RCA
Communications Systems

prodigi™ SERIES
PROFESSIONAL DIGITAL RADIO PRODUCTS

3 YEAR
WARRANTY
PROTECTION PROGRAM

RDR6350 UHF / VHF

The Intelligent Choice for
Digital Two-Way Radio Communication

DMR
DIGITAL MOBILE RADIO ASSOCIATION

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 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, Digital DMR Tier III, Prodigi Plus™, 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.

AUTOMATIC ROAMING Dramatically improves communication and productivity by allowing for seamless roaming from one repeater site to another and eliminating the need for users to physically change channels on the radios as they travel through the different coverage zones of the repeater system.

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

RDR6350 Mobile

1) LED Indicator

2) Volume Control / Channel Selector Knob

3) LCD Display

4) Option / Back / Home Button

5) Menu / Enter Button

6) Up Button

7) Down Button

8) Speaker

9) Emergency Call Button

10) Handheld Microphone Interface

11) Power On / Off / On-Hook Button

12) Enter / P1 Key

13) Cancel / P2 Button

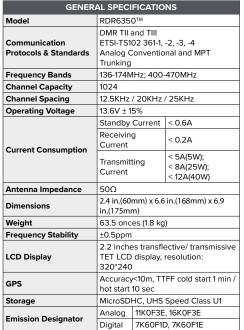**14)** Power Level / Lock / Unlock Button

RDR6350 SPECIFICATIONS

Features and Options

- DMR TII Conventional and TIII Single* and Multi-Site Trunking* Modes
- Prodigi Plus™ Mode*
- Analog Conventional and MPT Trunking* Modes
- 40 Watts VHF and UHF
- Group and Private Calling
- Text Messaging
- Scanning & Priority Scanning
- Roaming*
- GPS Location Reporting*

- 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, Prodigi Advanced Encryption)
- Call Alert
- Emergency Alerts
- Lone Worker Alert

* Optional Features

GENERAL SPECIFICATIONS

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Model	RDR6350™	
Communication Protocols & Standards	DMR TII and TIII ETSI-TS102 361-1, -2, -3, -4 Analog Conventional and 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 onces (1.8 kg)	
Frequency Stability	±0.5ppm	
LCD Display	2.2 inches transflective/ transmissive TET LCD display, resolution: 320*240	
GPS	Accuracy<10m, TTFF cold start 1 min / hot start 10 sec	
Storage	MicroSDHC, UHS Speed Class U1	
Emission Designator	Analog	11K0F3E, 16K0F3E
	Digital	7K60F1D, 7K60F1E

TRANSMITTER

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Power Output	Up to 40W, 2 Programmable Options
FM Modulation	11KOF3E@12.5KHz; 16KOF3E@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
Rated Audio Output Power	4W @20 ohms (built-in)

ENVIRONMENTAL SPECIFICATIONS

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

RECEIVER		
Sensitivity	Analog	0.3µV(12dB SINAD): 0.22µV(Typical value) (12dB SINAD)
		0.4µV(20dB SINAD)
	Digital	0.3µV / BER5%
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)	4W
	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

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

RDR6350 ACCESSORIES

Medium Duty Mobile Mic
MM6350

Keypad Speaker Mic
MM6350K

UHF Roof Mount Antenna
B4503

VHF Roof Mount Antenna
B1523

GPS Antenna
ANTGPS6350

External Desktop Power Supply & Housing
SS-18 & BSC6350

NMO Magnetic Mount
G8PI

NMO Hole Mount
MB8PI

DC Power Cord
PC300-12

Mounting Bracket

External Speaker
EXSPK300D

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