



RCA
Communications Systems

*prodigi*TM 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.



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

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

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

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

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

For more information, visit RCACommunicationsSystems.com

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



For more information, visit
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