

# Digital Migration Radio RD62X

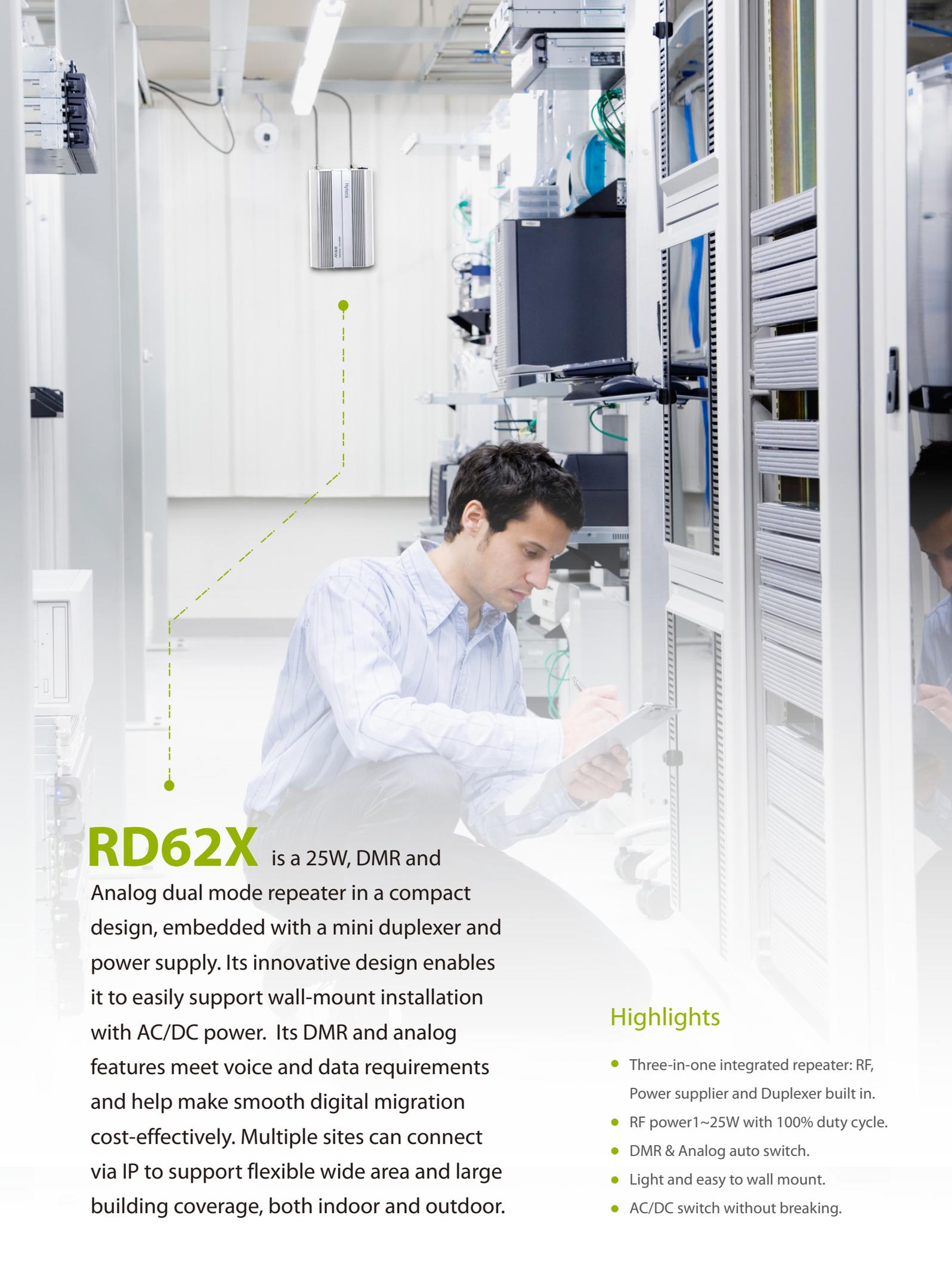
Wall Mount Repeater for Indoor

Light, Small, Compact Design

RF Power 1~25W with 100% Duty Cycle

DMR & Analog Auto Switch





**RD62X** is a 25W, DMR and Analog dual mode repeater in a compact design, embedded with a mini duplexer and power supply. Its innovative design enables it to easily support wall-mount installation with AC/DC power. Its DMR and analog features meet voice and data requirements and help make smooth digital migration cost-effectively. Multiple sites can connect via IP to support flexible wide area and large building coverage, both indoor and outdoor.

### Highlights

- Three-in-one integrated repeater: RF, Power supplier and Duplexer built in.
- RF power 1~25W with 100% duty cycle.
- DMR & Analog auto switch.
- Light and easy to wall mount.
- AC/DC switch without breaking.

