Free-form and quick text messaging*
- Contacts list accommodates up to 1,000 contacts
- Voice Activated Transmit (VOX) hands-free communication
- Expanded coverage across multiple sites with IP Site Connect*
- Increased voice and data capacity with Capacity Plus single-site trunking*

DISPLAY PORTABLE RADIO STANDARD PACKAGE

- Display Portable Radio
  Digital/Analogue Radio
- Antenna: Standard Whip (DP 3600) / GPS Monopole (DP 3601)
- IMPRES Li-Ion Submersible Battery
  NiMH 1300 mAh
- IMPRES Single Unit Charger
- 2.5" Belt Clip
- Two-year Standard Warranty

*Digital mode only

DP 3400 / DP 3401
NON-DISPLAY PORTABLE RADIO

1 Tri-color LED indicator for clear, visible feedback of calling, scanning, roaming and monitoring features.

2 Emergency button to alert supervisor or dispatcher in an emergency situation.

3 Accessory connector meets IP57 submersibility specifications and incorporates RF, USB and IMPRES audio capability.

4 Integrated GPS module (DP 3401) enables the use of location-tracking data applications.*

5 Radio housing meets IP57 specifications; submersible in 1 meter of fresh water up to 30 minutes. Offers intrinsically safe FM battery options for use in locations where flammable gas, vapors or combustible dust may be present.

6 Powerful, front projecting speaker.

7 Three side programmable buttons for easy access to frequently used features.

8 Large, textured push-to-talk button provides good tactile response and easy access, even when wearing gloves.

9 32 channels.

NON-DISPLAY PORTABLE RADIO STANDARD PACKAGE

- Non-Display Portable Radio
  Digital/Analogue Radio
- Antenna: Standard Whip (DP 3400) / GPS Monopole (DP 3401)
- IMPRES Li-Ion Submersible Battery
  NiMH1300 mAh
- IMPRES Single Unit Charger
- 2.5" Belt Clip
- Two-year Standard Warranty

ADDITIONAL FEATURES

- Enhanced call management
  Digital calling features*
  Encode/Decode: private call, call alert, all call, transmit interrupt (voice interrupt, remote voice dekey, emergency voice interrupt or data over voice interrupt)
  Encode only: emergency, push-to-talk ID
  Decode only: radio check, remote monitor, radio disable
  Quik-Call II™ analogue calling features
  Decode only: call alert, call alert with voice, select call
- Dual-mode analogue and/or digital scan and mixed mode priority scan* facilitates a smooth migration from analogue to digital
- Option board for added capabilities
- Basic or Enhanced privacy, built-in scrambling for increased security*
- Send quick text messages via programmable buttons*
- Voice Activated Transmit (VOX) hands-free communication
- Expanded coverage across multiple sites with IP Site Connect*
- Increased voice and data capacity with Capacity Plus single-site trunking*

*Digital mode only

MOTOTRBO™ PORTABLE RADIO SPECIFICATIONS

DISPLAY
VHF/UHF

DP 3600 / DP 3601
(with integrated GPS)

General Specifications

Channel Capacity	1000
Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-512 MHz (UHF2)
Dimensions (HxWxL) with NiMH Battery 1300mAH with Lilon Std Battery 1500mAH with Lilon HiCap Battery 2200mAH with Lilon FM Battery 1400mAH	 131.5 x 63.5 x 37.2 mm 131.5 x 63.5 x 35.2 mm 131.5 x 63.5 x 39.2 mm 131.5 x 63.5 x 37.2 mm
Weight with NiMH Battery with Lilon FM Battery with Lilon HiCap Battery with Lilon Std Battery	 430 g 370 g 375 g 360 g
Power Supply	7.2V nominal
Average battery life at 5/5/90 duty cycle with battery saver enabled in carrier squelch and transmitter in high power.	
IMPRES Lilon Std Battery IMPRES Lilon HiCap Battery IMPRES FM Lilon Battery NiMH Battery	Analogue: 9 hrs / Digital: 13 hrs Analogue: 13.5hrs / Digital: 19 hrs Analogue: 8.5 hrs / Digital: 12 hrs Analogue: 8 hrs / Digital: 11 hrs

Receiver

Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-512 MHz (UHF2)
Channel Spacing	12.5 kHz/ 20 kHz[1]/ 25 kHz
Frequency Stability (-30° C, +60° C, +25° C)	+/- 1.5 ppm (DP 3600) +/- 0.5 ppm (DP 3601)
Analogue Sensitivity	0.35 uV (12 dB SINAD) 0.22 uV (typical) (12 dB SINAD) 0.4 uV (20 dB SINAD)
Digital Sensitivity	5% BER: 0.3 uV
Intermodulation	65 dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz
Spurious Rejection	70 dB
Rated Audio	500 mW
Audio Distortion @ Rated Audio	3% (typical)
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Audio Response	+1, -3 dB
Conducted Spurious Emission	-57 dBm

Transmitter

Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-512 MHz (UHF2)
Channel Spacing	12.5 kHz/ 20 kHz[1]/ 25 kHz
Frequency Stability (-30° C, +60° C, +25° C)	+/- 1.5 ppm (DP 3600) +/- 0.5 ppm (DP 3601)
Power Output UHF1 and UHF2 VHF	 1W and 4 W 1W and 5 W
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz +/- 4 kHz @ 20 kHz +/- 5.0 kHz @ 25 kHz
FM Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Conducted / Radiated Emission	-36 dBm < 1 GHz -30dBm > 1GHz
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 20/25 kHz
Audio Response	+1, -3 dB
Audio Distortion	3%
Digital Vocoder Type	AMBE+2
Digital Protocol	ETSI-TS 102 361-1, 2 & 3

