

# SW206 Wireless Door/Window Sensor Installation Guide

# SPECIFICATIONS

Power supply Magnet operation Radio frequency Radio range Radio modulation Temperature limit Humidity Dimensions

2 x AAA alkaline battery / 1.5 V Nominal (1200MAH) Maximum 3/4" inch (2 cm) from sensor for closed switch 902-928 MHz 100 feet (30.5 m) line of sight at open field Frequency Hopping Spread Spectrum (FHSS) -10°C~50°C (-14°F ~ 122°F) 95% RH maximum 4.8" x 1.1" x .78" (123.5 x 29 x 20 mm)

# INTRODUCTION

Thank you for choosing the PECO® SW206 Wireless Door/Window Sensor, an accessory intended for use with the RW205 Receiver as part of the PECO Wave Wireless® System. The SW206 Sensor (in association with magnet assembly) is designed to report the open/ closed status change of the monitored door/window to the paired PECO RW205 Receiver (HVAC operation controller) via a built-in radio communication module. The SW206 Sensor is powered by two AAA alkaline batteries.

# DESCRIPTION

The SW206 Wireless Door/Window Sensor operates in association with a required magnet. When the sensor moves away (min. 10") from the magnet, the switch opens; when the sensor moves close to the magnet, the switch closes. A radio signal is transmitted from the sensor to the associated RW205 Receiver when it detects any door/window open/closed status change. The sensor is comprised of:

- Front cover: Plastic part must be assembled with unit base for proper sensor operation.
- Printed Circuit Board Assembly (PCBA): Main board for sensor operation and settings.
- Unit base: Plastic base part where the PCBA is located.
- Magnet assembly: Associated magnet must be located within 3/4" (2 cm) of sensor for proper "closed" signal.

Figure 1. SW206 Door/Window Sensor.



# INSTALLATION

### Required Components (included unless noted):

- Two AAA alkaline batteries SW206 Wireless Door/Window Sensor
- · Magnet assembly (required) · Small Phillips screwdriver (not included)
- · Package of screws (4)

# LOW BATTERY

The SW206 Sensor LED will blink once every four (4) seconds to alert the occupant when battery power is getting low. If this occurs, replace old batteries with new batteries immediately. The LED will stop blinking after new batteries are inserted.

# FCC COMPLIANCE

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

#### Warning: Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help.

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- READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, **OPERATE OR SERVICE THIS DEVICE.**
- Failure to observe safety information and comply with instructions could result in PERSONAL INJURY, DEATH AND/OR PROPERTY DAMAGE.
- To avoid electrical shock or damage to equipment, disconnect power to all devices before installing or servicing.
- To avoid potential fire and/ or explosion do not use in potentially flammable or explosive atmospheres.
- Retain these instructions for future reference. This product, when installed, will be part of an engineered system whose specifications and performance characteristics are not designed or controlled by PECO, Inc. You must review your application and national and local codes to assure that your installation will be functional and safe.

#### Wireless Pairing

• PECO recommends completing the pairing process before mounting the sensor.

- To ensure successful pairing, refer to pairing instructions for the RW205 Receiver. The SW206 Sensor must be paired with the RW205 Receiver. Wireless pairing enables the associated RW205 Receiver to receive a radio signal from the SW206 Sensor.
- 1. To begin pairing, remove the front cover of the SW206 Sensor (see Fig. 1).
- 2. Place two AAA batteries in the SW206 Sensor battery compartment.
- 3. On the SW206 Sensor, press and hold the pairing switch (see Fig. 1) for about five seconds. The corresponding LED indicator on the RW205 Receiver will begin flashing. After the sensor has been successfully paired with the RW205 Receiver, the corresponding LED on the RW205 Receiver will remain lit.

NOTE: In the event of battery depletion, the sensor's corresponding LED on RW205 will shut off; the RW205 will assume that the room is occupied.

Mounting

- 1. Open the front cover of the SW206 Sensor.
- 2. Insert two AAA batteries (if not already inserted) in the SW206 battery compartment.
- 3. Insert screws through the mounting holes of the unit base on the frame of the door/window (see Fig. 2/3) that will be monitored, and mount the SW206 Sensor.
- 4. Mount the magnet assembly on the door/window, directly adjacent to the SW206 Sensor. Note: Magnet assembly must be located within 3/4" (2 cm) of the sensor when the door/ window is in the closed position (see Fig.2/3) for sensor to function properly.
- Figure 3. SW206 Sensor Window Mount. Figure 2. SW206 Sensor Door Mount. SW206 Sensor





Sensor installation is complete after both wireless pairing and mounting.

#### STATUS HEARTBEAT

A heartbeat signal will be transmitted from the SW206 Sensor once every 10 minutes to report the current open/closed status to the associated RW205 Receiver. The sensor will also transmit an update when the status changes.

#### Industry Canada statement:

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

French translation:

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

### IMPORTANT NOTE: (For mobile device use) **Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

# French translation:

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NOTE IMPORTANTE: (Pour l'utilisation de dispositifs mobiles) Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

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SW206 Sensor