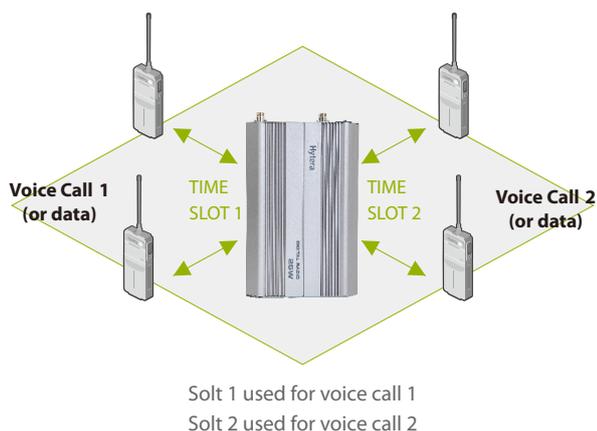
# Features

## Multiple Sites via IP

RD62X supports network connection via the IP port of repeater to form a private radio network to meet data and voice communication needs for wide-area coverage and dispersed locations.

## Digital Audio Streaming of Dual Time Slots

RD62X supports the streaming of both the voice slots via the rear port accessory pins, allowing for capability expansion via future development.



## Analog/Digital Operating Mode

RD62X supports operating mode in both Analog and Digital.

## Analog Scan

The RD62X supports Analog voice and signaling scan, allowing coverage of different analog voice users from various groups.

## Repeater Diagnostic And Control (RDAC)

RD62X supports Remote IP connection to monitor, diagnose and control the repeater, thus increasing maintenance efficiency. The Hytera developed RDAC is able to support multiple master network connections to allow the radio administrator to monitor multiple radio networks.

## AC/DC Auto Switch

RD62X integrates an internal power supply that supports a battery floating charge. The power supports 13.6V±15% DC and 90V-264V AC. If the AC power is cut off, the DC power (battery) automatically takes over without interruption.

## Analog/Digital Back-to-Back Interconnect

RD62X supports different operating modes of Analog and Digital to interconnect for voice cross patch, allowing Analog users to communicate to Digital users and vice versa. This allows for a smooth migration for Analog users to the digital world!

## Multi CTCSS/CDCSS Decode

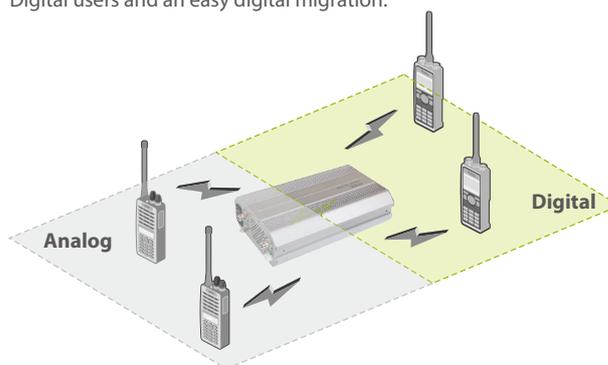
RD62X supports decoding up to a maximum of 16 CDCSS/CTCSS codes in Analog channels, allowing coverage for different Analog voice users from various groups.

## Analog/Digital Telephone Interconnect

RD62X supports simplex voice communications between radio and telephone users. It allows a radio user to make a telephone call; or a telephone user to make either a Group or Private call to radio users. This feature utilizes the Commercial off the Shelf (COTS) Analog Phone Patch boxes and a Plain Old Telephone Service (POTS) line to connect the Repeater to the Corporate Office Phone System (PBX) or Public Switched Telephone Network (PSTN).

## Analog/Digital Auto Switch

RD62X supports Analog and Digital channel auto switching, allowing for efficient frequency sharing between Analog and Digital users and an easy digital migration.



## All-In-One Compact Design

RD62X's compact design, integrates RF, Power supply, and duplexer into one box, which makes RD62X smaller, lighter, and easier for wall-mount installation and indoor coverage.

## Repeater Access Management

RD62X supports a repeater access control feature allowing better security to prevent unauthorized users from accessing the radio network.