GPS

Accuracy specs are for long-term tracking (95th percentile values > 5 satellites visible at a nominal -130 dBm signal strength)	
TTFF (Time To First Fix) Cold Start	< 2 minutes
TTFF (Time To First Fix) Hot Start	< 10 seconds
Horizontal Accuracy	< 10 meters

Environmental Specifications

Operating Temperature*	-30° C / +60° C
Storage Temperature	-40° C / +85° C
Temperature Shock	Per MIL-STD
Humidity	Per MIL-STD
Water Intrusion	EN60529 - IP57
Packaging Test	MIL-STD 810D and E

* With Lilon battery, operating temperature specification is -10° C / +60° C.
With NiMH battery, operating temperature specification is -20° C / +60° C

Military Standards

Applicable MIL–STD	810E		810F	
	Methods	Procedures	Methods	Procedures
Low Pressure	500.3	II	500.4	II
High Temperature	501.3	I/A, II/A1	501.4	I/Hot, II/Hot
Low Temperature	502.3	I/C3, II/C1	502.4	I/C3, II/C1
Temperature Shock	503.3	I/A1C3	503.4	I
Solar Radiation	505.3	I	505.4	I
Rain	506.4	I, II	506.4	I, III
Humidity	507.3	II	507.4	-
Salt Fog	509.3	I	509.4	I
Dust	510.3	I	510.4	I
Vibration	514.4	I/10, II/3	514.5	I/24
Shock	516.4	I, IV	516.5	I, IV

[1] 20 kHz is not supported in 450 - 512 MHz (UHF2) nor in VHF

Specifications subject to change without notice. All specifications shown are typical.
Radio meets applicable regulatory requirements.

FACTORY MUTUAL APPROVALS - DP family of radios are certified by Factory Mutual Approvals as intrinsically safe for use in Division 1, Class I,II,III, Groups C,D,E,F,G, when ordered with the Factory Mutual approved battery option. Two versions of the VHF (136-174 MHz) portable are available; one which does not support 20 kHz, but can be ordered with the Factory Mutual approved battery option and one which supports 20 kHz but can not be ordered with the FM approved battery option.

NON-DISPLAY VHF/UHF

DP 3400 / DP 3401
(with integrated GPS)

General Specifications

Channel Capacity	32
Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-512 MHz (UHF2)
Dimensions (HxWxL) with NiMH Battery 1300mAH with Lilon Std Battery 1500mAH with Lilon HiCap Battery 2200mAH with Lilon FM Battery 1400mAH	 131.5 x 63.5 x 37.2 mm 131.5 x 63.5 x 35.2 mm 131.5 x 63.5 x 39.2 mm 131.5 x 63.5 x 37.2 mm
Weight with NiMH Battery with Lilon FM Battery with Lilon HiCap Battery with Lilon Std Battery	 430 g 340 g 345 g 330 g
Power Supply	7.2V nominal
Average battery life at 5/5/90 duty cycle with battery saver enabled in carrier squelch and transmitter in high power.	
IMPRES Lilon Std Battery IMPRES Lilon HiCap Battery IMPRES FM Lilon Battery NiMH Battery	Analogue: 9 hrs / Digital: 13 hrs Analogue: 13.5hrs / Digital: 19 hrs Analogue: 8.5 hrs / Digital: 12 hrs Analogue: 8 hrs / Digital: 11 hrs

Receiver

Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-512 MHz (UHF2)
Channel Spacing	12.5 kHz/ 20 kHz[1]/ 25 kHz
Frequency Stability (-30° C, +60° C, +25° C)	+/- 1.5 ppm (DP 3400) +/- 0.5 ppm (DP 3401)
Analogue Sensitivity	0.35 uV (12 dB SINAD) 0.22 uV (typical) (12 dB SINAD) 0.4 uV (20 dB SINAD)
Digital Sensitivity	5% BER: 0.3 uV
Intermodulation	65 dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz
Spurious Rejection	70 dB
Rated Audio	500 mW
Audio Distortion @ Rated Audio	3% (typical)
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Audio Response	+1, -3 dB
Conducted Spurious Emission	-57 dBm

Transmitter

Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-512 MHz (UHF2)
Channel Spacing	12.5 kHz/ 20 kHz[1]/ 25 kHz
Frequency Stability (-30° C, +60° C, +25° C)	+/- 1.5 ppm (DP 3400) +/- 0.5 ppm (DP 3401)
Power Output UHF1 and UHF2 VHF	 1W and 4 W 1W and 5 W
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz +/- 4 kHz @ 20 kHz +/- 5.0 kHz @ 25 kHz
FM Hum and Noise	40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Conducted / Radiated Emission	-36 dBm < 1 GHz -30dBm > 1GHz
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 20/25 kHz
Audio Response	+1, -3 dB
Audio Distortion	3%
Digital Vocoder Type	AMBE+2
Digital Protocol	ETSI-TS 102 361-1, 2 & 3

GPS

Accuracy specs are for long-term tracking (95th percentile values > 5 satellites visible at a nominal -130 dBm signal strength)	
TTFF (Time To First Fix) Cold Start	< 2 minutes
TTFF (Time To First Fix) Hot Start	< 10 seconds
Horizontal Accuracy	< 10 meters

