

ADVANCED DIGITAL REPEATER

Rx885

Empower Your Operation



Organizations today face growing challenges across sectors like public safety, utilities, and industry. To enhance safety and operational efficiency, reliable and instant communication is vital. The Rx885 series repeater, a next-generation digital solution from Realix, ensures seamless voice and data communication with wide coverage and high-performance network reliability.

KEY FEATURES

Economical UI Structure

Compact and lightweight design makes Realix RX885 ideal for easy installation.

AC/DC Auto Switch

Supports both AC and DC inputs with automatic switching for versatile power compatibility.

Wide Coverage

Enhanced communication range enables flexible deployment, allowing Realix RX885 to connect to various systems effectively.

Analog & Digital Auto Switch

Supports mixed analog and digital channels, enabling seamless switching and transition for improved performance.

Outstanding Performance (enhanced version)

Enhanced RX885 includes a high-performance chipset, delivering fast processing for demanding applications.

High Integration (enhanced version)

Integrated router and SIP gateway simplify system management and reduce infrastructure cost, especially for network construction.

Convenient Management (enhanced version)

A web-based backend management platform allows easy device configuration and operation, ideal for remote control and monitoring.

High Security (enhanced version)

SNMP v3 technology enhances communication security, ensuring data is protected in complex scenarios.

TECHNICAL DATA

General

Frequency Range	UHF: 400-470MHz; VHF: 136-174MHz
Channel Capacity	64
Channel Spacing	12.5KHz/ 20KHz/ 25KHz
Operating Voltage	DC: 13.6V±15%; AC: 100-240V
Current Consumption (DC)	Standby: ≤0.9A; Transmitting: ≤12A
Current Consumption (AC)	Standby: ≤0.35A; Transmitting: ≤1.2A
Frequency Stability	≤±0.5ppm
Antenna Impedance	50Ω
Duty Cycle	100%
Dimensions (H×W×D)	44×483×366 mm
Weight	5.8kg
Networking	Conventional Mode; *Digital Trunking Lite; *Simulcast (*marked features are coming soon)

Receiver

Sensitivity - Analog	0.18μV (12dB SINAD); 0.16μV (Typical) (12dB SINAD)
Sensitivity - Digital	0.18μV/BER5%
Selectivity	TIA-603: 65dB@12.5kHz / 75dB@20/25kHz; ETSI: 60dB@12.5kHz / 70dB@20/25kHz
Inter-Modulation	TIA-603: 75dB@12.5/20/25kHz; ETSI: 70dB@12.5/20/25kHz
Spurious Response Rejection	TIA-603: 80dB@12.5/20/25kHz; ETSI: 80dB@12.5/20/25kHz

Receiver (continued)

Blocking	90dB
Hum and Noise	40dB@12.5kHz; 43dB@20kHz, 45dB@25kHz
Conducted Spurious Emission	≤1GHz: ≤-57dBm; >1GHz: ≤-47dBm

Transmitter

RF Power Output	5-50W (adjustable)
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	Operating: ≤1GHz -36dBm, >1GHz -30dBm; Standby: ≤1GHz -57dBm, >1GHz -47dBm
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 Specifications

Operating Temperature	-30°C ~ +60°C
Storage Temperature	-40°C ~ +85°C

Front and rear panel

Front	Audio/Programming Port; Operation Status Indicator; Channel Display
Rear	TX Antenna Connector; Accessory Connector; RX Antenna Connector; Ethernet Port x2*; USB Port*; DC Power Inlet; AC Power Inlet