



**RCA**  
Communications Systems

**prodigi**™ SERIES  
PROFESSIONAL DIGITAL RADIO PRODUCTS



**RDR6350 UHF / VHF**



**The Intelligent Choice for  
Digital Two-Way Communication**

**VERSATILE & AFFORDABLE!**

**prodigi™**  
PROFESSIONAL DIGITAL RADIO PRODUCTS

The RCA PRODIGI™ Radio Series is compatible with other DMR Digital radios on the market. Operational in both digital and analog modes, the PRODIGI™ Radio Series delivers crystal clear, dependable communication. RDR6350 mobile radios are designed to be used in a wide range of applications. Industries such as manufacturing, warehousing, construction, security, hotels and schools all benefit from its basic push to talk functionality and advanced emergency features.

## RDR6350 FEATURES

**ADVANCED MULTI-MODE FUNCTIONALITY** With different operating modes — Conventional Analog, Conventional Digital DMR Tier II, Trunked Digital DMR Tier III, Digital DMR based Prodigy Plus™, Trunked Analog MPT 1327 the portable will truly meet even the most demanding communication needs. The RDR6350 mobile radio delivers fast, reliable communication for a safer and more productive work environment.

**CROSS-BRAND COMPATIBILITY** Designed according to the Digital DMR ETSI Standard TS 102 361-1,-2,-3, the RDR6350 mobile radio is compatible with all RCA two-way radios as well as all other major brands, including digital equipment, such as Motorola, Hytera and Vertex series digital two-way radios and repeaters.

**TOUGH AND RELIABLE** The RDR6350 mobile radio is designed and built with the most demanding conditions in mind. Your team needs radios that will not fail them, regardless of the working environment. The newest portables in the RCA PRODIGI™ product line meet Military Specs 810C, D, E, F, and G and are IP54 rated, water and dust resistant radios.

**TRUE OPERATIONAL VERSATILITY** The RDR6350 mobile radio has a large, color display and 7 programmable function keys. Businesses, Departments and Government Agencies can take advantage of advanced features such as Caller ID, Group and Private Call, Radio Check, Radio Monitor, Radio Enable/Disable, Emergency, Lone Worker Alerts, Text Messaging, Pre-saved Status Messaging, GPS Tracking and more.

**IMPROVED COMMUNICATION RANGE** Today's digital technology allows for the transmitted signal to be clear of background noise regardless of the distance between two radio units, providing virtually no deterioration of the voice quality. This provides a larger usable coverage area where analog communication will be very poor or not possible at all.

**CRYSTAL CLEAR AUDIO** Designed with X-Sound+ HD™ for exceptional voice quality. The RDR6350 mobile radio provides loud audio power, eliminating background noise and static even from analog voice transmissions and delivering crystal clear voice message.

**ADVANCED ENCRYPTION OPTIONS** Secure communications are essential. The RDR6350 mobile radio meets today's demand for safe and private voice and data

transmissions by providing flexibility to it's users to choose from multiple advanced options. The radios are equipped standard with ARC4 type encryption and available 40-bit, 128-bit or 256-bit AES advanced encryption options.

**AVAILABLE INTEGRATED GPS** Location tracking service is available as a built-in functionality. The tracking of your asset's location enables real-time visibility of field operations, resulting in improved worker safety, increased productivity and shortened incident response time.

**AVAILABLE WIRELESS ACCESSORIES** Wireless accessory options are important for many users nowadays. The available wireless functionality allows for the connection of RCA approved wireless speaker mics, surveillance kits and headsets.

**INDUSTRY LEADING WARRANTY** The RDR6350 mobiles are backed standard by an industry leading, hassle-free Three (3) Year Warranty.



- |   |  |
|---|--|
| 1) LED Indicator                          | 8) Speaker                             |
| 2) Volume Control / Channel Selector Knob | 9) Emergency Call Button               |
| 3) LCD Display                            | 10) Handheld Microphone Interface      |
| 4) Option / Back / Home Button            | 11) Power On / Off / On-Hook Button    |
| 5) Menu / Enter Button                    | 12) Enter / P1 Key                     |
| 6) Up Button                              | 13) Cancel / P2 Button                 |
| 7) Down Button                            | 14) Power Level / Lock / Unlock Button |



# RDR6350 SPECIFICATIONS

## Features and Options

- DMR TII Conventional and TIII Single and Multi-Site Trunking Modes
- Prodigy Plus™ Mode\*
- Analog Conventional and MPT Trunking Modes
- Direct Mode Operation (DMO)
- 40 Watts VHF and UHF
- Group and Private Calling
- TX Override
- Text Messaging
- Scanning & Priority Scanning
- Roaming\*
- GPS\*
- Wireless AccessoryLink\*
- X-Sound HD Enhanced Audio Clarity
- Large Color Display
- 5 Programmable Function Keys
- IP54 Design
- MIL-STD 810C, D, E, F, G
- 3 Year Warranty

## Emergency / Security Features

- Radio Check
- Remote Radio Monitor
- Radio Kill / Active
- Advanced Digital Encryption Options\* (ARC4, Prodigy Advanced 256bit Encryption)
- Call Alert
- Emergency Alerts
- Lone Worker Alert
- Voice Recording\*

