



RCA
Communications Systems

prodigi™ SERIES
PROFESSIONAL DIGITAL RADIO PRODUCTS



RDR2325 UHF / VHF

RDR2385 UHF / VHF



Cost-Effective DMR Digital Portable Two-Way Radio

Compact, versatile and cost-effective, the RDR2325 / RDR2385 radios are completely compatible with any other DMR Digital radio on the market. They operate in both digital and analog modes, delivering clear and loud communication. RDR2385 comes with a display and full keypad and with its versatility it can be used in a wide range of applications. Industries such as K12 Education, Colleges and Universities, Manufacturing, Security, Hotels and more. When safety and reliability is critical, the RDR2325 / RDR2385 radios are the best choice for your communication needs.

RDR2325 / RDR2385 FEATURES

EXCEPTIONAL AUDIO QUALITY – The RDR2325 / RDR2385 radios completely eliminate background noise and static from voice transmissions, delivering a crystal clear message compared to analog radios.

ANALOG + DIGITAL OPERATION – Capable of operating in both analog and digital modes, the RDR2325/RDR2385 radios are Digital DMR Tier II, and offer Digital DMR based Prodigi Plus™ Trunking.

SMALLEST DIGITAL RADIO ON THE MARKET – Compact, lightweight design, making the RDR2325 / RDR2385 very comfortable and easy to use through a long work shift.

POWER IS PERFORMANCE – The RDR2325 / RDR2385 radios are designed to conserve battery power reducing the power consumption by 40% compared to analog radios. This extends the radio's operating time, enabling your employees to stay connected for up to 13 hours of regular usage. It eliminates the need to recharge during long shifts.

EMERGENCY AND SECURITY – In critical situations, the radio user can initiate an emergency alarm which overrides all activity on the channel.

PRIVATE AND GROUP CALL – Allows users to talk privately with specific individuals or groups without broadcasting to everyone on the channel.

SIGNALING – 2-Tone, 5-Tone, DTMF Encode/Decode and MDC1200 Encode: PTT ID (identifies outbound calls), Individual/Group Call (receive/place calls from specific individuals or groups), Call Alert (tone indicates new inbound call), and Alarm (sounds alarm or notifies system administrator of emergency).

RADIO STUN/KILL/REVIVE – Allows the radio administrator to disable radio if it is lost or stolen.

VOICE ANNUNCIATION – Announces channel number when channel is changed.

INDUSTRY LEADING WARRANTY – Backed by a Three (3) Year Warranty.



RDR2325

RDR2385

- ① **2 Programmable Side Buttons** Place your favorite features at your fingertips.
- ② **PTT Button** Push To Talk Button.
- ③ **6" Antenna** Provides best radio coverage.
- ④ **32 / 1000 Channels** Plenty of choices for specific assignments.
- ⑤ **Programmable Top Emergency Button** Activates emergency signal or can be programmed to make it easy to use your favorite feature.
- ⑥ **On/Off and Analog/Digital Audio** Clear, crisp audio that's 50% louder than Motorola's HT750.
- ⑦ **Two Prong Right Angle Connector** Compatible with Motorola CP200/CP200d accessories.
- ⑧ **Display** 16 character, dot matrix. (RDR2385 only)
- ⑨ **Keypad/Menue Keys** 12 alpha/numeric/3 menu keys. (RDR2385 only)



