

# DP 3400/3401

## Non-display Portable Radios



- 1 Tri-color LED indicator for clear, visible feedback of calling, scanning and monitoring.
- 2 Emergency button to alert supervisor or dispatcher in an emergency situation. With DP 3401, location coordinates can be sent to dispatcher using GPS.
- 3 New accessory connector meets IP57 submersibility specifications and incorporates RF, USB and enhanced audio capability.
- 4 DP 3401 includes integrated GPS module.
- 5 Radio housing meets IP57 specifications; submersible in 1 metre of water up to 30 minutes.
- 6 Powerful, front projecting speaker.
- 7 Three side 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.
- 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
- Antenna - Standard whip included with DP 3400; GPS Monopole included with DP 3401
- NiMH 1300 mAh Battery
- IMPRES™ Single Unit Charger
- 2.5" Belt Clip
- Quick Reference Guide

### Additional Features

- Enhanced call management
  - Encode: emergency, push-to-talk ID
  - Decode: radio check, remote monitor, radio disable, all call
- Dual-mode analogue/digital scan - facilitates a smooth migration from analogue to digital
- Send quick text messaging via programmable buttons

## MOTOTRBO™ System Components and Benefits

### DP 3400/3401 Non-display Portable Radios

## Specifications

### GENERAL SPECIFICATIONS

Channel Capacity	32
Frequency	403-470 MHz
Dimensions (HxWxL)	
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 FM Battery 1400mAH	131.5 x 63.5 x 37.2 mm
Weight	
with NiMH Battery	400 g
with Lilon FM Battery	340 g
with Lilon Std Battery	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	Analogue: 9 hrs / Digital: 13 hrs
IMPRES FM Lilon Battery	Analogue: 8.5 hrs / Digital: 12 hrs
NiMH Battery	Analogue: 8 hrs / Digital: 11 hrs

### RECEIVER

Frequency	403-470 MHz
Channel Spacing	12.5 kHz/ 25 kHz
Frequency Stability	+/- 1.5 ppm (DP 3400)
(-30° C, +60° C, +25° C)	+/- 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 @ 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 @ 25 kHz
Audio Response	+1, -3 dB
Conducted Spurious Emission	-57 dBm

### TRANSMITTER

Frequency	403-470 MHz
Channel Spacing	12.5 kHz/ 25 kHz
Frequency Stability	+/- 1.5 ppm (DP 3400)
(-30° C, +60° C, +25° C)	+/- 0.5 ppm (DP 3401)
Power Output	
Low Power	1 W
High Power	4 W
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz +/- 5.0 kHz @ 25 kHz
FM Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz
Conducted / Radiated Emission	-36 dBm < 1 GHz -30dBm > 1GHz
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 25 kHz
Audio Response	+1, -3 dB
Audio Distortion	3%
Digital Vocoder Type	AMBE++
Digital Protocol	ETSI-TS102 361-1

### 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	< 1 minute
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.	
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/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

**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.



**MOTOROLA**

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DP3400/3401/SPEC-ENG(01/07)

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