

UHF Narrow Band Multi Channel Transmitter/Receiver

CDP-TX-02N / CDP-RX-02N 433MHz

The unique and compact CDP-02N is a frequency selectable radio data module for 434MHz UHF band. Both CDP-TX-02N (transmitter) and CDP-RX-02N (receiver) are equipped by frequency synthesizer system with microprocessor. Frequency range of CDP-02N is from 433.875MHz to 434.650MHz in 32 channels which are selectable by the use of an onboard 4 bits switch.

Small size, low voltage operation and frequency selectability of CDP-02N make it ideal for various applications in sites where many radio transmitters are operated.

Feature

- 32 frequency synthesized RF channels
- 5mW/10mW selectable
- Low voltage operation
- High sensitivity receiver
- FM narrow band modulation and high frequency stability
- EN 300 220, EN301 489 compliance

Application

- Remote control systems
- Security systems
- Alarms
- Telemetry systems



Common

Item	Specification
Communication form	One way
Oscillation system	PLL controlled VCO
Frequency range	433.875MHz to 434.650MHz
Number of RF channels	32 ch
Channel step	25kHz
Frequency stability	+/-2.5kHz (-10 to +55 degree C)
Baud rate	300 to 4800bps
Operating temp. range	-10 to +60 degree C

CDP-TX-02N (Transmitter)

Transmitter type	PLL synthesizer
RF output power	10mW/5mW
Transmitter start up time	80msec
Modulation	FM Narrow
Data input level	3.0 to 12V
Input signal	Digital
Deviation	2.0kHz
Spurious emission	<-60dBm (< 862MHz) , <-46dBm (>= 862MHz)
Adjacent channel power	<200nW
Supply voltage	3.0 to 12V DC
Supply current	30mA (typ)
Dimensions	36 X 26 X 10 mm
Weight	12.5g

This specification is applied to the CDP-TX-02N units whose serial numbers start with E and subsequent letters of the alphabet.

CDP-RX-02N (Receiver)

Receiver type	Double Superheterodyne PLL synthesizer
Sensitivity	-120dBm (12dB/SINAD at CCITT filter)
Selectivity	+/-7.5kHz at -6dB point
Demodulation	FM Narrow
Distortion	<3% at 1kHz
S/N ratio	35dB overall (AF out)
Data output	Digital
Supply Voltage	3.6 to 12V DC
Supply current	26mA (typ)
Dimensions	50 X 30 X 9mm
Weight	19g

Specifications are subject to change without prior notice

CIRCUIT DESIGN, INC. International Business Division

<http://www.cdt21.com>

CDP-TX/RX-02NDS ver1.3 Oct 04
DS_CDP-02N_v13e

7557-1 Hotaka, Hotaka-machi, Minamiazumi, Nagano 399-8303, Japan

Tel: +81-263-82-1024 Fax: +81-263-82-1016