RDR2325 / RDR2385 SPECIFICATIONS

GENERAL			
Frequency Bands	VHF: 136-174MHz, UHF: 400-470MHz		
Dimensions	4.5" x 1.3" x 2.1" / 113mm x 54mm x 33.5mm		
Weight	9.5 ounces (270g) with 2000 mAh battery		
Battery	Supplied	7.4V 2000mAh Lithium Ion Battery: 14.8 Wh	
	Upgrade	7.4V 2400mAh Lithium-Ion Battery: 17.76 Wh	
Channels	32 (RDR2325) / 1,000 (RDR2385)		
Frequency Stability	± 0.5 ppm (typical)		
Display	102 x 64 pixels (RDR2385 only)		
Switching Bandwidth	Full band		
Modulation	Pre-emphasized FM, C4FM		
Environmental Protection	IP65 (Water Resistant/Dust Proof)		
Environmental Standards	MIL-STD-810 F	Method	Procedure
	Low Pressure (Altitude), Storage	500.4	I
	Low Pressure (Altitude), Operational	500.4	II
	High Temp, Storage	501.4	I
	High Temp, Operating	501.4	II
	Low Temp, Storage	502.4	I
	Low Temp, Operating	502.4	II
	Thermal Shock	503.4	I
	Solar Radiation	505.4	I(A2)
	Relative Humidity	507.4	
	Dust	510.4	I
	Sand	510.4	II
	General Vibration: Truck/trailer/tracked - restrained cargo	514.5	I Cat 24
	General Vibration: Minimum Integrity	514.5	I Cat 24
Shock - Transit Drop	516.5	IV	
Operating Temperature	-22°F (-30°C) - 140°F (60°C)		
Storage Temperature	(-40°C)~+80°C / (-40°F)~+176°		
Emission Designators	Analog	8K02F3E, 9K52F3E, 10K0F3E, 11K0F3E	
	Digital	7K21FXD/FXW, 7K31FXD/FXW, 7K41FXD/FXW, 7K60FXD/FXW, 7K72FXD/FXW	

TRANSMITTER SPECIFICATION	
Power Output	0.5 - 5 W, 3 programmable levels
Audio Distortion	<3% at 1 kHz, 60% deviation
Channel Spacing	Analog 12.5KHz/25KHz
	Digital 12.5KHz
Conducted, Radiated Spurious Emission	-36dBm@<1GHz, -30dBm@>1GHz
Adjacent Channel Power	-60dB@12.SKHz
Audio Response	+1 dB to -3 dB
FM Modulation Mode	12.SKHz : 11K0F3E
4FSK Digital Mode	12.5KHz (data only): 7K60FXD 12.5KHz (data+ voice): 7K60FXE
FSK Error	≤3%
Modulation Maximum Deviation	2.5KHz@12.5KHz
Idle Slot Power	-57dBm
Audio Distortion	3% (Type)
Digital Protocol	ETSI TS 102 361-1, -2, -3
Vocoder Type	AMBE3000™
Hum and Noise	>40 dB (12.5 kHz)
RECEIVER SPECIFICATION	
Analog Sensitivity	0.3SuV/ -116dBm(20 dB SINAD) 0.22uV/ -120dBm(Type)
Digital Sensitivity	0.3uV/-117.4dBm (BER 5%) 0.7uV/-110dBm (BER 1%)
Adjacent Channel Selectivity	TIA603C: 65dB@12.SKHz ETSI: 60dB@12.SKHz
Co-Channel Rejection	-8dB@12.5kHz
Spurious Response Rejection	TIA603C : 75dB ETSI : 70dB
Conducted Spurious Emission	- 57dBm@ < 1 GHz , - 47dBm @> 1GHz
Audio Output	1W
Blocking	>95 dB at +/- 1 MHz



ACCESSORIES



**Light Duty
Speaker Mic**
SM220-X03S



**Heavy Duty
Speaker Mic**
SM310-X03S



**One-Wire
Surveillance Kit
In-Ear Style**
SK12NE-X03S



**Two-Wire
Surveillance Kit
In-Ear Style**
SK22NE-X03S



**Light Duty Behind the
Head Headset**
HS12V-X03S



**High Noise Headset
Over the Head &
Behind the Head**
HS65NR-X03S, HS75NR-X03S



Nylon & Leather Holsters
HN200FC/SC/FL/SL
HN300FC/SC/FL/SL
HL200FC/SC/FL/SL
HL300FC/SC/FL/SL



BC2300
Screw In Belt Clip



3" & 6" Antennas
ANH200U/V-3
ANH200U/V-6



**2000mAH Lithium-Ion
Battery**
B2020LI



Single Unit Charger
CH2001 PKG



**Multi-Unit
Rapid-Rate Charger**
CHU6 PKG - RDR2300 cup



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