

Pushbutton Transmitter Module PTM 210

The radio transmitter module PTM 210 from EnOcean enables the implementation of wireless remote controls without batteries. Power is provided by a built-in electro-dynamic power generator.

Key applications are wall-mounted flat rocker switches with 1 or 2 rockers (with medial position), as well as handheld remote controls with up to 4 single pushbuttons

Functional Principle

A common electro-dynamic energy transducer is actuated by a bow, which can be pushed from outside the module on the left or right by an appropriate pushbutton or switch rocker. When the energy bow is pushed down, electrical energy is created and a RF telegram is transmitted including a 32-bit module ID. Releasing the energy bow generates different telegram data, so every PTM telegram contains the information that the bow was pressed or released. In addition, the radio telegram transmits the operating status of 4 contact nipples when activating the bow. This enables the identification of up to 2 appropriate switch rockers or up to 4 single pushbuttons. „Long“ or „Short“ pushbutton operation (the time



between pushing and releasing the pushbutton) can be easily detected by the receiver. By doing that, applications such as dimming control or jalousie control including slat action are simple to implement.

The PTM 210 module serves the 868 MHz air interface protocol of EnOcean.

Type
PTM210

Ordering Code
S3001-A210

Features overview

Power supply	power generation by rocker operating (Electrodynamic Power Generator)
Antenna	integrated
Frequency	868.3 MHz
Data rate / Modulation type	125 kbps / ASK
Channels	2 with 4 action states each (upper/lower pushbutton is pressed/released)
EnOcean Equipment Profile supported	EEP F6-02-xx, F6-04-xx
Transmission range	300 m free field, typ. 30 m indoor
Energy bow travel/Operating force	1.8 mm / approx. 7 N (at room temperature)
Number of operations at 25°C	typ. 100.000 actuations tested according to EN 60669 / VDE 0632
Module dimensions (inclusive rotation axis and energy bow)	40.0 x 40.0 x 11.2 mm
Operating temperature	- 25 up to + 65 °C

Radio signals are event controlled (pushbutton is pressed / is released) with button code and unique module identification (fix 32 bit ID).

This product will be CE certified and conform to the R&TTE EU-Directive on radio equipment.