

TB-CDP02-RX/TX

- Status Translation System & Development Kit -



The test boards were developed to demonstrate and use the CDP-TX-02FP-R and CDP-RX-02FP-R. Besides this it is possible to develop own software for these boards.

It consists of a transmitter input board and receiver output board.

In combination with the radio modules, it is a full 8 channel digital status translator which can be practically used for various applications.

Features of the status translation

- TX board: 8 inputs (opto coupler) & RX board: 8 outputs (photo MOS relays).
- Manual and automatic channel control
- Different transmission types (test mode, continuous mode, triggered mode)
- Learning and pairing mode (TX 1 : RX N or TX N : RX 1)
- 8 monitoring LED's on the receiver board
- Data packets with CRC16 checksum
- Fail safe mode with max error count
- Calibrated to -116dBm for the automatic channel control

Features of the development set

- Full programmable Atmel® ATMEGA324P over ISP port
- 32 kb internal flash and 2 kB EEPROM for own software
- 2 UART ports for CDP-02, debugging/data transmission and reception
- 3 DIP switches for configuration
- Complete documented source code for the status transmission

Technical data

General specifications

| | |
|---------------------|-------------------------|
| Applicable standard | EN 300 220-3 Ver.1.1.1 |
| Frequency | 433.1875 – 434.7750 MHz |
| Channels | 128 |
| Antenna impedance | 50 ohm |

| | |
|-----------------------|---------------|
| Operating temperature | -20 to + 60°C |
| Storage temperatur | -30 to + 70°C |
| Operating voltage | 5 – 15 V DC |
| Data rate | 4800 bps |

TB-CDP02-TX

| | | |
|--------------------------|-----------------|--|
| Current consumption | Typ. 66 mA | TX on, all inputs off / 15 V |
| | Typ. 22 mA | TX off, all inputs off / 15 V |
| | Typ. 2.2 mA | Input current for each channel / 5V +V Led |
| Input | 8 opto coupler | |
| Input opto coupler | 4-15 V DC | |
| Opto coupler LED current | 1.5 – 8 mA | |
| Dimensions | 70 x 80 x 13 mm | |
| Weight | 60 g | |

TB-CDP02-RX

| | | |
|---------------------|--------------------|---------------------------------|
| Current consumption | Typ. 143 mA | RX on, all outputs on / 15V |
| | Typ. 53 | RX on, all outputs off / 15V |
| | Typ. 11.3 mA | Current for each channel / 15 V |
| Output | 8 Photo-MOS relays | |
| Output relay | Max. 48V, 300 mA | |
| Dimensions | 100 x 80 x 13 mm | |
| Weight | 90 g | |