

# Pulse10 ON/OFF Wireless Switch



## Standards, Approvals & Directives

- Electromagnetic Compatibility – Directive 2004/108/EC
- Radio and Telecommunications Terminal Equipment – Directive R&TTE 1999/5/EC
- Low Voltage – Directive 73/23/EC
- EN 301489-3: V1.4.1; EN 61000-6-2:2005
- EN 300220-2: V2.3.1
- EN 60950-1:2006+A11:2009
- EN 50371:2002
- ERC Recommendation 70-03:2009-02
- Conforms to CE

## Description

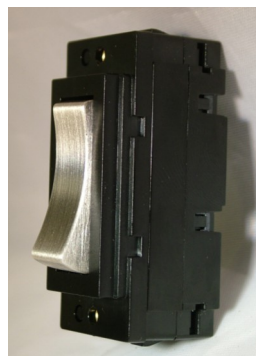
The Pulse10 has been designed to be an automated system that doesn't require any new cable installations or batteries. Pulse10 is a self powered switch offering a convenient and energy saving solution to both domestic and commercial applications.

## Features

- Patent pending
- Grid mounted, metal rocker version available using En Ocean technology.
- Wireless and self powered using RF technologies with ranges up to 200 meters in ideal conditions.
- No cable required between the switch and light fitting guarantees immediate cost savings in terms of cable and installation time for electrical contractors.
- Fewer number of issues with installing new or additional switches in buildings where decor is sensitive and chasing cables for additional switches or rewire is prohibited.

## Applications/Uses

Pulse10 can be used in any building where running cables may be problematic. e.g. Heritage Buildings. Also Prisons', Law Courts and Police Stations where there is no voltage in the cell.



## Compatibility

The Pulse10 is compatible throughout all our collections of plates and grids. It is also compatible with EnOceans technology. The option of screw-in and clip-in grids are available in:

Single – 1 and 2 gang  
Twin – 3 and 4 gang

## Availability

The Pulse10 modules are available in Black and White housings. All plate finishes are available throughout all The Classic, Infinity, Dimension's, Heritage, Crystal and Penthouse Collections with the rockers being available in both metal and plastic.

## Screening

The main factors decreasing coverage include:

- A transmitter mounted on metal surfaces (typically 30% loss of range).
- Hollow lightweight walls filled with insulating wool on metal foil.
- Inserted ceilings with panels made of metal or carbon fibre.
- Lead glass or glass with metalized coating, steel furniture.

## Ordering

When ordering, please state the catalogue number and the finish required. Please see Wandsworth Catalogue for further information.

Catalogue number:  
Pulse10/\*

\*Interior Finishes available:  
/B – Black, /W – White

Tel: +44(0)1483 713 400  
Email: sales@wandsworthgroup.com

# Pulse10 ON/OFF Wireless Switch

Technical Specifications	
Frequency:	868.3MHz (PTM33x)
Transmission Power:	Typ. 2dBm at antenna base
Data Rate/Modulation Type:	125Kbps / ASK
Transmission Range:	Up to 200m free field. Up to 30m indoor.
Operating Temperature:	-5°C up to +40°C
Switching Cycles (Up or Down):	Typ. >300.000 at 25° (in optimised applications >1 Mio cycles possible)
Recommended Box Depth:	Pulse10/* = 25mm Metal box to BS4662

## Radio Signals

A field strength test measurement should be carried out prior to each installation to ensure complete reliability and functionality. RF signals decrease in strength when passing through certain materials. (see table below) A direct-line of sight path should be used where possible to guarantee signal strength.

Material	Attenuation (%)
Wood, Plaster, Uncoated Glass with no metal content	0 – 10%
Brick, Pressed Board	5 – 35%
Ferro-Concrete	10 – 90%
Metal, Aluminium Lining	90 - 100%

## Installation

The angle which the transmitted signal hits a wall is important. Signals should be transmitted as directly as possible through a wall, avoiding any wall niches. A receiver should not be placed behind a transmitter as the signal strength is reduced significantly. Ensure the distance between the switch receiver and any other transmitting devices or high-frequency sources are at a minimum of 500mm.

