

UHF Narrowband Transmitter / Receiver

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

CDP-TX-07M and CDP-RX-07M are low power narrowband 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 channels selected through the use of jumpers. The receiver is double-superheterodyne and equipped with a SAW filter, ensuring high sensitivity and very good selectivity for stable and long range communication.

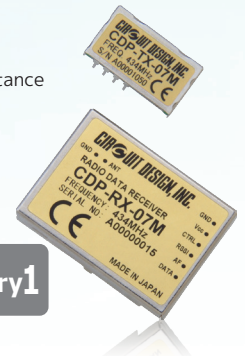
The CDP-TX-07MP and CDP-RX-07MP are channel selectable using a 2 pin terminal allowing you to perform channel selection remotely. In addition, each of the 4 preset channels are reprogrammable using values in the range 434.075 to 434.700 MHz with 25 kHz spacing.

Features

- Low power narrowband FSK with 25 kHz channel spacing
- 4 preset channels containing 4 frequencies in the 434 MHz band
- Low voltage operation
- High receiver sensitivity for long range applications with 600 m or more at line of sight
- High reliability for industrial applications
- Robust metal housing, high selectivity and shock resistance
- Compact Size
- RED EN 300 220
- Receiver Category 1

Applications

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



General

Parameter	Specification
Applicable standard	EN 300 220
Communication method	One way
Emission type	F1D (FSK narrow)
Number of RF channels	4
Frequency (Ch 3) *1	434.0750
(Ch 2)	433.9200
(Ch 1)	434.6000
(Ch 0)	434.7000
RF bit rate	100 to 4,800 bps
Frequency stability	+/- 2.5 ppm
Operating temperature	-20 to +65 C

*1 Factory default frequency channel setting

CDP-TX-07M (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
Dimensions	22 x 12 x 4.5 mm
Weight	2 g
Data input	Digital L = GND, H = Vcc
Spurious emission	< -54 dBm (Frequencies below 862 MHz)
	< -36 dBm (862 MHz to 1000 MHz)
	< -30 dBm (Frequencies above 1000 MHz)
Adjacent channel leakage power	< -37 dBm (CH 25 kHz / BW 16 kHz / PN9 4,800 bps)

CDP-RX-07M (Receiver)

Parameter	Specification
Receiver type	Double superheterodyne
Receiver Category	1
IF frequency	21.7 MHz / 450 kHz
Sensitivity (12 dB/SINAD) (BER<0.1%)	-120 dBm
Supply voltage	3 to 14 V
Supply current at 3 V	23 mA typ.
Dimensions	36 x 26 x 8 mm
Weight	13 g
Data output	Digital L = GND, H = Vcc
Adjacent channel selectivity	45 dB

Specifications are subject to change without prior notice