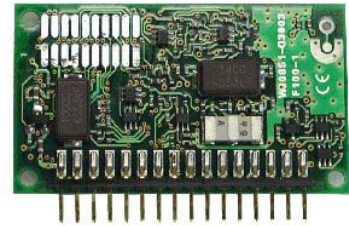


EnOcean Transceiver Module TCM 120

The transceiver module TCM 120 of EnOcean enables the realization of bi-directional RF applications based on the innovative EnOcean radio technology.

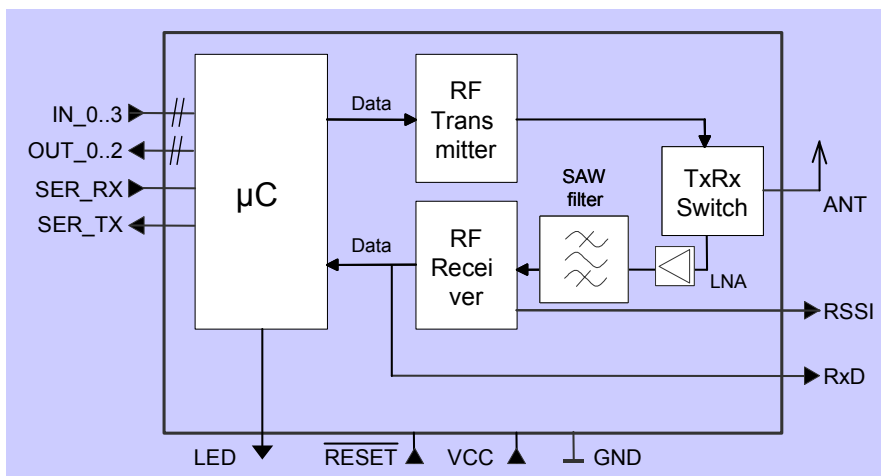
Typical applications are bi-directional EnOcean compatible radio interfaces, e.g. to existing system solutions or bus systems.



The TCM 120 transceiver module serves the 868 MHz air interface protocol of EnOcean. It receives all signals from EnOcean radio transmitters and makes them available at the serial port. Control signals can be sent to any EnOcean radio receiver (based on e.g. receiver modules RCM 110, RCM 120, TCM 120). The integrated modem functionality allows easy data transfer between different TCM 120.

Technical Data

- Frequency / Modulation type / Transmission power:** 868.3 MHz / ASK / max. 10 mW
- Data rate (transmitter) / Channel bandwidth (receiver):** 120 kbps / 280 kHz
- Transmission range:** 300 m free field
- Antenna:** No antenna installed. Whip antenna or external 50Ω antenna mountable
- Power Supply Voltage:** 5V +10%/-5%
- Power Supply Stand-by Current:** typ. 40 μA
- Power Supply Operation Current (receive / transmit):** .. typ. 33 mA (receive only), max. 55 mA
- Bi-dir Serial Interface:** full-duplex, async., 9.6 kbps
- Modem functionality (for easy data transfer):** 6 Byte per telegram with acknowledge
- Transmitting indication output (LED):** 20 mA max., approx. 3x1 ms within 50 ms
- RSSI Output:** indicates received peak signal strength
- Dimensions of PCB:** 24 x 42 x 5 mm (without wiring pins)
- Operating Temperature:** -25 up to +65 °C



This product is CE certified and conforms to the R&TTE EU-Directive on radio equipment. The EnOcean 868 MHz radio technology can be approved for operating in the USA and in Canada.