



**ON-SITE TWO-WAY BUSINESS RADIOS AND ACCESSORIES**

# RM SERIES BUILT TOUGH TO DO BUSINESS BETTER

Motorola RM Series two-way radios have the business smarts to help people work better together – coordinating resources at the construction site or monitoring production on the manufacturing line. They come with the right credentials to give business the competitive edge: exceptional quality, affordability and durability to outlast high noise, tough conditions and hard use.

**WORK TOGETHER EFFICIENTLY AND SAFELY**

Focus on the job with instant push-to-talk and customized channel announcements that keep your hands free. Now you'll know which channel and which department you are talking to without removing the radio from your belt. And you'll know what's coming with National Oceanic and Atmospheric Administration (NOAA) Weather Alerts (available on select models). Receive official warnings, watches and forecasts automatically to prepare your workforce.

**CONNECT EASILY THROUGHOUT THE WORKPLACE**

The RM Series radios make it easy to get the work done. A powerful speaker ensures clear communication, even in noisy conditions. Compact yet performance-packed, the RM Series

provides coverage up to 250,000 square feet or 20 floors.\* Voice prompts enable you to program non-display radios on the go. A carry holster with swivel belt clip lets you rotate the radio to fit comfortably and move freely while picking up a tool or restocking a shelf. And the antimicrobial coating helps prevent the growth of mold and germs on the surface of the radio – as you change shifts, pass on the portable confidently.

**KEEP ON TALKING IN TOUGH CONDITIONS**

Military Standard 810 C, D, E, F and G plus IP54/55 may be the standards for other radio manufacturers, but they are the starting point for our RM Series. These radios undergo Motorola's unique Accelerated Life Testing (ALT). This rigorous laboratory testing simulates up to 5 years of field use. We design and engineer the RM Series right the first time to minimize costly repairs and downtime.

**MOVE FROM RDX TO RM SERIES SEAMLESSLY**

The HTML-based Customer Programming Software is so easy to use, it works with any computer browser. Profiles interchange with the RDX Series too. You can also quickly copy settings between the RM Series or between the RM and RDX Series portables with the radio-to-radio cloning cable or through the multi-unit charger. Plus you can re-use your RDX Series audio accessories to unleash the power of your RM Series radios.

\*Coverage will vary based on terrain, conditions and the radio model used.

**PRODUCT SPEC SHEET**  
RM SERIES RADIOS AND ACCESSORIES

**GENERAL SPECIFICATIONS**

	RMU2040	RMU2080	RMU2080d	RMV2080	RMU2043 (Canada Only)	RMM2050
Frequency Range	UHF (450 to 470 MHz)			VHF (150.8 to 160)	UHF (438 to 470 MHz)	
Audio Output	1500 mW					
Channel Capacity	4 Channels	8 Channels	8 Channels	8 Channels	4 Channels	5 Channels
Channel Bandwidth	12.5kHz	12.5kHz	12.5kHz	12.5kHz	12.5kHz/25kHz	11.25 or 20.0kHz frequency dependant, see above
<b>Dimensions with:</b> Standard Li-Ion Battery High Capacity Li-Ion Battery	4.5 in H x 2.2 in W x 1.6 in D (115.6 mm H x 57.6 mm W x 40.5 mm D) 4.5 in H x 2.2 in W x 1.6 in D (115.6 mm H x 57.6 mm W x 40.5 mm D)					
<b>Weight with:</b> Standard Li-Ion Battery High Capacity Li-Ion Battery	8.6 oz (244g) 8.7 oz (247g)	8.6 oz (244g) 8.7 oz (247g)	9 oz (256g) 9.1 oz (259g)	8.9 oz (252g) 9.0 oz (255g)	8.6 oz (244g) 8.7 oz (247g)	8.6 oz (244g) 8.7 oz (247g)
Average Battery Life @ 5/5/90: with Standard 2150 mAh Li-Ion Battery with High Capacity 3200 mAh Li-Ion Battery	Up to 15 hours with battery save on or up to 12 hours without battery save. Available in Q4/2013					
Battery Voltage	3.7V Li-Ion					

