

UHF Narrowband Transmitter and Receiver

CDP-TX-07M, CDP-RX-07M 869 MHz

The CDP-TX-07M and CDP-RX-07M 869 MHz are low power narrowband FSK transmitter and receiver modules designed for industrial applications operating in the 869 MHz ISM band. The modules contain most of the components necessary for radio transmission in a compact housing. The RF channel can be selected from 4 preset channels using jumpers. The receiver is double superheterodyne and contains a SAW filter, ensuring high sensitivity and selectivity for stable long range communication.

The CDP-TX-07MP and CDP-RX-07MP 869 MHz 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 868.050 to 869.975 MHz with 12.5 kHz step.

Features

- Low power narrowband FSK
- 4 preset RF channels
- 600 m or more at line of sight.
- High reliability for industrial applications.
- Robust compact metal housing
- High selectivity and shock resistance
- CE / UKCA marking

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 ch
Frequency	869.7500* / 868.3000 / 869.8000 / 869.9250 MHz
RF bit rate	100 to 4,800 bps
Frequency stability	+/-2.5 ppm or less (-20 to +65 C)
Operating temperature	-20 to +65 C

CDP-TX-07M

Transmitter

Parameter	Specification
RF output power	5 mW
Transmitter start up	< 20 ms
Deviation	+/-3 kHz
Supply voltage	2.2 to 5.5 V
Supply current	18 mA
Data input	Digital L = GND, H = Vcc
Spurious emission	< -54 dBm (below 790 MHz) < -36 dBm (790 to 1000 MHz) < -30 dBm (above 1000 MHz)
Adjacent channel leakage power	< -37 dBm (PN9 4,800 bps, CH = 25 kHz)
Dimensions	22 x 12 x 4.5 mm
Weight	2 g

CDP-RX-07M

Receiver

Parameter	Specification
Receiver type	Double superheterodyne
Receiver category	1.5
IF frequency	21.7 MHz (1st), 450 kHz (2nd)
Sensitivity (12 dB SINAD)	-115 dBm
Sensitivity (BER 0.1%)	-110 dBm
Supply voltage	3 to 14 V
Supply current	23 mA typ.
Data output	Digital L = GND, H = Vcc
Adjacent channel selectivity	> 45 dB
Dimensions	36 x 26 x 8 mm
Weight	13 g

*Factory default frequency channel setting
Specifications are subject to change without prior notice