



**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                         |   |   |           |
|---------------------------------|---|---|-----------|
| <b>Frequency Bands</b>          | VHF: 136-174MHz, UHF: 400-470MHz                            |   |           |
| <b>Dimensions</b>               | 4.5" x 1.3" x 2.1" / 113mm x 54mm x 33.5mm                  |   |           |
| <b>Weight</b>                   | 9.5 ounces (270g) with 2000 mAh battery                     |   |           |
| <b>Battery</b>                  | Supplied  | 7.4V 2000mAh Lithium Ion Battery: 14.8 Wh                       |           |
|                                 | Upgrade   | 7.4V 2400mAh Lithium-Ion Battery: 17.76 Wh                      |           |
| <b>Channels</b>                 | 32 (RDR2325) / 1,000 (RDR2385)                              |   |           |
| <b>Frequency Stability</b>      | ± 0.5 ppm (typical)   |   |           |
| <b>Display</b>                  | 102 x 64 pixels (RDR2385 only)                              |   |           |
| <b>Switching Bandwidth</b>      | Full band   |   |           |
| <b>Modulation</b>               | Pre-emphasized FM, C4FM                                     |   |           |
| <b>Environmental Protection</b> | 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        |
| <b>Operating Temperature</b>    | -22°F (-30°C) - 140°F (60°C)                                |   |           |
| <b>Storage Temperature</b>      | (-40°C)~+80°C / (-40°F)~+176°                               |   |           |
| <b>Emission Designators</b>     | Analog  | 8K02F3E, 9K52F3E, 10K0F3E, 11K0F3E                              |           |
|                                 | Digital   | 7K21FXD/FXW, 7K31FXD/FXW, 7K41FXD/FXW, 7K60FXD/FXW, 7K72FXD/FXW |           |

| TRANSMITTER SPECIFICATION                    |  |
|--|--|
| <b>Power Output</b>                          | 0.5 - 5 W, 3 programmable levels                               |
| <b>Audio Distortion</b>                      | <3% at 1 kHz, 60% deviation                                    |
| <b>Channel Spacing</b>                       | Analog 12.5KHz/25KHz   |
|  | Digital 12.5KHz  |
| <b>Conducted, Radiated Spurious Emission</b> | -36dBm@<1GHz, -30dBm@>1GHz                                     |
| <b>Adjacent Channel Power</b>                | -60dB@12.SKHz  |
| <b>Audio Response</b>                        | +1 dB to -3 dB   |
| <b>FM Modulation Mode</b>                    | 12.SKHz : 11KOF3E  |
| <b>4FSK Digital Mode</b>                     | 12.5KHz (data only): 7K60FXD<br>12.5KHz (data+ voice): 7K60FXE |
| <b>FSK Error</b>                             | ≤3%  |
| <b>Modulation Maximum Deviation</b>          | 2.5KHz@12.5KHz   |
| <b>Idle Slot Power</b>                       | -57dBm   |
| <b>Audio Distortion</b>                      | 3% (Type)  |
| <b>Digital Protocol</b>                      | ETSI TS 102 361-1, -2, -3                                      |
| <b>Vocoder Type</b>                          | AMBE3000™  |
| <b>Hum and Noise</b>                         | >40 dB (12.5 kHz)  |
| RECEIVER SPECIFICATION                       |  |
| <b>Analog Sensitivity</b>                    | 0.3SuV/ -116dBm(20 dB SINAD)<br>0.22uV/ -120dBm(Type)          |
| <b>Digital Sensitivity</b>                   | 0.3uV/-117.4dBm (BER 5%)<br>0.7uV/-110dBm (BER 1%)             |
| <b>Adjacent Channel Selectivity</b>          | TIA603C: 65dB@12.SKHz<br>ETSI: 60dB@12.SKHz                    |
| <b>Co-Channel Rejection</b>                  | -8dB@12.5kHz   |
| <b>Spurious Response Rejection</b>           | TIA603C : 75dB ETSI : 70dB                                     |
| <b>Conducted Spurious Emission</b>           | - 57dBm@ < 1 GHz , - 47dBm @> 1GHz                             |
| <b>Audio Output</b>                          | 1W   |
| <b>Blocking</b>                              | >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



Communications Systems Created in U.S.A.

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