Environmental Specifications

Operating Temperature*	-30° C / +60° C
Storage Temperature	-40° C / +85° C
Temperature Shock	Per MIL-STD
Humidity	Per MIL-STD
Water Intrusion	EN60529 - IP57
Packaging Test	MIL-STD 810D and E

* With Lilon battery, operating temperature specification is -10° C / +60° C.
With NiMH battery, operating temperature specification is -20° C / +60° C

Military Standards

Applicable MIL–STD	810E		810F	
	Methods	Procedures	Methods	Procedures
Low Pressure	500.3	II	500.4	II
High Temperature	501.3	I/A, II/A1	501.4	I/Hot, II/Hot
Low Temperature	502.3	I/C3, II/C1	502.4	I/C3, II/C1
Temperature Shock	503.3	I/A1C3	503.4	I
Solar Radiation	505.3	I	505.4	I
Rain	506.4	I, II	506.4	I, III
Humidity	507.3	II	507.4	-
Salt Fog	509.3	I	509.4	I
Dust	510.3	I	510.4	I
Vibration	514.4	I/10, II/3	514.5	I/24
Shock	516.4	I, IV	516.5	I, IV

[1] 20 kHz is not supported in 450 - 512 MHz (UHF2) nor in VHF

Specifications subject to change without notice. All specifications shown are typical.
Radio meets applicable regulatory requirements.

FACTORY MUTUAL APPROVALS - DP family of radios are certified by Factory Mutual Approvals as intrinsically safe for use in Division 1, Class I,II,III, Groups C,D,E,F,G, when ordered with the Factory Mutual approved battery option. Two versions of the VHF (136-174 MHz) portable are available; one which does not support 20 kHz, but can be ordered with the Factory Mutual approved battery option and one which supports 20 kHz but can not be ordered with the FM approved battery option.

MOTOTRBO™ SYSTEM COMPONENTS AND BENEFITS

DM 3600 / DM 3601 DISPLAY MOBILE RADIO

1 Flexible, menu-driven interface with user-friendly icons or two lines of text for ease of reading text messages* and navigating through the menus.

2 Multi-colored LED indicators for clear, visible feedback of calling, scanning, roaming and monitoring features.

3 Large, easy-to-use volume knob.

4 Integrated GPS module (DM 3601) enables the use of location-tracking data applications.*

5 Up to 1,000 channels.

6 Powerful, front-projecting speaker.

7 Large, easy-to-use navigation buttons allow easy access to intuitive, menu-driven interfaces.

8 Accessory connector supports USB and IMPRES™ audio capability.

9 Four programmable/replaceable buttons for easy access to frequently used features.

10 Compact and ergonomically friendly microphone.

DISPLAY MOBILE RADIO STANDARD PACKAGE

- Mobile Radio with Display Control Head Digital/Analogue Radio
- Compact Microphone
- Mounting Trunnion
- 3-Metre Power Cable
- Two-year Standard Warranty

ADDITIONAL FEATURES

- Enhanced call management
  Digital calling features*
  Encode/Decode: call alert, emergency, remote monitor, push-to-talk ID, radio check, private call, all call, transmit interrupt (voice interrupt, remote voice dekey, emergency voice interrupt or data over voice interrupt), radio disable
  Quik-Call II™ analogue calling features
  Encode/decode: call alert, call alert with voice, select call
- Dual-mode analogue and/or digital scan and mixed mode priority scan* facilitates a smooth migration from analogue to digital
- Option board for added capabilities
- Basic or Enhanced privacy, built-in scrambling for increased security*
- Free-form (requires keypad microphone) and quick text messaging*
- Remote mount control head kit for easier access and installation
- Expanded coverage across multiple sites with IP Site Connect*
- Increased voice and data capacity with Capacity Plus single-site trunking*

*Digital mode only

DM 3400 / DM 3401 NUMERIC DISPLAY MOBILE RADIO

1. 32 channels; channel number is easy to read on large, clear numeric two-digit display.
2. Multi-colored LED indicators for clear, visible feedback of calling, scanning, roaming and monitoring features.
3. Large, easy-to-use volume knob.
4. Integrated GPS module (DM 3401) enables the use of location-tracking data applications.*
5. Large, easy-to-use channel navigation buttons.
6. Powerful, front-projecting speaker.
7. Accessory connector supports USB and IMPRES audio capability.
8. Two programmable/replaceable buttons for easy access to frequently used features.
9. Compact and ergonomically friendly microphone.

NUMERIC DISPLAY MOBILE RADIO STANDARD PACKAGE

- Mobile Radio with Numeric Display Control Head Digital/Analogue Radio
- Compact Microphone
- Mounting Trunnion
- 3-Metre Power Cable
- Two-year Standard Warranty

ADDITIONAL FEATURES

- Enhanced call management
  Digital calling features*
  Encode/Decode: private call, call alert, all call, transmit interrupt (voice interrupt, remote voice dekey, emergency voice interrupt or data over voice interrupt)
  Encode only: emergency, push-to-talk ID
  Decode only: radio check, remote monitor, radio disable
  Quik-Call II™ analogue calling features
  Decode only: call alert, call alert with voice, select call
- Dual-mode analogue and/or digital scan and mixed mode priority scan* facilitates a smooth migration from analogue to digital
- Option board for added capabilities
- Basic or Enhanced privacy, built-in scrambling for increased security*
- Send quick text messages via programmable buttons*
- Remote mount control head kit for easier access and installation
- Expanded coverage across multiple sites with IP Site Connect*
- Increased voice and data capacity with Capacity Plus single-site trunking*