# Target Market

Hotels

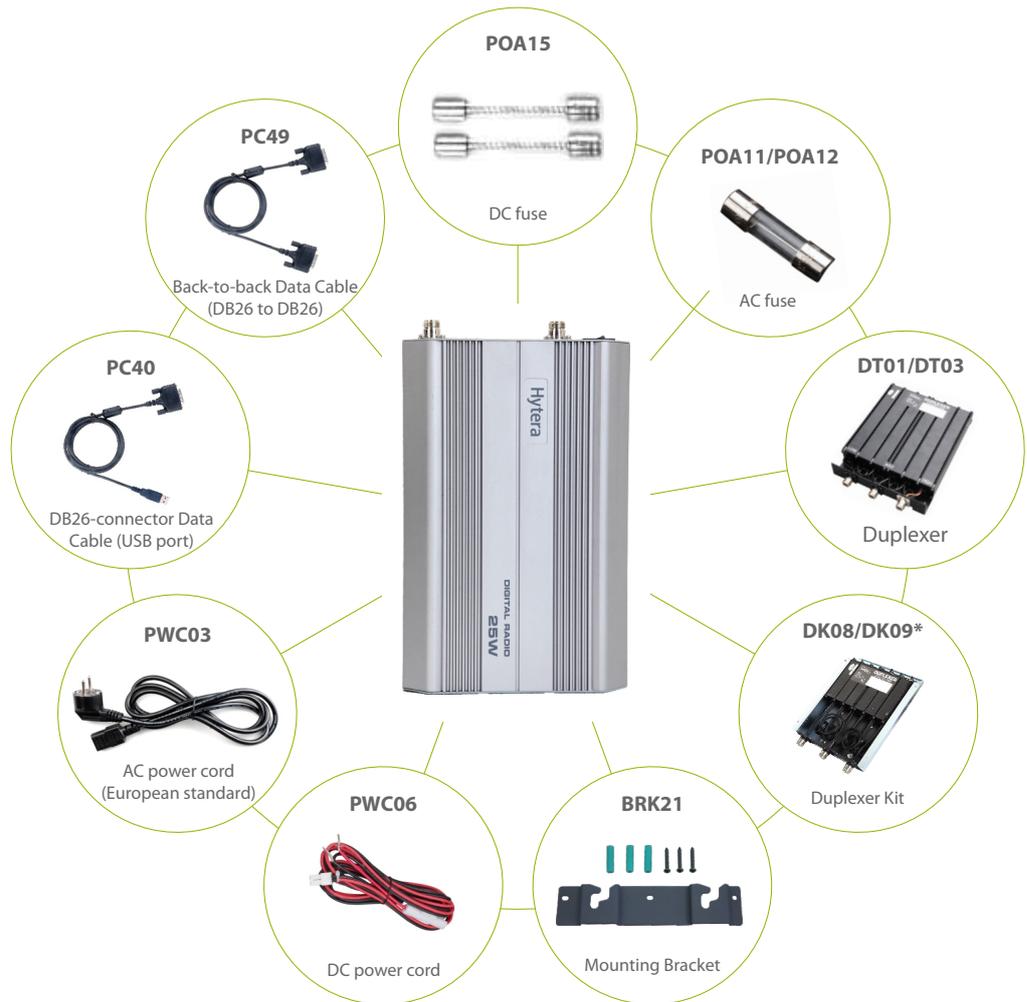
Shopping Malls

Hospitals

Schools



# Accessories



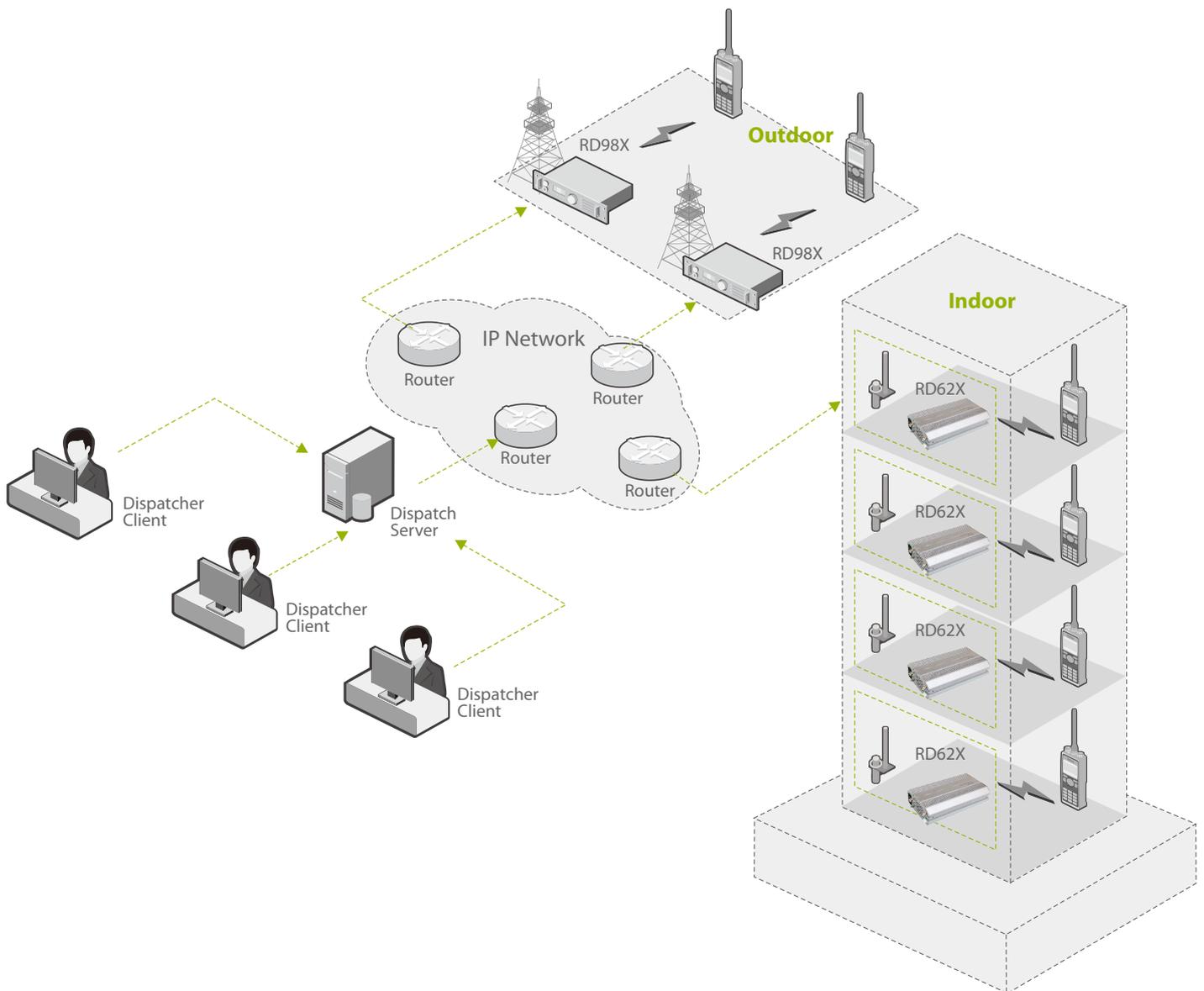
\*Dk08: Frequency Range: 400-470MHz; Frequency Spacing: 5-20MHz  
DK09: Frequency Range: 136-174MHz; Frequency Spacing: 4.5-13MHz

