

# DP 3400/3401

# Non-display Portable Radios



# 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

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

## **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 1300m	nAH 131.5 x 63.5 x 37.2 mm				
with Lilon Std Battery 150	0mAH 131.5 x 63.5 x 35.2 mm				
with Lilon FM Battery 140	0mAH 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 Aud	io 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)

 TTFF (Time To First Fix) Cold Start
 < 1 minute</td>

 TTFF (Time To First Fix) Hot Start
 < 10 seconds</td>

 Horizontal Accuracy
 < 10 meters</td>

#### **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		
$^{\ast}$ With Lilon battery, operating temperature specification is -10° C / +60° C.			
With NiMH battery, operating temperature specification is -20° C /			

#### MILITARY STANDARDS

	0105		010E	
	BIUE		8105	
Applicable MIL-STD	Methods	Procedures	Methods	Procedures
Low Pressure	500.3	Ш	500.4	
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	
Solar Radiation	505.3		505.4	1
Rain	506.3	1,11	506.4	I, III
Humidity	507.3	Ш	507.4	-
Salt Fog	509.3		509.4	1
Dust	510.3	1	510.4	
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.



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#### www.motorola.com

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

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