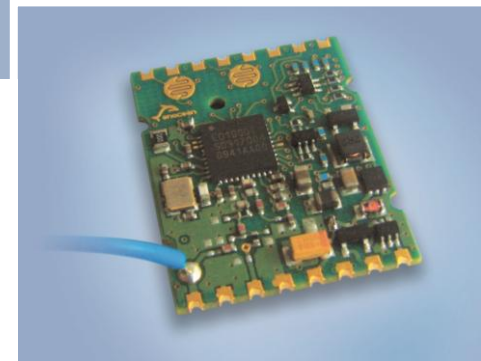


Transmitter Module PTM 33x / PTM 33xC / PTM330U

The radio transmitter module family PTM 33x from EnOcean enables the implementation of wireless sensors and switches without batteries.



Functional Principle

When an energy pulse is supplied (e.g. by the motion energy harvester ECO 200 from EnOcean) an RF telegram is transmitted including a unique 32-bit module ID, the polarity of the energy pulse, and the operating status of 4 digital inputs. The RPS telegram content can be configured if other content is needed.

PTM 33x can be connected to ECO 200 via a contact spring. There are two meander structures on the PCB which allow usage of a rubber pad to set the level of two digital inputs. Alternatively PTM 33x can be mounted as an SMD component onto a host PCB. In this case energy supply pins and digital input pins are accessible via contact pads.

PTM 335 additionally can protect the outgoing communication with enhanced security features like AES 128 Encryption and Message Validation.

There are three frequency variants – PTM 33x in 868 MHz, PTM 33xC in 315 MHz and PTM 330U using 902.875MHz.

Type	Ordering Code
PTM 330	S3001-A330
PTM 335	S3001-A335
PTM 332	S3001-A332
PTM 330C	S3031-A330
PTM 332C	S3031-A332
PTM 330U	S3051-A330

There are two packaging variants for PTM 330:
 ■ PTM 332/332C: Tape & reel for SMD mounting (no pre-installed antenna)

Features overview

Power supply	ECO 200 or equivalent energy pulse
Antenna	pre-installed whip antenna PTM 330/335/330C/330U external 50 Ohm or whip antenna PTM 332/332C
Frequency	868.3 MHz (PTM 33x) / 315.0 MHz (PTM 33xC) / 902.875 MHz (PTM 330U)
Transmission power	typ. 3 dBm (PTM 33x, PTM 33xC) / 1dBm (PTM 33xU) at antenna base
Data rate / Modulation type	125 kbps / ASK(315MHz, 868MHz), FSK(902MHz)
Telegram type	RPS of type 2 (allows interpretation of operating two buttons simultaneously) F6-10-00 (window handle) PTM 332 only SEC PTM 335 only
Digital inputs	4
Mode switch (standard and enhanced security)	3 pins PTM 335 only
Transmission range	up to 200 m free field, up to 30 m indoor
Module dimensions	26.2 x 21.15 x 3.5 mm
Operating temperature	-25 up to +65 °C