## CIRQUIT DESIGN, INC.



UHF Narrow Band Multi Channel Transmitter/Receiver

## CDP-TX-02N/ CDP-RX-02N

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.

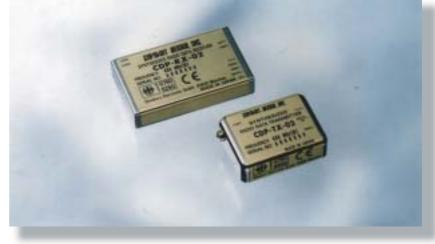
Small size, low voltage operation and frequency selectability of CDP-02N make it ideal for various applications in sites where many radio transmitters are operated.

## **Feature**

- European EN300-220 compliance
- 32 frequency synthesized RF channels
- 5mW/10mW selectable
- Low voltage operation
- High sensitivity 300m range
- FM narrow band modulation and high frequency stability

## **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 - +60 degree C
CDP-TX-02N	Transmitter type	PLL synthesizer

Operating temp. range	-10 - 100 degree 0
Transmitter type	PLL synthesizer
RF output power	10mW/5mW
Transmitter start up time	80msec
Modulation	FM Narrow
Data input level	2.2 - 12V
Input signal	Digital
Deviation	2.0kHz
Spurious emission	<-60dBm (< 862MHz) , <-46dBm (>= 862MHz)
Adjacent channel power	<200nW
Supply voltage	2.4 - 12V DC
Supply current	30mA (typ)
Dimensions	36 X 26 X 10 mm
Weight	12.5g
Receiver type	Double Superheterodyne PLL synthesizer
Sancitivity	-120dRm (12dR/SINAD at CCITT filter)

CDP-RX-02N (Receiver)

Differisions	30 X 20 X 10 IIIIII
Weight	12.5g
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