RCA
Communications Systems

prodigi™ SERIES
PROFESSIONAL DIGITAL RADIO PRODUCTS

RDR2320 UHF / VHF

RDR2380 UHF / VHF

RCA PRODIGI

DMR
DIGITAL MOBILE RADIO ASSOCIATION

3 YEAR
WARRANTY
PROTECTION PROGRAM

Cost-Effective DMR Digital Portable Two-Way Radio

Compact, versatile and cost-effective, the RDR2300 Series of radios is completely compatible with any other DMR Digital radio on the market. It operates in both digital and analog modes, delivering clear and loud communication. RDR2380 comes with a display and full keypad and with itâ€™s 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 RDR2300 Series of radios is the best choice for your communication needs.

RDR2320 / RDR2380 FEATURES

EXCEPTIONAL AUDIO QUALITY – The RDR2300 radio completely eliminates 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 RDR2300 radio gives you the option to upgrade to digital radios at your own pace.

SMALLEST DIGITAL RADIO ON THE MARKET – Compact, lightweight design, making the RDR2300 very comfortable and easy to use through a long work shift.

POWER IS PERFORMANCE – The RDR2300 radio is 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.

RDR2320   RDR2380

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. (RDR2380 only)

9   *Keypad/Menue Keys* 12 alpha/numeric/3 menu keys. (RDR2380 only)

RDR2300 SPECIFICATIONS

GENERAL

Frequency Bands	136 - 174 MHz (VHF "V"); 400 - 470 MHz (UHF "U")
Dimensions	4.5" x 1.3" x 2.1"/ 113mm x 54mm x 33.5mm
Weight	9.5 ounces (270g) with 1700 mAh battery
Battery	Li-ion 1700 mAh. Optional 2000 mAh
Battery Life	Approx.10 hours, high transmit power 1700 mAh battery, 90:5:5 duty cycle
Channels	32 (RDR2320) / 1,000 (RDR2380)
Frequency Stability	± 0.5 ppm (typical)
Display	102 x 64 pixels (RDR2380 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)

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	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 : 11KOF3E
4FSK Digital Mode	12.5KHz (data only): 7K60FXD 12.5KHz (data+ voice): 7K60FXE
Modulation Maximum Deviation	2.5KHz@12.5KHz
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: 60d8@12.SKHz
Spurious Response Rejection	TIA603C : 75dB ETSI : 70dB
Conducted Spurious Emission	- 57dBm@ < I GHz , - 47dBm @> IGHz
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
SK11NE-X03S

Two-Wire Surveillance Kit In-Ear Style
SK21NE-X03S

Light Duty Behind the Head Headset
HS11V-X03S

High Noise Headset Over the Head & Behind the Head
HS61NR-X03S, HS71NR-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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For more information, visit
www.RCACommunicationsSystems.com

Authorized Distributor: