



# DP 3600/3601

## Display Portable Radios



- 1 Flexible, menu-driven interface with user-friendly icons or two lines of text for ease of reading text messages.
- 2 Tri-color LED indicator for clear, visible feedback of calling, scanning and monitoring.
- 3 Emergency button to alert supervisor or dispatcher in an emergency situation.
- 4 New accessory connector meets IP57 submersibility specifications and incorporates RF, USB and enhanced audio capability.
- 5 DP 3601 includes integrated GPS module.
- 6 Large, easy-to-use navigation buttons allow easy access to intuitive menu-driven interfaces.
- 7 Radio housing meets IP57 specifications; submersible in 1 metre of water up to 30 minutes
- 8 Powerful, front projecting speaker.
- 9 Three side and two front programmable buttons for easy access to favourite features. New features such as one-touch calling and quick text messaging are made even easier through programmable button access.
- 10 Large, textured push-to-talk button. Provides good tactile response and easy access, even when wearing gloves.
- 11 1000 channels.

### Display Portable Radio Standard Package

- Display Portable Radio
- Antenna - Standard whip included with DP 3600; GPS Monopole included with DP 3601
- NiMH 1300 mAh Battery
- IMPRES™ Single Unit Charger
- 2.5" Belt Clip
- Quick Reference Guide

### Additional Features

- Enhanced call management
  - Encode/decode: emergency, remote monitor, push-to-talk ID, radio check, all call, radio disable
- Dual-mode analogue/digital scan - facilitates a smooth migration from analogue to digital
- Free-form and quick text messaging
- DP 3601 can transmit GPS coordinates
- Privacy Options
- VOX Capability
- Multiple Site Support (IP Site Connect)

# MOTOTRBO™ System Components and Benefits

## DP 3600/3601 Display Portable Radios

### Specifications

#### GENERAL SPECIFICATIONS

|  |   |
|--|---|
| Channel Capacity   | 1000  |
| Frequency  | 136-174 MHz (VHF)<br>403-470 MHz (UHF1)<br>450-512 MHz (UHF2) |
| Dimensions (HxWxD)   |   |
| with NiMH Battery 1300mAh  | 131.5 x 63.5 x 37.2 mm  |
| with Lilon Std Battery 1500mAh   | 131.5 x 63.5 x 35.2 mm  |
| with Lilon HiCap Battery 2200mAh   | 131.5 x 63.5 x 39.2 mm  |
| with Lilon FM Battery 1400mAh  | 131.5 x 63.5 x 37.2 mm  |
| Weight   |   |
| with NiMH Battery  | 430 g   |
| with Lilon FM Battery  | 370 g   |
| with Lilon HiCap Battery   | 375 g   |
| with Lilon Std Battery   | 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   | Analogue: 9 hrs / Digital: 13 hrs                             |
| IMPRES Lilon HiCap Battery   | Analogue: 13.5hrs / Digital: 19 hrs                           |
| IMPRES FM Lilon Battery  | Analogue: 8.5 hrs / Digital: 12 hrs                           |
| NiMH Battery   | Analogue: 8 hrs / Digital: 11 hrs                             |

#### RECEIVER

|                                |  |
|--------------------------------|--|
| Frequency                      | 136-174 MHz (VHF)<br>403-470 MHz (UHF1)<br>450-512 MHz (UHF2)                    |
| Channel Spacing                | 12.5 kHz/ 20 kHz/ 25 kHz   |
| Frequency Stability            | +/- 1.5 ppm (DP 3600)<br>( -30° C, +60° C, +25° C)                               |
| Analogue Sensitivity           | 0.35 uV (12 dB SINAD)<br>0.22 uV (typical) (12 dB SINAD)<br>0.4 uV (20 dB SINAD) |
| Digital Sensitivity            | 5% BER: 0.3 uV   |
| Intermodulation                | 65 dB  |
| Adjacent Channel Selectivity   | 60 dB @ 12.5 kHz,<br>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<br>-45 dB @ 20/25 kHz  |
| Audio Response                 | +1, -3 dB  |
| Conducted Spurious Emission    | -57 dBm  |

#### 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         |

<sup>1</sup> 20 kHz is not supported in 450 - 512 MHz (UHF2)

**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.



**MOTOROLA**

MOTOROLA and the Stylised M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2008. All rights reserved. Conforms to ETSI TS 102 361 (Parts 1, 2 & 3) - ETSI DMR Standard. Specifications subject to change without notice. MOTOTRBO will be launched with a phased introduction - please check availability of products in your region before ordering. All specifications shown are typical. Radio meets applicable regulatory requirements.

DP3600/3601/SPEC-ENG(02/09)

#### TRANSMITTER

|                               |  |
|-------------------------------|--|
| Frequency                     | 136-174 MHz (VHF)<br>403-470 MHz (UHF1)<br>450-512 MHz (UHF2)        |
| Channel Spacing               | 12.5 kHz/ 20 kHz/ 25 kHz   |
| Frequency Stability           | +/- 1.5 ppm (DP 3600)<br>( -30° C, +60° C, +25° C)                   |
| Power Output                  | UHF1 and UHF2: 1W and 4 W<br>VHF: 1W and 5 W                         |
| Modulation Limiting           | +/- 2.5 kHz @ 12.5 kHz<br>+/- 4 kHz @ 20 kHz<br>+/- 5.0 kHz @ 25 kHz |
| FM Hum and Noise              | -40 dB @ 12.5 kHz<br>-45 dB @ 20/25 kHz                              |
| Conducted / Radiated Emission | -36 dBm < 1 GHz<br>-30dBm > 1GHz                                     |
| Adjacent Channel Power        | -60 dB @ 12.5 kHz<br>-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) |              |
| TTF (Time To First Fix) Cold Start  | < 2 minutes  |
| TTF (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.<br>With NiMH battery, operating temperature specification is -20° C / +60° C |                    |

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

[www.motorola.com](http://www.motorola.com)

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