

UHF Narrowband Transmitter and Receiver

CDP-TX-05M-R, CDP-RX-05M-R

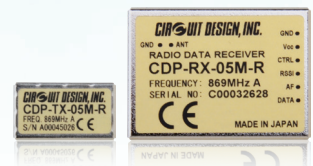
CDP-TX-05M-R and CDP-RX-05M-R are low power narrowband FSK transmitter and receiver modules, designed for industrial applications operating in sub-GHz. The modules contain most of the components necessary for radio transmission in compact housing. The RF channel can be selected from 4 preset channels. The receiver is double-superheterodyne and equipped with a SAW filter, ensuring high sensitivity and very good selectivity for stable and long range communication.

Features

- Low power narrowband FSK with 25 kHz channel spacing
- 4 preset channels
- 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
- RSSI (Received Signal Strength) output terminal
- RED EN 300 220
- 915 MHz version for US markets

Applications

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



General

Parameter	Specification		
	869 MHz A	869 MHz B	915 MHz
Applicable standard	EN 300 220	< -	None
Communication method	One way	< -	< -
Emission type	F1D (FSK narrow)	< -	< -
Frequency (Ch 3) *1	869.7500 MHz	868.6625 MHz	914.500 MHz
(Ch 2)	868.3000 MHz	869.2125 MHz	914.700 MHz
(Ch 1)	869.8000 MHz	869.2750 MHz	914.750 MHz
(Ch 0)	869.9250 MHz	869.3625 MHz	914.825 MHz
RF bit rate	100 to 4,800 bps	< -	< -
Frequency stability	+/-2.5 ppm or less	< -	< -
Operating temperature	-20 to +65 C	< -	< -

*1 Factory default frequency channel setting

CDP-TX-05M-R

Transmitter

Parameter	Specification		
	869 MHz A	869 MHz B	915 MHz
RF output power	5 mW	< -	1 mW
Deviation	+/-3 kHz	< -	< -
Supply voltage	2.2 to 5.5 V	< -	< -
Supply current	16.5 mA	< -	14 mA
Dimensions	22 x 12 x 6 mm	< -	< -
Weight	3 g	< -	< -
Data input	Digital L = GND, H = Vcc	< -	< -
Spurious emission	< -54 dBm (Frequencies below 862 MHz)	< -	< -50 dBm (Frequencies below 862 MHz)
	< -36 dBm (862 MHz to 1000 MHz)	< -	< -50 dBm (862 MHz to 1000 MHz)
	< -30 dBm (Frequencies above 1000 MHz)	< -	< -46 dBm (Frequencies above 1000 MHz)
Adjacent channel leakage power	< -37 dBm (CH 25 kHz / BW 16 kHz / PN9 4,800 bps)	< -	-

CDP-RX-05M-R

Receiver

Parameter	Specification		
	869 MHz A	869 MHz B	915 MHz
Receiver type	Double superheterodyne	< -	< -
Receiver category	1.5	< -	None
IF frequency	21.7 MHz / 450 kHz	< -	< -
Sensitivity (BER<0.1%)	-111 dBm	< -	< -
Supply voltage	3 to 14 V	< -	< -
Supply current	28 mA	< -	< -
Dimensions	36 x 26 x 8 mm	< -	< -
Weight	13 g	< -	< -
Data output	Digital L = GND, H = Vcc	< -	< -
Adjacent channel selectivity	45 dB	< -	60 dB

Specifications are subject to change without prior notice