### \*Optional Features



GENERAL SPECIFICATIONS	
<b>Model</b>	RDR6350™
<b>Communication Protocols &amp; Standards</b>	DMR Tier 3 Digital Trunking ETSI-TS102 361-1, -2, -3, -4 Analog MPT Trunking
<b>Frequency Bands</b>	136-174MHz; 400-470MHz
<b>Channel Capacity</b>	1024
<b>Channel Spacing</b>	12.5KHz / 20KHz / 25KHz
<b>Operating Voltage</b>	13.6V ± 15%
<b>Current Consumption</b>	Standby Current < 0.6A
	Receiving Current < 0.2A
	Transmitting Current < 5A(5W); < 8A(25W); < 12A(40W)
<b>Antenna Impedance</b>	50Ω
<b>Dimensions</b>	2.4 in.(60mm) x 6.6 in.(168mm) x 6.9 in.(175mm)
<b>Weight</b>	63.5 ounces (1.8 kg)
<b>Frequency Stability</b>	±0.5ppm
<b>LCD Display</b>	2.2 inches transfective/ transmissive TET LCD display, resolution: 320*240
<b>GPS</b>	Accuracy<10m, TTFF cold start 1 min / hot start 10 sec
<b>Storage</b>	Standard Micro SD
<b>Emission Designator</b>	Analog 11K0F3E, 16K0F3E
	Digital 7K60F1D, 7K60F1E

TRANSMITTER	
<b>Power Output</b>	VHF/UHF High power: 40W; Low power: 5W
<b>FM Modulation</b>	11K0F3E@12.5KHz; 16K0F3E@20KHz
<b>4FSK Digital Modulation</b>	12.5khz Data: 7K60F1D 12.5khz Voice: 7K60F1E
<b>Conducted / Radiated Emission</b>	-36dBm < 1GHz; -30dBm > 1GHz
<b>Modulation Limiting</b>	±2.5KHz@12.5KHz; ±4.0KHz@20KHz; ±5.0KHz@25KHz
<b>FM Noise</b>	40dB@12.5KHz; 43dB@20KHz; 45dB@25KHz
<b>Adjacent Channel Power</b>	60dB@12.5KHz; 70dB@20 / 25KHz
<b>Audio Response</b>	+1~-3dB
<b>Audio Distortion</b>	≤3%
<b>Digital Voice Vocoder</b>	AMBE++ or NVOIC
<b>Rated Audio Output Power</b>	4W @20 ohms (built-in)

ENVIRONMENTAL SPECIFICATIONS	
<b>Operation temperature/ Storage temperature</b>	-30°C~+60°C / -40°C~+85°C
<b>ESD</b>	IEC 61000-4-2 (level 4); ±8KV(contact); ±15KV(air)
<b>Environment Test Standard (Temperature &amp; Fall &amp; Vibration)</b>	MIL-STD-810 C / D / E / F / G
<b>Water &amp; dust proof</b>	Integral type IP54
	Split type Control head IP67, main unit IP54
<b>Humidity</b>	According to MIL-STD-810 C / D / E / F / G standard
<b>Shock &amp; vibration</b>	According to MIL-STD-810 C / D / E / F / G standard

RECEIVER	
<b>Sensitivity</b>	Analog 0.3μV(12dB SINAD); 0.22μV(Typical value) (12dB SINAD)
	Digital 0.4μV(20dB SINAD)
<b>Adjacent Channel Sensitivity</b>	TIA-603 65dB@12.5KHz / 75dB@20 & 25KHz
	ETSI 60dB@12.5KHz / 70dB@20 & 25KHz
<b>Intermodulation</b>	TIA-603 75dB@12.5 / 20 / 25KHz
<b>Spurious Response Rejection</b>	ETSI 70dB@12.5 / 20 / 25KHz
	TIA-603 75dB@12.5 / 20 / 25KHz
<b>Blocking</b>	ETSI 90dB
	ETSI 84dB
<b>Receiving Rated Audio Power</b>	Built-in (load 20Ω) 4W
	External (load 8Ω) 7.5W
<b>Hum and Noise</b>	40dB@12.5KHz; 43dB@20KHz; 45dB@25KHz;
<b>Rated Audio Distortion</b>	≤3%
<b>Audio Response</b>	+1~-3dB
<b>Conducted Spurious Emission</b>	< -57dBm

GPS	
The accuracy standard is applicable for long time tracking. (95% value>under rated -130dBm signal strength, there are 5 visible satellites)	
<b>TTFF cold start</b>	< 1 min
<b>TTFF hot start</b>	< 10 sec
<b>Horizontal location accuracy</b>	< 10 m

Disclaimer: The above specifications comply with standard tests accordingly, and due to continuous technical development, they are subject to changes without prior notice.



# ACCESSORIES & OPTIONS



**Medium Duty  
Mobile Mic**  
MM6350



**Keypad  
Speaker Mic**  
MM6350K



**Desktop Base  
Station Mic**  
DMM6350



**Roof Mount Antenna**  
B4503 (UHF) / B1523 (VHF)



**GPS Antenna**  
ANTGPS6350



**Desktop Power  
Supply & Housing**  
SS-18 & BSC6350



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