

## UHF Narrow Band Single Channel Receiver

# CDP-RX-03AS

CDP-RX-03AS UHF FM-narrow band receiver is developed to cover a band plan of ERC Recommendation on Short Range Device ( SRD ) in the range of 868-870MHz and 433-434MHz ISM band. The receiver design is based on the double Super-heterodyne principle with PLL control, enabling high signal sensitivity, high selectivity, and high frequency stability which are not achieved by simple SAW resonators or other low cost designs.

### Feature

- 860-870 & 433-434MHz UHF band
- EN 300 220 / EN 301 489 compliance
- Very small compact integrated device with robust metal housing
- FM narrow band modulation and high frequency stability
- Low current consumption, ideal for mobile applications
- Control terminal for switching the power on/off

### Application

- Remote control system
- Telemetry system
- Social alarm system
- Security alarm system
- Paging system



### CDP-RX-03AS (Receiver)

Item	Specification
Receiver type	Double superheterodyne, PLL controlled Fixed channel
Frequencies	433.920, 434.075, 869.75MHz *Other frequency
Frequency stability	+/-2.5kHz (-10 to +60C) /434MHz +/-3.0kHz (-10 to +60C) /868MHz
Pulse width	Min. 208uS Max. 20 mS
Data rate	100 to 4800bps FSK
Operating temp. range	-10 to +60C
Sensitivity	-120dBm (12dB/SINAD at CCITT filter) / 434MHz -117dBm (12dB/SINAD at CCITT filter) / 868MHz
Selectivity	+/-5kHz at -6dB point
Demodulation	FM Narrow
Distortion	< 5% at 1kHz (AF output)
S/N ratio	50dB overall (AF output)
Data output	Digital output, pulled up to Vcc (22 kohm)
Other outputs	RSSI, AF (-11dBm typ. at Fm=1kHz / Fmod=+/-3kHz, 100 kohm)
Supply Voltage	3.0 to 14V DC
Supply current	18mA (typ)
I/O terminals	Ant, Gnd, Vcc, Data out, AF out, RSSI out, Power Control
Dimensions	36 X 26 X 8mm
Weight	12g

Specifications are subject to change without prior notice  
\*Other frequency: Please contact to Circuit Design, Inc. distributor

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