

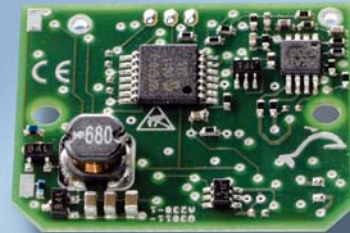
PTM 230

Radio transmitter module

The radio transmitter module PTM 230 from EnOcean enables the implementation of battery-less radio switches for applications in e.g. building technology or industrial automation. Power is provided by an external electro-dynamic power generator such as ECO 100 or a short energy pulse.

Functional Principle

When a short energy pulse is supplied to the PTM 230 module an RF telegram is transmitted including a 32-bit module ID and the polarity of the supply voltage. In addition the information of 2 inputs is transmitted. With these 2 inputs one rocker of a PTM 200 can be simulated.



Type
PTM230

S3011-A230

Features overview

Energy input	EnOcean energy converter ECO 50 or ECO 100 or equivalent energy pulse $E_{\text{Pulse}} > 0.45\text{mWs}$, $2.5\text{V} \leq U_{\text{max,Pulse}} \leq 5.5\text{V}$, $0,001\text{ms} \leq T_{\text{Pulse}} \leq 11\text{ms}$
Antenna	no antenna installed, $\lambda/4$ -whip antenna mountable
Frequency / Transmission power	868.3 MHz / max. 10 mW EIRP
Data rate / Channel bandwidth / Modulation type	125 kbps / 280 kHz / ASK
Number of digital inputs	2
Telegram type	RPS Typ 2, 32 bit ID, 3 telegrams within 25 ms
Minimum time between activations	45 ms
Transmission range	300m free field, range strongly dependent on surrounding material and position relative to energy harvester or other metal surfaces
PCB Dimensions	approx. 20 x 25 x 6 mm
Operating temperature	- 25 up to + 65 °C
Storage temperature	- 40 up to + 85 °C
Humidity	0-93% r.h. non-condensing, IP 00 (required pulse width depends on voltage, pulse shape and source impedance)

PTM230 is CE certified and conforms to the R&TTE EU directive on radio equipment.