DOLPHIN
Self-powered IoT by EnOcean

Transceiver Module
TCM 410J

TCM 410J enables the realization of gateways for EnOcean 928MHz radio systems.
It provides a bi-directional radio interface at one end and a bi-directional serial interface at the other end. Radio messages are sent transparently through the serial interface in both directions from and to an externally connected host processor or host PC. On demand the outgoing radio communication can be encrypted & incoming radio communication can be decrypted by the TCM 410J module. In addition control commands can be sent from the host, e.g. to configure the repeater functionality or to manage the Smart Ack functions. TCM 410J can act as postmaster for up to 15 bi-directional sensors using Smart Ack technology.

Type	Ordering Code
TCM 410J	**S3063-K410**

Product variants

- TCM 410J: SMD mountable module for use with external antenna (928 MHz)
- Features
- Smart Ack controller functionality
- Transparent radio channel
- Programmable repeater functionality (1 Level)
- ESP3 support (EnOcean Serial Protocol V3)
- API programmable
- Enhanced security communication

Features overview

Antenna	External whip or 50Ω antenna mountable
Frequency	928.35 MHz (FSK)
Radio Standard	Enocean Radio Protocol 2 (FSK)
Data rate/Modulation type	125 kbps FSK
Receiver Sensitivity (at 25°C)	typ. −95 dBm
Conducted Output Power	typ. 0dBm
Power Supply	2.6…5V
Serial Interface	UART
Current Consumption	Receive mode (incl. CPU current): 27 mA Transmit mode (incl. CPU current): 22 mA
Dimensions of PCB	22x19x3 mm
Operating temperature	-25 to +85°C
Radio Regulations	ARIB STD-T108

Energy Harvesting made easy with EnOcean wireless standard TCM 410J is a bidirectional system module for line powered application to communicate with maintenance-free sensor solutions based on the EnOcean wireless standard.