RCA Communications Systems

prodigi™
PROFESSIONAL DIGITAL RADIO PRODUCTS

RDR4300 SERIES

PRODIGI™, the Intelligent Choice for Digital Two-Way Communication

ADVANCED MULTI-MODE FUNCTIONALITY With four different operating modes — Conventional Analog, Conventional Digital DMR T2, Trunked Digital DMR T3, Digital DMR based PRODIGI™ T2+, Trunked Analog MPT 1327 the portable will truly meet even the most demanding communication needs. The RDR4300 Series Portables deliver 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 RDR4300 series radios are 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 PORTABLES The RDR4300 series radios are 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 IP67 rated, fully submersible and dustproof units.

TRUE OPERATIONAL VERSATILITY The RDR4300 radios come in 3 different models, the standard RDR4320 unit; the upgraded RDR4350 with large, color display and 11 programmable function keys; the advanced RDR4380 unit with large, color display, full keypad and industry leading 23 programmable function keys. Businesses, Departments and Government Agencies can choose the best model for their needs, taking advantage of advanced features such as Caller ID, Group and Private Call, Radio Check, Radio Monitor, Radio Enable/Disable, Emergency, Man Down, 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 stay clear from background noise regardless of the distance between two radio units, providing virtually no deterioration of the voice quality, thus providing larger usable coverage in areas where analog communication will be very poor or not possible at all.

FULL SHIFT PERFORMANCE The RCA PRODIGI™ RDR4300 radios provide up to 40% improved battery performance in digital mode over analog, allowing for longer operating time on a single battery charge. With a typical duty cycle of 5 (Rx) - 5 (Tx) - 90 (Stand By), the RDR4320 with 2250mAh Lithium Ion battery can provide up to 10 hours of operation in Analog mode and up to 12 hours of operation in Digital mode. For extended operating time a higher capacity 3500mAh battery is also available.

CRYSTAL CLEAR AUDIO Designed with X-Sound+ HD™ for exceptional voice quality. The RDR4300 series radios provide loud 1 Watt of 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 RDR4300 series meet 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.

RDR4320   RDR4350   RDR4380

SELECTALK™
PRIVATE AND GROUP CALLING

ENHANCED EMERGENCY & SAFETY FEATURES

3 YEAR WARRANTY
PROTECTION PROGRAM

DMR
DIGITAL MOBILE RADIO ASSOCIATION

Xsound+HD
Enhanced Audio Clarity ™

SPECIFICATIONS
RDR4320 / RDR4350 / RDR4380

Features and Options

- Full features compliant with European ETSI DMR Tier II & III
- Support conventional and trunking modes; support analog and digital modes
- UHF & VHF
- High-performance processor, high volume battery for extra-long standby time
- Standard embedded Micro SD card for voice recording and encryption
- GPS, Bluetooth
- Mandown function for more security
- High sensitivity receiving for enhanced communication distance
- Flexible and practical data services and operations
- Big loudspeaker and noise reduction for high quality voice communication
- Friendly open API for third party development
- Meets IP Standard IP67
- Meets MIL-STD 810 C,D,E,F,G

Emergency / Security Features

- Radio Check
- Remote Radio Monitor
- Radio Kill / Active
- Privacy Encryption
- Call Alert
- Emergency Alerts
- Lone Worker Alert
- Scanning

Optional Features

- Roaming
- Man Down
- Voice Recording
- AES 256bit Encryption
- GPS
- Bluetooth

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

INDUSTRY LEADING WARRANTY The RDR4300 series radios are backed standard by an industry leading, hassle-free Three (3) Year Warranty.

* The Bluetooth word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc

GENERAL SPECIFICATIONS	
Model	RDR4320™ / RDR4350™ / RDR4380™
Communication Protocals & Standards	PDT digital trunking GA / T1056, 1057, 1058, 1059 DMR tier 3 digital trunking ETSI-TS102 361-1, -2, -3, -4 Analog trunking MPT 1327 / MPT1343
Frequency Bands	136-174MHz; 400-470MHz; 450-520MHz
Channel Spacing	12.5KHz / 20KHz / 25KHz
Operating Voltage	7.4V
Battery Volume	2250mAh (Lithium battery)
Working Time (5-5-90 duty cycle, high TX power)	Analog: >13h; Digital: >18h
Dimensions (standard battery, not including antenna)	128*55*35.5(H*W*D)
Weight (standard battery, including antenna)	355±1%g
Frequency Stability	±0.5ppm
LCD Display	160*128pixel, 65535 color, 1.8 inches color screen (SPH6000S non-display)
GPS	Accuracy<10m, TTFF cold start 1 min / hot start 10 sec
Encryption & Storage	Standard Micro SD
Emission Designators	Analog	11K0F3E, 16K0F3E
	Digital	7K60F1D, 7K60F1E

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
IP Rating	IP67

TRANSMITTER	
RF Power Output	VHF High power: 5W; VHF Low power: 1W
FM Modulation	11KOF3E@12.5KHz; 14KOF3E@20KHz; 16KOF3E@20KHz
4FSK Digital Modulation	12.5khz Data: 7F60FXD 12.5khz Data& voice: 7F60FXW
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

RECEIVER		
Sensitivity	Analog	0.3μV(12dB SINAD): 0.22μV(Typical value) (12dB SINAD)
		0.4μV(20dB SINAD)
	Digital	0.3μV / BER5%
Sensitivity TIA-603 / ETSI	60dB@12.5KHz / 70dB@20 & 25KHz	
Intermodulation	TIA-603	70dB@12.5 / 20 / 25 KHz
	ETSI	65dB@12.5 / 20 / 25 KHz
Spurious Response Rejection TIA-603 / ETSI	70dB@12.5 / 20 / 25 KHz	
Blocking	TIA-603	80dB
	ETSI	84dB
Hum and Noise	40dB@12.5KHz; 43dB@20KHz; 45dB@25KHz;	
Rated Audio Power Output	1.0W	
Rated Audio Distortion	≤3%	
Audio Response	+1~-3dB	
Conducted Spurious Emission	< -57dBm	

Authorized Distributor:

For more information, visit
RCACommunicationsSystems.com