*Digital mode only

MOTOTRBO™ MOBILE RADIO SPECIFICATIONS

DISPLAY VHF/UHF

DM 3601
(with integrated GPS module)

General Specifications

Channel Capacity	1000
Typical RF Output Low Power UHF1 and VHF High Power UHF2 (450-512 MHz) High Power UHF2 (512-527 MHz) High Power UHF1 High Power VHF	 1-25 W 1-40 W 1-25 W 25-40 W 25-45 W
Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-527 MHz (UHF2)
Dimensions (HxWxL)	51 x 175 x 206 mm
Weight	1.8 kg
Current Drain: Standby Rx @ Rated Audio Transmit	 0.81 A max 2 A max 1-25 W: 11.0A max 1-40 W: 14.5A max (11.0A max < 25 W) 25-40 W: 14.5A max 25-45 W: 14.5A max
Digital Protocol	ETSI-TS 102 361-1, 2 & 3

Receiver

Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-527 MHz (UHF2)
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz
Frequency Stability (-30° C, +60° C, +25° C)	+/- 1.5 ppm (DM 3600) +/- 0.5 ppm (DM 3601)
Analogue Sensitivity	0.30 uV (12 dB SINAD) 0.22 uV (typical) (12 dB SINAD) 0.4 uV (20 dB SINAD)
Digital Sensitivity	5% BER: 0.3 uV
Intermodulation	70 dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz
Spurious Rejection	70 dB
Rated Audio	3 W (Internal) 7.5 W (External - 8 ohms) 13 W (External - 4 ohms)
Audio Distortion @ Rated Audio	3% (typical)
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Audio Response	+1, -3 dB
Conducted Spurious Emission	-57 dBm

Transmitter

Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-527 MHz (UHF2)
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz
Frequency Stability (-30° C, +60° C, +25° C)	+/- 1.5 ppm (DM 3600) +/- 0.5 ppm (DM 3601)
Power Output Low Power UHF1 and VHF High Power UHF2 (450-512 MHz) High Power UHF2 (512-527 MHz) High Power UHF1 High Power VHF	 1-25 W 1-40 W 1-25 W 25-40 W 25-45 W
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz +/- 4 kHz @ 20 kHz +/- 5.0 kHz @ 25 kHz
FM Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Conducted / Radiated Emission	-36 dBm < 1 GHz -30 dBm > 1 GHz
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 20/25 kHz
Audio Response	+1, -3 dB
Audio Distortion	3%
Digital Vocoder Type	AMBE+2

GPS

Accuracy specs are for long-term tracking (95th percentile values > 5 satellites visible at a nominal -130 dBm signal strength)

TTFF (Time To First Fix) Cold Start	< 2 minutes
TTFF (Time To First Fix) Hot Start	< 10 seconds
Horizontal Accuracy	< 10 meters

Environmental Specifications

Operating Temperature	-30° C / +60° C
Storage Temperature	-40° C / +85° C
Temperature Shock	Per MIL-STD
Humidity	Per MIL-STD
Water and Dust Intrusion	IP54, MIL-STD

Military Standards

Applicable MIL–STD	810E		810F	
	Methods	Procedures	Methods	Procedures
Low Pressure	500.3	II	500.4	II
High Temperature	501.3	I/A, II/A1	501.4	I/Hot, II/Hot
Low Temperature	502.3	I/C3, II/C1	502.4	I/C3, II/C1
Temperature Shock	503.3	I/A, 1C3	503.4	I
Solar Radiation	505.3	I	505.4	I
Rain	506.3	I, II	506.4	I, III
Humidity	507.3	II	507.4	-
Salt Fog	509.3	I	509.4	I
Dust	510.3	I	510.4	I
Vibration	514.4	I/10, II/3	514.5	I/24
Shock	516.4	I, IV	516.5	I, IV

Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements.

NUMERIC DISPLAY VHF/UHF

DM 3401
(with integrated GPS module)

General Specifications

Channel Capacity	32
Typical RF Output Low Power UHF1 and VHF High Power UHF2 (450-512 MHz) High Power UHF2 (512-527 MHz) High Power UHF1 High Power VHF	 1-25 W 1-40 W 1-25 W 25-40 W 25-45 W
Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-527 MHz (UHF2)
Dimensions (HxWxL)	51 x 175 x 206 mm
Weight	1.8 kg
Current Drain: Standby Rx @ Rated Audio Transmit	 0.81 A max 2 A max 1-25 W: 11.0A max 1-40 W: 14.5A max (11.0A max < 25 W) 25-40 W: 14.5A max 25-45 W: 14.5A max
Digital Protocol	ETSI-TS 102 361-1, 2 & 3

Receiver

Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-527 MHz (UHF2)
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz
Frequency Stability (-30° C, +60° C, +25° C)	+/- 1.5 ppm (DM 3400) +/- 0.5 ppm (DM 3401)
Analogue Sensitivity	0.30 uV (12 dB SINAD) 0.22 uV (typical) (12 dB SINAD) 0.4 uV (20 dB SINAD)
Digital Sensitivity	5% BER: 0.3 uV
Intermodulation	70 dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz
Spurious Rejection	70 dB
Rated Audio	3 W (Internal) 7.5 W (External - 8 ohms) 13 W (External - 4 ohms)
Audio Distortion @ Rated Audio	3% (typical)
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Audio Response	+1, -3 dB
Conducted Spurious Emission	-57 dBm

