

Compact narrowband radio modules for industrial use, now with multiple channels

Circuit Design, Inc., the leading supplier of narrowband radio modules, has begun sale of the small multi-channel transmitter CDP-TX-05M-R and receiver CDP-RX-05M-R.

The CDP-TX-05M-R and CDP-RX-05M-R include nearly all the parts necessary for industrial-use radio transmission in a small and robust shielding case. They are both compatible with the CDP-TX-04S-R transmitter and CDP-RX-03AS-R receiver, earlier models of the same modules that were very well received in the Japanese and European markets for their quality and reliability. They also come with several new functions.

While the earlier models had just one RF channel, the new models are programmed with four channels. In addition, within the main ISM frequency band* of Sub-1 GHz, the frequency table can be customized according to the customer's requirements.

* 426 MHz in Japan, 434 MHz, 869 MHz in Europe, 915 MHz in the US

Using a TCXO as the reference oscillator circuit of the radio component ensures high frequency stability, and while the operating temperature range of the earlier product was -10°C to +60°C, in the new product it is increased to -20°C to +65°C.

With the output of 10 mW * authorized for narrow band FM and double superheterodyne receivers with high receive sensitivity in the European harmonized ISM band, a communication range of 600 m (line-of-sight) is possible.

* 5 mW in 869 MHz, 1 mW in 426 MHz, 0.5 mW in 915 MHz

The features of CDP-TX-05M-R / CDP-RX-05M-R are as follows.

- R&TTE (EN300220) & RoHS compliant - 434 MHz version and 869 MHz version for EU
- ARIB-T67 - 426 MHz version for Japan
- FCC Part15.249 - 915 MHz version for the US
- Small and lightweight - Transmitter 22 x 12 x 6 mm, 3 g / Receiver 36 x 26 x 8 mm, 13 g
- Wide operating temperature range (-20°C to +65°C) / TCXO built in
- 4 RF channels with narrowband FM 25 kHz channel spacing
- High sensitivity double superheterodyne receiver -120 dBm sensitivity (434 MHz SINAD 12 dB)

Applications

- Industrial remote control
- Security and alarms
- Telemetry and monitoring systems
- Tracking systems



About Circuit Design

Circuit Design, Inc. designs and supplies low power radio modules for various application fields such as telecontrol, telemetry, alarms, serial data transmission and audio. The products comply with European ETSI, US FCC and Japanese ARIB standard.

Quality is assured with an ISO9001-certified design and manufacturing process based in Japan.

Enquiries | Development | Manufacturing

Circuit Design, Inc., Business Division

7557-1 Hotaka, Azumino, Nagano 399-8303, Japan

TEL: +81 (0)263-82-1024 / FAX: +81 (0)263-82-1016

e-mail: info@circuitdesign.jp

URL: www.circuitdesign.jp