

UHF Narrow Band Transmitter / Receiver

CDP-TX-07MP, CDP-RX-07MP 434MHz

CDP-TX-07M and CDP-RX-07M are low power narrow band FSK transmitter and receiver modules, designed for industrial applications operating in the 434 MHz ISM band. The modules contain most of the components necessary for radio transmission in compact housing. The operating RF channel can be selected from 4 preset frequency channels through pins. The receiver is double-superheterodyne and equipped with a SAW filter, ensuring high sensitivity and very good selectivity for stable and long range communication. The frequency table can be customized according to the customer's requirement. Please contact Circuit Design.

Features

- Low power narrow band FSK with 25kHz channel spacing
- 4 preset channels reprogrammable* to 4 frequencies in the 434 MHz band
- Low voltage operation
- High receiver sensitivity for long range applications with 600m or more at line of sight
- High reliability for industrial applications
- Robust metal housing, high selectivity and shock resistance
- Compact Size
- RoHs/RED EN 300220 Receiver Category 1

Applications

- Industrial remote control
- Security / Alarms
- Telemetry / Monitoring systems
- Tracking systems



General

Parameter	Specification
Applicable standard	EN 300 220
Communication form	One way
Modulation / Demodulation	FM narrow / FSK
Number of RF channels	4
Frequency (Ch 3) *1	434.0750
(Ch 2)	433.9200
(Ch 1)	434.6000
(Ch 0)	434.7000
Data rate	100 - 4,800 bps
Frequency stability	+/- 2.5 kHz
Operating temp. range (degree C)	-20 to +65

*1 Factory default frequency channel setting

CDP-TX-07MP (Transmitter)

Parameter	Specification
RF output power	10 mW
Transmitter start up	< 20 ms
Deviation	+/- 3 kHz
Supply voltage	2.2 to 5.5 V
Supply current at 3.0 V	20 mA
Dimension	22 x 12 x 4.5 mm
Weight	2 g
Data in	H=Vcc L=0V

CDP-RX-07MP (Receiver)

Parameter	Specification
Receiver type	Double superheterodyne
Receiver Category	1
IF frequency	21.7 MHz / 450 kHz
Sensitivity (12dB/SINAD) (BER<0.1%)	-120 dBm
Supply voltage	3 to 14 V
Supply current at 3V	23 mA typ.
Dimension	36 x 26 x 8 mm
Weight	13 g

Specifications are subject to change without prior notice

* Each of the 4 preset channels are reprogrammable using values chosen from a frequency table containing 67 values that consists of 433.920 MHz and values from 434.075 to 434.700 MHz with 25 kHz spacing. To reprogram the preset channels, a dedicated setting program is provided.