Transmitter

Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-527 MHz (UHF2)
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz
Frequency Stability (-30° C, +60° C, +25° C)	+/- 1.5 ppm (DM 3400) +/- 0.5 ppm (DM 3401)
Power Output Low Power UHF1 and VHF High Power UHF2 (450-512 MHz) High Power UHF2 (512-527 MHz) High Power UHF1 High Power VHF	 1-25 W 1-40 W 1-25 W 25-40 W 25-45 W
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz +/- 4 kHz @ 20 kHz +/- 5.0 kHz @ 25 kHz
FM Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Conducted / Radiated Emission	-36 dBm < 1 GHz -30 dBm > 1 GHz
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 20/25 kHz
Audio Response	+1, -3 dB
Audio Distortion	3%
Digital Vocoder Type	AMBE+2

GPS

Accuracy specs are for long-term tracking (95th percentile values > 5 satellites visible at a nominal -130 dBm signal strength)

TTFF (Time To First Fix) Cold Start	< 2 minutes
TTFF (Time To First Fix) Hot Start	< 10 seconds
Horizontal Accuracy	< 10 meters

Environmental Specifications

Operating Temperature	-30° C / +60° C
Storage Temperature	-40° C / +85° C
Temperature Shock	Per MIL-STD
Humidity	Per MIL-STD
Water and Dust Intrusion	IP54, MIL-STD

Military Standards

Applicable MIL–STD	810E		810F	
	Methods	Procedures	Methods	Procedures
Low Pressure	500.3	II	500.4	II
High Temperature	501.3	I/A, II/A1	501.4	I/Hot, II/Hot
Low Temperature	502.3	I/C3, II/C1	502.4	I/C3, II/C1
Temperature Shock	503.3	I/A, 1C3	503.4	I
Solar Radiation	505.3	I	505.4	I
Rain	506.3	I, II	506.4	I, III
Humidity	507.3	II	507.4	-
Salt Fog	509.3	I	509.4	I
Dust	510.3	I	510.4	I
Vibration	514.4	I/10, II/3	514.5	I/24
Shock	516.4	I, IV	516.5	I, IV

Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements.

MOTOTRBO™ SYSTEM COMPONENTS AND BENEFITS

DR 3000 REPEATER

1. 100% continuous duty at 40W/UHF and 45W/VHF.
2. Supports two simultaneous voice or data paths in digital TDMA mode.
3. Integrated power supply with connector for optional external DC battery backup.
4. Operates in analogue or digital mode, bright, clear, colored LEDs indicate mode.
5. LEDs clearly indicate transmit and receive modes in both channel slots.
6. Rack- or wall-mountable, compatible with desktop housing as well.
7. Sturdy handles make installation and handling easier.

REPEATER STANDARD PACKAGE

- Repeater
- AC Power Cord
- Two-year Standard Warranty

ADDITIONAL FEATURES

- Automated battery back-up capability
- Expanded coverage across multiple sites with IP Site Connect*
- Increased voice and data capacity with Capacity Plus single-site trunking*
- Dynamic mixed mode capability allows for automatic switching between analogue and digital mode
- Repeater diagnostic and control software provides remote or local site monitoring

*Digital mode only

MOTOTRBO REPEATER SPECIFICATIONS

VHF/UHF

DR 3000

General Specifications

Channel Capacity	16
Typical RF Output Low Power UHF1 and VHF High Power UHF2 (450-512 MHz) High Power UHF2 (512-527 MHz) High Power UHF1 High Power VHF	 1-25 W 1-40 W 1-25 W 25-40 W 25-45 W
Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-527 MHz (UHF2)
Dimensions (HxWxL)	132.6 x 482.6 x 296.5 mm
Weight	14 kg
Voltage Requirements	100-240 V AC (13.6 V DC)
Current Drain: Standby	 >0.2A (100 V AC2 A max >0.1A (240 V AC) >1.5A (typical) (13.4 V DC)
Transmit Low Power High Power	 >2.0A (100 VAC >1.0A (240 VAC) >9.0A (typical) (13.4 VDC) >2.5A (100 V AC) >1.25A (240 V AC) >12.0A (typical) (13.4 V DC)
Operating Temperature Range	-30°C to +60°C
Max Duty Cycle	100%
Digital Protocol	ETSI-TS 102 361-1, 2 & 3

Receiver

Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-527 MHz (UHF2)
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz
Frequency Stability (-30° C, +60° C, +25° C)	+/- 0.5 ppm
Analogue Sensitivity	0.30 uV (12 dB SINAD) 0.22 uV (typical) (12 dB SINAD) 0.4 uV (20 dB SINAD)
Digital Sensitivity	5% BER: 0.3 uV
Intermodulation	70 dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 70 dB @ 20/25 kHz
Spurious Rejection	70 dB
Audio Distortion @ Rated Audio	3% (typical)
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Audio Response	+1, -3 dB
Conducted Spurious Emission	-57 dBm < 1GHz

Transmitter

Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-527 MHz (UHF2)
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz
Frequency Stability (-30° C, +60° C, +25° C)	+/- 0.5 ppm
Power Output Low Power UHF1 and VHF High Power UHF2 (450-512 MHz) High Power UHF2 (512-527 MHz) High Power UHF1 High Power VHF	 1-25 W 1-40 W 1-25 W 25-40 W 25-45 W
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz +/- 4 kHz @ 20 kHz +/- 5.0 kHz @ 25 kHz
FM Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Conducted / Radiated Emission	-36 dBm < 1 GHz -30 dBm > 1 GHz
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 20/25 kHz
Audio Response	+1, -3 dB
Audio Distortion	3%
Digital Vocoder Type	AMBE+2

Specifications subject to change without notice. All specifications shown are typical. Repeater meets applicable regulatory requirements.

