

ADVANCED DIGITAL PORTABLE RADIO

Rx665

Empower Your Operation with Rx665 Series



Compact, lightweight, and powerful – the Rx665 Series delivers crystal-clear audio, extended coverage, long battery life, and exceptional durability. Designed for customer-facing teams, it ensures efficient communication, improved productivity, and uninterrupted service.

KEY FEATURES

Light & Stylish

Slim and lightweight design for easy portability with clear audio for professional-grade communication.

Long Battery Life

Over 20 hours of usage with advanced lithium polymer battery – no need to recharge during shifts.

Rugged & Durable

MIL-STD-810G certified and IP67 rated – resists drops up to 2 meters and tough environmental conditions.

Clear Audio

Powerful speaker, AI noise cancellation, and water-proofing technology ensure clear sound even in noisy or wet environments. AI-based noise cancellation reduces background noise and howling by up to 30dB, ensuring clear audio for the receiver regardless of the caller's noisy environment.

Easy to Use

The Rx665 Series is compact, discreet, and user-friendly with tactile PTT, programmable buttons, and BT5.0 wireless connectivity - ideal for hands-free operation.

Extended Range

Enhanced receiver sensitivity ensures reliable performance in weak signal areas, improving safety and communication for field teams.

TECHNICAL DATA

General

Frequency Range	UHF: 400-527MHz VHF: 136-174MHz
Channel Capacity	1024
Zone Capacity	64
Zone Channels	256
Channel Spacing	12.5kHz/20kHz/25kHz
Operating Voltage	7.7V (rated)
Battery	2000 mAh Li-polymer
Battery Life (5/5/90)	20h (GNSS OFF); 16h (GNSS ON)
Frequency Stability	±0.5ppm
Antenna Impedance	50Ω
Dimensions (H x W x D)	122 x 55 x 31.5mm
Weight (with antenna & battery)	280g
Display	160 x128pixels, 65536colors, 1.8inch, 6rows
BT	BT 5.0 BLE+EDR

Receiver

Sensitivity	Analog: 0.18μV (12dB SINAD); 0.16μV (Typical) (12dB SINAD); Digital: 0.18μV/BER5%
Selectivity	TIA-603: 60dB@12.5kHz / 70dB@20/25kHz; ETSI: 60dB@12.5kHz / 70dB@20/25kHz
Intermodulation	TIA-603: 70dB@12.5/20/25kHz; ETSI: 65dB@12.5/20/25kHz
Spurious Response Rejection	TIA-603: 70dB@12.5/20/25kHz; ETSI: 70dB@12.5/20/25kHz
Blocking	TIA-603: 80dB ETSI: 84dB

Receiver (continued)

Hum and Noise	40dB@12.5kHz; 43dB@20kHz; 45dB@25kHz
Rated Audio Power Output	0.5W
Rated Audio Distortion	≤3%
Audio Response	+1 ~ -3dB
Conducted Spurious Emission	<-57dBm

Transmitter

RF Power Output	UHF: 1W/4W VHF: 1W/5W
FM Modulation	11K0F3E@12.5kHz; 14K0F3E@20kHz; 16K0F3E@25kHz
4FSK Digital Modulation	12.5kHz Data Only: 7K60FXD; 12.5kHz Data and Voice: 7K60FXW
Conducted/Radiated Emission	-36dBm<1GHz; -30dBm>1GHz
Modulation Limiting	±2.5kHz@12.5kHz; ±4.0kHz@20kHz; ±5.0kHz@25kHz
FM Hum & 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 Vocoder Type	AMBE+2™
Digital Protocol	ETSI-TS102 361-1,-2,-3

Environmental

Operating Temperature -30°C* ~ +60°C (*Radio only - Battery -20°C)

Storage Temperature -40°C ~ +85°C

ESD IEC 61000-4-2 (Level 4); ±8kV (contact); ±15kV (air)

Dustproof & Waterproof IEC60529-IP67

Humidity Per MIL-STD-810G Standard

Shock and Vibration Per MIL-STD-810G Standard

Location Services

GNSS GPS, GPS+GLONASS, GPS+BDS

TTFF (Time To First Fix) Cold Start <1minute

TTFF (Time To First Fix) Hot Start <10seconds

Horizontal Accuracy <5meters

Features

Operating Modes Analog conventional; Digital conventional; XPT

Voice Service Private Call; Group Call; All Call; Emergency Call; Priority Interrupt

Data Service Text Message; Quick Text Message

Connection BT Audio; BT Data; GNSS (GPS, GLONASS, BDS); Open API

Safety Emergency; Man Down; Lone Worker; Authentication; Air Interface Encryption; End-to-End Encryption; Disable/Enable

Features (continued)

Analog Mode 2-Tone signaling; 5-Tone Signalling*; HDC1200

Supplementary Profiles; Programmable Buttons; Interface Switcher; Roaming; Remote Monitor; Radio Check; Alert Call

ACCESSORIES

- Standard: Charger
- Standard: Adapter (12V/1A)
- Standard: Li-polymer battery 2000mAh
- Standard: Antenna
- Standard: Belt clip
- Standard: Strap
- Optional: BT Wireless earpiece
- Optional: Programming cable (USB port)
- Optional: BT wireless ring PTT
- Optional: BT Wireless remote speaker microphone
- Optional: Wired earpiece
- Optional: Multi-unit charger