

# UHF Narrowband Transmitter / Receiver

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

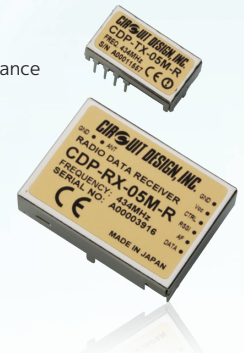
CDP-TX-05M-R and CDP-RX-05M-R are low power narrowband FSK transmitter and receiver modules, designed for industrial applications operating in sub-1 GHz. The modules contain most of the components necessary for radio transmission in compact housing. The RF channel can be selected from 4 preset channels. 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	868.6625	914.500
(Ch 2)	868.3000	869.2125	914.700
(Ch 1)	869.8000	869.2750	914.750
(Ch 0)	869.9250	869.3625	914.825
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-05M-R (Transmitter)

Parameter	Specification		
RF output power	5 mW	< -	1 mW
Deviation	+/- 3 kHz	< -	< -
Supply voltage	2.2 to 5.5 V	< -	< -
Supply current at 3.0 V	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	< -	< -50 dBm
	(Frequencies below 862 MHz)		(Frequencies below 862 MHz)
	< -36 dBm	< -	< -50 dBm
	(862 MHz to 1000 MHz)		(862 MHz to 1000 MHz)
	< -30 dBm	< -	< -46 dBm
	(Frequencies above 1000 MHz)		(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		
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 at 3V	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