MOTOTRBO™ SYSTEM COMPONENTS AND BENEFITS

MTR3000 UHF BASE STATION / REPEATER

1 100% continuous duty cycle (Integrated 100W Power Amp)

2 Supports two simultaneous voice or data paths in digital TDMA mode with 16 channels*

3 Integrated AC/DC power supply

4 Operates in analogue or digital mode

5 LEDs clearly indicate transmit and receive modes and overall station status

6 Rack-or-cabinet mountable

7 Front access speaker port for serviceability ease

8 Front access microphone port for routine service

9 Standard USB port for station configuration

BASE STATION / REPEATER STANDARD PACKAGE

- MTR3000 Base Station / Repeater
- AC Power Cord
- MOTOTRBO Repeater Installation Guide
- Two-year Standard Warranty

ADDITIONAL FEATURES

- Convenient access to station ports, shortening installation and maintenance time
- 12.5 or 25 kHz programmable channel spacing
- 6.25e Compliant
- Integrated 100W Power Amplifier and AC/DC Power Supply minimises cabling, rack space, expense, and overall complexity
- Software based design simplifies feature upgrades
- Power supply functions over a wide range of voltages
- Supports MOTOTRBO Capacity Plus single site trunking without a separate hardware controller*
- Expanded coverage across multiple sites with IP Site Connect*
- Repeater diagnostic and control software provides remote or local site monitoring
- Automated battery back up (charger sold separately)
- Restriction of Hazardous Substances (RoHS) compliant

*Digital mode only

MTR3000 BASE STATION / REPEATER SPECIFICATIONS

General Specifications

		MTR3000	Upgrade kit for MTR2000 stations
Number of Frequencies		Up to 16	
Modulation		FM & 4FSK	
Frequency Generation		Synthesized	
Channel Spacing	Analogue Digital	12.5 kHz, 25 kHz* 12.5 kHz (6.25e compliant)	
Mode of Operation		Semi-duplex / Duplex	
Temperature Range		–30ºC to +60ºC	
Antenna Connectors		Transmit and Receive, Type "N" Female	
AC Operation		85-264 VAC, 47-63 Hz	
DC Operation		28.6 VDC (25.7-30.7 VDC full rated output power)	
		Dimensions	**Weight**
Base Station Repeater		5.25 x 19 x 16.5 in. (133 x 483 x 419 mm)	40 lbs (19 kg)
Digital Protocol		ETSI 102 361-1, -2, -3	

Receiver

		MTR3000
Frequency		403-470, 450-524 MHz
Selectivity (TIA603)	25 kHz* 12.5 kHz	80 dB (86 dB typical) 75 dB (78 dB typical)
Selectivity (TIA603D)	25 kHz* 12.5 kHz	75 dB (85 dB typical) 45 dB (60 dB typical)
Analogue Sensitivity 12 dB SINAD		0.30 uV (0.22 uV typical)
Digital Sensitivity 5% BER		0.30 µV (0.20 uV typical)
Signal Displacement Bandwidth 12.5 / 25 kHz		1 kHz / 2 kHz
Intermodulation Rejection 12.5 and 25 kHz		85 dB
Spurious and Image Response Rejection		85 dB (typical 95 dB)
Audio Response		+1,-3 dB from 6 dB per octave de-emphasis; 300-3000 Hz referenced to 1000 Hz at line output
Audio Distortion		Less than 3% (1.5% typical) at 1000 Hz, 60% RSD
Line Output		330 mV (RMS) @ 60% RSD
FM Hum and Noise (750µs de-emphasis)	25 kHz* 12.5 kHz	50 dB nominal 45 dB nominal
RF Input Impedance		50 Ohms

Transmitter

		MTR3000
Frequency		403-470, 470-524 MHz
Power Output (Continuous Duty)		8-100 watts
Electronic Bandwidth		Full Band
Output Impedance		50 Ohms
Intermodulation Attenuation		55 dB
Maximum Deviation (RSD)	25 kHz* 12.5 kHz	±5 kHz ±2.5 kHz
Audio Sensitivity		60% RSD @ 80 mV RMS
Spurious and Harmonic Emissions Attenuation		85 dB
FM Hum and Noise (750 µs de-emphasis)	25 kHz* 12.5 kHz	50 dB nominal 45 dB nominal
Frequency Stability (for temperature and aging variation)		1.5 PPM/External Ref (optional)
Audio Response		+1,-3 dB from 6 dB per octave pre-emphasis; 300-3000 Hz referenced to 1000 Hz at line output
Audio Distortion		Less than 3% (1% typical) at 1000 Hz; 60% RSD
Emission Designators		FM Modulation: 12.5 kHz: 11K0F3E; 25 kHz*: 16K0F3E 4FSK Modulation: 12.5 kHz - Data Only: 7K60FXD; 12.5 kHz - Data & Voice: 7K60FXE
Digital Vocoder Type		AMBE +2™ Vocoder

UHF Input Power

	AC Line 117 Volts / 220 Volts	28 VDC D/C Battery Revert, Neg. Gnd.
100 W Standby	0.4A/0.2A	0.8A
100 W Transmit	3.3A/1.8A	11.5A

Specifications subject to change without notice. All specifications shown are typical.
Repeater meets applicable regulatory requirements.