Pictures above are for reference only and may vary from actual products.

## Network Solution

An example of an integrated IP multi-site network solution is detailed in the following illustration: RD62X, RD98X, and Dispatching System connect with IP network providing good signal coverage and dispatching features. This will greatly improve work efficiency, communication convenience and resource management.

- RD98X provides large outdoor coverage with high RF power;
- RD62X provides indoor and some outdoor area coverage with compact design and easy installation;
- Hytera smart dispatch system provides dispatching functionalities, such as selective voice calls, voice recording, GPS tracking, alarm management, etc.



## Specifications

General		
Frequency Range	136-174MHz, 400-470MHz	
Channel Capacity	16	
Channel Spacing	25KHz/20KHz /12.5KHz	
Operating Voltage	13.6±15%V DC 90V-264V AC	
Current Drain	Standby: ≤0.5A Transmit: ≤5.5A	
Frequency Stability	±0.5 ppm	
Antenna Impedance	50 Ω	
Duty Cycle	100%	
Dimensions (W*H*D)	210x348x108mm	
Weight (with Duplexer)	5Kg	
Receiver		
Sensitivity	Analog	0.3μV (12dB SINAD) 0.22μV (Typical) (12dB SINAD) 0.4μV (20dB SINAD)
	Digital	0.3 μ V/BER5%
Adjacent Channel Selectivity	TIA603	65dB @ 12.5KHz /75dB @ 20/25KHz
	ETSI	60dB @ 12.5KHz /70dB @ 20/25KHz
Inter Modulation	TIA603	75dB @ 12.5/20/25KHz
	ETSI	70dB @ 12.5/20/25KHz
Spurious Response Rejection	TIA603	75dB @ 12.5/20/25KHz
	ETSI	≥70dB @ 12.5/20/25KHz
Blocking	TIA603	90dB
	ETSI	84dB
Hum and Noise	40dB @ 12.5KHz; 43dB @ 20KHz; 45dB @ 25KHz	
Rated Audio Distortion	≤3%	
Receiver Audio Response	+1~-3dB	
Conducted Spurious Emission	≤-57dBm	

RD62X, X=0, 2, 5, 6 or 8, model number varies geographically. For details, please contact our regional sales representatives.

Transmitter	
RF output Power	1-25W Continuous
FM Modulation	11K0F3E @ 12.5KHz 14K0F3E @ 20KHz 16K0F3E @ 25KHz
4FSK Digital Modulation	12.5KHz data: 7K60FXD data & 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++ or SELP
Digital Protocol	ETSI-TS102 361-1, 2&3
Environmental Specifications	
Operating Temperature	-30°C ~ +60°C
Storage Temperature	-40°C ~ +85°C

All specifications are subject to change without notice due to continuous development.



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