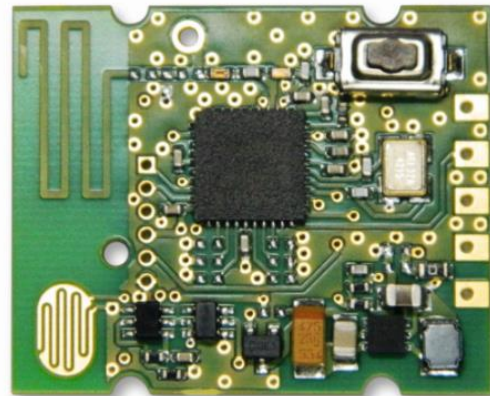# 2.4 GHz IEEE 802.15.4 Miniswitch Transmitter PTM 535Z

PTM 535Z enables the realization of energy harvesting wireless switches for EnOcean systems communicating based on the 2.4 GHz IEEE 802.15.4 radio standard.

PTM 535Z is primarily intended for operation in conjunction with the EnOcean ECO 200 or ECO 250 energy harvesters.

ECO 200 or ECO 250 can be either mechanically connected using two contact pairs or wired to the electrical interface of PTM 535Z.

Upon detection of an energy pulse from the ECO 200 or ECO 250 harvester, PTM 535Z will determine the following items:
- Polarity of the energy pulse
- Status of on-board meander contact
- Status of input signals IN1 and IN2

The status of these items will be reported as 2.4 GHz IEEE 802.15.4 radio telegram. Both secure and non-secure transmission is supported.

PTM 535Z contains a learn button (LRN) to send dedicated commissioning telegrams and to change the radio channel.

Radio channel and security mode can also be selected using the hardware configuration interface.

PTM 535Z provides a five pad electrical interface with the following signals:
- Wired connection to ECO 200 / ECO 250 (AC1 and AC2)
- Two external input signals (IN1 and IN2)
- Ground (GND)

PTM 535Z is mechanically compatible with the outline of existing PTM 33x modules.

TYPE	ORDERING CODE
PTM 535Z	**S3071-A535**

Features overview

Antenna	Integrated PCB antenna External 50 Ohm whip antenna (optional)
Radio Standard / Bit Rate	2.4 GHz IEEE 802.15.4 / 250 kbps
Supported Radio Channels	IEEE 802.15.4 Radio Channel 11 … 26 (Default: Radio Channel 11)
Radio Channel Selection	Configurable via configuration interface User-selectable (Commissioning)
Commissioning	Learn Button (on-board)
Security	AES128 authentication with Sequence Code
Transmit Power (typ, at 25°C)	+2 dBm
Power Supply	ECO 200 or ECO 250 Kinetic Energy Harvester
Harvester Interface	2 pairs of contacts
External Interface	5 pins (solderable)
Configuration Interface	6 zero Ohm resistor footprints (on-board)
Module Dimensions	26.2 +- 0.3 mm x 21.15 +-0.3 mm
Operating Temperature	-25°C … 65°C
Radio Certification	RED (Europe) / FCC (US) / IC (Canada) / ARIB (Japan)