IMPRES™ SMART AUDIO SYSTEM EXCLUSIVE AUDIO TECHNOLOGY THAT ENABLES HIGH QUALITY COMMUNICATIONS

Motorola digital technology enables breakthrough radio performance and features. Our state-of-the-art IMPRES audio technology allows communication between the radio and audio accessories, enabling enhanced performance and capabilities, both in analogue and digital modes, now and into the future.

- **IMPRES Smart Audio System** Provides businesses and agencies with a solution that optimises key aspects of two-way audio quality, loudness, clarity and intelligibility.

  Optimal Audio Performance: When an IMPRES accessory is attached, the accessory parameters are sent to the MOTOTRBO™ radio enabling the radio to optimise its output for each type of audio accessory. This results in more consistent output across all audio accessory types. For example, the IMPRES remote speaker microphone capitalises on the MOTOTRBO radio's intelligent signal processing for outstanding noise suppression, speech clarity, and loudness – even in difficult weather conditions.

  Customisation: Accessory programmable buttons can be programmed to any feature available in the radio CPS, rather than being linked to radio programmable button programming. This allows accessories with programmable buttons to have independently programmed features. This flexibility allows the radio to be customised to fit your specific applications and needs.

  Enhanced Audio Gain Capability (AGC): IMPRES audio accessories have significantly enhanced audio gain capability. When you are speaking either quietly or speaking in a normal volume but not directly into the microphone, IMPRES audio technology can detect that condition and will automatically increase the microphone gain. AGC eliminates the need to adjust volume levels repeatedly.

- **Built-in Antenna Signal** The portable connector design incorporates the antenna signal within the audio connector, eliminating the need for an external radio frequency (RF) adapter for public safety microphones.

- **Submersibility** This connector design meets IP57 submersibility requirements. This allows for use with submersible accessories, such as the submersible remote speaker microphone, which provides reliable communications even in wet conditions.

- **Future Applications** The connector design also incorporates built-in USB capability to allow for the use of USB-capable accessories. The audio accessory interface is now the Motorola standard audio accessory interface for mid- to high-tier two-way radios. Future accessory development is based on this interface so you will be able to take advantage of future releases of new audio accessories.

MOTOROLA ORIGINAL

IMPRES SMART ENERGY SYSTEM A UNIQUE BATTERY CHARGING AND RECONDITIONING SOLUTION

Motorola's state-of-the-art IMPRES technology allows communication between the battery and the charger to automate battery maintenance. The result, prolonged life of your batteries and maximized talk time.

- **Automated battery maintenance** Manual tracking and recording of battery use are a thing of the past. IMPRES uses a unique communications protocol to facilitate adaptive reconditioning, the charger evaluates the details of the battery's usage pattern to determine the optimal reconditioning interval. This automated process works to diminish memory effect and optimise the cycle life of the battery and maximise talk time.

- **Long-term safe charging** IMPRES batteries may be left in IMPRES chargers for extended periods without heat damage from the charger. Charge levels are also monitored by the charger, so that radios are charged to the appropriate level and ready to go whenever needed.

- **Chargers that communicate** IMPRES chargers are available with a two-line display module. You now have access to valuable information such as:
  - ~ Battery capacity (in mAh and percent of minimum rated capacity) and voltage while charging and at completion of charge
  - ~ Time remaining to complete rapid charging (NiCd and NiMH only)
  - ~ Current battery charge status
  - ~ The battery's unique serial number, part number and chemistry
  - ~ Knowledge is power. You can make informed decisions on battery replacement and asset management.

- **Extended warranty** When used exclusively with IMPRES chargers, MOTOTRBO IMPRES batteries have an 18 month capacity warranty coverage, six months longer than Motorola Premium Li-Ion batteries.

- **Proven Tough** IMPRES batteries are subjected to the same rigorous testing and held to the same high standards as all Motorola Premium batteries. Actual results of Drop, Vibration and ESD (Electrostatic Discharge) tests prove Motorola batteries outperform the competition.

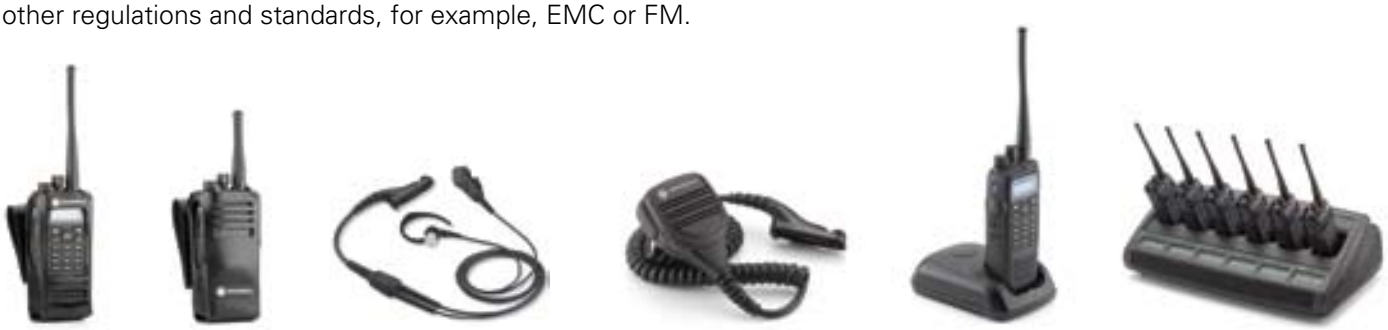
- **Environmentally Friendly** IMPRES chargers have technology that avoids overcharging and our single-unit IMPRES chargers with external power supplies consume 40 percent less energy in standby mode than required by the U.S. Energy Independence and Security Act of 2007.