**RECEIVER**

Sensitivity (12 dB SINAD)	-122 dBm (0.18 µV)
Adjacent Channel Selectivity	70 dB @ 12.5 kHz 75 dB @ 25 kHz
Intermodulation Rejection	70 dB
Spurious Response Rejection (blocking 1 MHz)	90 dB
Audio Distortion	< 5%
CSQ Hum and Noise @ 12.5 kHz	-50 dB
PL Hum and Noise @ 12.5 kHz	-50 dB
DPL Hum and Noise @ 12.5 kHz	-45 dB
Spurious Emissions (< 1 GHz)	< -54 dBm
Spurious Emissions (> 1 GHz)	< -52 dBm
Audio Output @ < 5% Distortion	1.5W @ 8 ohms

**TRANSMITTER**

RF Output: High (conducted)	2 Watts
Low (conducted)	1 Watt
Frequency Stability	< 1.5 ppm
Spurs and Harmonics	< -45 dBc
FM Hum and Noise	-36 dbm for f < 1GHz, -30 dbm for f > 1GHz
Modulation Limiting	±2.5 kHz @ 12.5 kHz ±5.0 kHz @ 25.0 kHz
Adjacent Channel Power	70 dBc
Spurious Emissions @ 12.5 kHz	-36 dbm for f < 1GHz, -30 dbm for f > 1GHz
Spurious Emissions @ 25 kHz	-36 dbm for f < 1GHz, -30 dbm for f > 1GHz
Audio Frequency Response (0.3 - 3.0 kHz)	+1 to -3 dB
Audio Distortion	< 2%

**MILITARY SPECIFICATIONS**

Standard	MIL 810 C Methods/ Procedures	MIL 810 D Methods/ Procedures	MIL 810 E Methods/ Procedures	MIL 810 F Methods/ Procedures	MIL 810 G Methods/ Procedures
Low Pressure	500.1 / Procedure 1	500.2 / Procedure 2	500.3 / Procedure 2	500.4 / Procedure 1	500.5 / Procedure 1
High Temperature	501.1 / Procedure 1,2	501.2 / Procedure 1,2	501.3 / Procedure 1,2	501.4 / Procedure 1,2	501.5 / Procedure 1,2
Low Temperature	502.1 / Procedure 1	502.2 / Procedure 1,2	502.3 / Procedure 1,2	501.4 / Procedure 1,2	501.5 / Procedure 1,2
Temperature Shock	503.1 / Procedure 1	503.2 / Procedure 1	503.3 / Procedure 1	503.4 / Procedure 1	503.5 / Procedure 1
Solar Radiation	505.1 / Procedure 1	505.2 / Procedure 1	505.3 / Procedure 1	505.4 / Procedure 1	505.5 / Procedure 1
Rain	506.1 / Procedure 1,2	506.2 / Procedure 1,2	506.3 / Procedure 1,2	506.4 / Procedure 1	506.5 / Procedure 1
Humidity	507.1 / Procedure 2	507.2 / Procedure 2,3	507.3 / Procedure 2,3	507.4 / Procedure 3	507.5 / Procedure 3
Dust	510.1 / Procedure 1	510.2 / Procedure 1	510.3 / Procedure 1	510.4 / Procedure 1	510.5 / Procedure 1
Vibration	514.2 / Procedure 8,10	514.3 / Procedure 1	514.4 / Procedure 1	514.5 / Procedure 1	514.6 / Procedure 1
Shock	516.2 / Procedure 1,2,5	516.3 / Procedure 1,4	516.4 / Procedure 1,4	516.5 / Procedure 1	516.5 / Procedure 1

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature	-30°C to +60°C (Radio)
Sealing	IP55
Shock and Vibration	Polycarbonate Housing passes EIA 603*
Dust and Humidity	Satisfied EIA 603*

\*The antimicrobial properties do not protect users or others against bacteria, viruses, germs, or other disease organisms. Always clean this product thoroughly before and after each use. Does not apply to accessories.

To learn more about the radio that's built tough to do business better, visit  
[www.motorolasolutions.com/rmseries](http://www.motorolasolutions.com/rmseries)

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