MOTOTRBO™ ACCESSORIES

PORTABLE RADIO

To complement the MOTOTRBO portables, Motorola Original® accessories are specifically designed for your critical communication needs. Whether it is harsh working conditions, noisy environments, long shifts or the focus is on discreet communication, a MOTOTRBO accessory is available to meet the challenge.

It is recommended that your MOTOTRBO radio always be paired with Motorola approved batteries or accessories. Use of non-Motorola approved batteries or accessories may result in RF energy exposure standards being exceeded. Use of non-Motorola approved batteries or accessories may cause your Motorola radios to become non-compliant to other regulations and standards, for example, EMC or FM.



AUDIO SOLUTIONS

Remote and Public Speaker Microphones are versatile and reliable accessories that allow users to remain in full contact without removing the radio from the belt or carry case. Motorola offers a range of these speaker microphones that provide features such as IMPRES™, Windporting, IP57 submersibility and noise-canceling acoustics.

Motorola also offers a wide range of earpieces, surveillance kits, headsets and temple transducers to ensure you have the right audio accessory for your specific business need.

BATTERY AND CHARGING SOLUTIONS

IMPRES batteries are designed to maximise talk time and optimise battery life. Four batteries are available to meet your specific power needs. Complementing the battery portfolio are a range of IMPRES charging solutions from single-unit chargers, multi-unit chargers and vehicular chargers.

CARRYING SOLUTIONS

The ability to perform the job while staying in contact requires good carrying solutions. MOTOTRBO offers a wide range of solutions including belt clips, nylon- and leather carry cases, shoulder straps and chest packs. All designed to increase comfort and enhance functionality such as ruggedness as well as water and dust resistance.

MOBILE RADIO

A range of Motorola accessories are available to support the MOTOTRBO mobile radios. Accessories are an important piece of the mobile solution to meet even the most challenging installation and operational requirements. These MOTOTRBO mobile accessories can enable hands free communication in the vehicle, dispatch-enabled communication and convenient installation options.

AUDIO SOLUTIONS

Various mobile microphones are available for different needs. The IMPRES keypad microphone allows the user to navigate the mobile menu, dial phone numbers and send text messages, the heavy duty microphone provides enhanced durability and easier handling while wearing gloves. The IMPRES visor microphone enables hands-free and discreet communications.

The desktop microphone, tray and external speaker allow users to convert MOTOTRBO mobiles into simple base stations offering an optimal solution for transportation and dispatch users.

Other accessories are available for MOTOTRBO with specific needs in mind. An emergency footswitch is available allowing users to discretely notify about an emergency situation. External speaker and push-button PTT are available when operating in noisy environments or if hands free operation is required.

REMOTE MOUNTING SOLUTIONS

Remote Mount cables enable you to mount the mobile in a trunk, a critical accessory when space is limited in the vehicle or in covert operations.

ANTENNA SOLUTIONS

A wide variety of antenna options are available to support your specific mobile configuration. Standalone radio frequency (RF) antennas, standalone GPS antennas or combination GPS/RF antennas are all available in the frequency band you require.

MOTOTRBO™ SERVICE OFFERINGS

SUBSCRIBER REPAIR

Managing the in-house repair and maintenance of your subscriber radios takes a dedicated staff of technicians, as well as an ongoing investment in diagnostic equipment, repair tools, and the technical training to keep up to speed on the latest technology. Motorola has made that investment and can help you easily and cost effectively keep your radios in top operating condition to ensure optimal efficiency and productivity.

Our subscriber repair service offering allows you to budget for your repairs, preventing unexpected service and maintenance costs. Extended Care Option repairs receive priority service and meet committed cycle times from our European Radio Service Centre.

• Extended Care Option (ECO):

Extended Care Option is a post-warranty service offering that extends the service coverage of Motorola portable or mobile subscriber radios. ECO can be purchased as an option to new radio purchases and is available to extend service coverage for up to five years.

• ECO Service Benefits:

With our proven repair capability, you can be sure your equipment is expertly repaired and back in your end users' hands quickly. Using the latest tools and with strict adherence to Motorola engineering procedures, our European Radio Support Center's expert technicians diagnose and repair units to original manufacturing specifications. With the Extended Care Option, you receive:

- Fast and committed turnaround times
- Predictable budgets
- Cost effective repairs
- Peace of mind

ALT™ Stringent Motorola Accelerated Life Testing simulating five years of hard use in real life. EIA RS-316B in Shock, Vibration, Dust, Humidity, IP54 for Sealing.

ISO 9001 Compliance with ISO 9001 Standard on international quality system assurance on design, development, production, installation and servicing of a product.

MIL-STD 810 Stamp of Approval from the U.S. Military for use in rough environments.

MOTOROLA ORIGINAL accessories To ensure compliance with RF energy exposure standards and regulations, use only Motorola-approved batteries and accessories. Use of non-Motorola-approved batteries and accessories may result in RF energy exposure standards being exceeded.

For more information please contact your local Motorola Authorised Dealer or Distributor

MOTOROLA

System-BROCH_UK (04/10)

www.motorola.com/mototrbo

Motorola, Ltd. Jays Close, Viables Industrial Estate,
Basingstoke, Hampshire, RG22 4PD, UK