



Installation and Operation Manual for Perenio® PECWS01 Door & Window Sensor



Introduction

The Door & Window Sensor is activated when the door or the window where it is installed opens or closes. It can be used as a part of the **Perenio Smart Building Management System** after being connected via the Control Gateway.

The present Manual contains a detailed description of the Door & Window Sensor, as well as instructions for its installation and operation.

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Responsibility and Technical Support

The present document is prepared in accordance with all necessary requirements and contains detailed information on the device installation, configuration and control valid as of the date of its issue.

Perenio IoT reserves the right to modify the device and make corrections or changes to this document without prior notice of the User, and shall not be responsible for any potential negative consequences which may arise from the use of an outdated version of the document, as well as for any possible technical and/or typographical errors, either omitted or accidental, or any related damage that may result from the document transfer or the use of devices.

Perenio IoT shall make no guarantee with respect to any data contained herein including but not limited to the device merchantability and fitness for a particular purpose.

For any technical issues, please contact your local *Perenio IoT* representative or the Tech Support Department at **perenio.com**.

The most common problems may be found in Section 7 of the present document and at **perenio.com** where you can also download the latest version of this Installation and Operation Manual.

Manufacturer: Perenio IoT spol s r.o. Na Dlouhem 79, Ricany – Jazlovice 251 01, Czech Republic **perenio.com**



FAI

RoHS

Conformance to Standards

The device is CE certified and complies with requirements of the following Directives of the European Union:

- 2014/53/EU Radio Equipment Directive (RED);
- 2004/30/EC Electromagnetic Compatibility Directive.

The device has passed all procedures of assessments established in Technical Regulations of the Customs Union and conforms with standards of the Customs Union

The device complies with the requirements of Restriction of the Use of Certain Hazardous Substances in Electronic and Electrical Equipment (2011/65/EU Directive)

The device complies with the requirements to the level of electromagnetic interference by the Federal Communications Commission

The national conformity mark of the Ukraine indicating that the device meets requirements of all applicable technical regulations



The device and supplied batteries must not be disposed of as a household waste in accordance with the Waste Electrical and Electronic Equipment Directive (2002/96/EC)

For the purpose of protection of the environment and human health, both the device and batteries must be disposed of in accordance with approved instructions on safe disposal. For more information on proper disposal, please contact your device supplier or local authorities responsible for waste management

Details on available Certificates are specified in Section 6 of the present document. For copies of Certificates and Reports, please visit a corresponding Section at **perenio.com**.



Table of Contents

Introduction
Copyrights
Responsibility and Technical Support
Conformance to Standards
Table of Contents6
1 General Description and Specifications
1.1 General Purpose
1.2 Technical Specification
1.3 Scope of Delivery11
1.4 Packaging and Labelling12
1.5 Safe Operation Rules12
1.6 Standalone Operation of Perenio® Sensors13
2 Installation and Setup 14
2.1 First Installation and Configuration15
2.2 Changing the Room or Location for the Sensor
2.3 History and Push-Notifications21
2.4 Battery Replacement21
3 Maintenance and Repair 23
4 Warranty Obligations
5 Storage, Transportation and Disposal of Devices
6 Other Information
7 Troubleshooting
8 Glossary

Figures and Tables

Figure 1 – Door & Window Sensor Exterior	8
Figure 2 – Door & Window Sensor Components	9
Figure 3 – Scope of Supply	11
Figure 4 – Examples of Installation of the Door & Window Sensor	14



Figure 5 – Installation rules for the Sensor and the Magnet	.16
Figure 6 – Add new device (Sensor) procedure	.19
Figure 8 – Positioning of the battery in the Door & Window Sensor	.22
Table 1 – Basic Technical Specifications of the Door & Window Sensor	.10
Table 2 – Typical Errors and Troubleshooting Methods	.30

Connection to the Perenio Smart Mobile App

A.	SWITCHING ON AND INSTALLATION OF THE DOOR & WINDOW SENSOR	15
Β.	LOGIN TO THE EXISTING USER ACCOUNT	17
C.	CONNECTION TO THE CONTROL GATEWAY	18



1 General Description and Specifications

1.1 General Purpose

The **PECWS01** Magnetic Sensor is a device that sends corresponding signals to the **Perenio**® Control Gateway when the magnet is moved away from the main part of the device to a distance of more than 20-30 mm or is returned back to initial state.

The **PECWS01** Door & Window Sensor has a number of distinctive features, namely:

- Timely notification of a window or door opening;
- Connection distance up to 40 meters;
- iOS and Android smartphone compatibility;
- Support of ZigBee Protocol;
- Impact-resistant casing material;
- Installation using 3M Tape or screws;
- Ability to adjust the Sensor installation level;
- Operation with one battery for up to 2 years;
- Small size and stylish design.



Figure 1 – Door & Window Sensor Exterior





Figure 2 – Door & Window Sensor Components

ATTENTION! All Products and the Mobile Application of the Company (including any future software and hardware whether in-house or third-party developed) are not intended for emergency responses and cannot be used as fire-extinguishing equipment and/or for emergency intervention, including but not limited to fires, flooding, gas leaks or explosions, burglary and theft, as well as natural disasters and other force majeure circumstances leading to damage and/or losses incurred by the Client or caused to their estates, personal property and/or other products, devices, personal data and privacy.



1.2 Technical Specification

Table 1 – Basic Technical Specifications of the Door & Window Sensor

Parameter	Value
Item Number	PECWS01
Microprocessor	NXP5169 (ZigBee IC)
Communication Technology	ZigBee 3.0 (IEEE 802.15.4)
Operating Frequency	2.4 GHz
Connection Radius	up to 40 meters (open area)
ZigBee Antenna	Type: Built-in Transmitting Power: 5.5 dBm Receiver Sensitivity: -90 dBm Antenna Gain: 1.5-1.8 dBi Repeater: N/A
Distance between the sensor and the magnet (Actuation distance)	≥ 25±5 mm
Reset Button	Side panel of the Sensor
Standalone Operation	N/A
Power Type	CR2032 Battery (125 mAh, 3V), 1 pc.
Power Consumption	Standby Mode: not more than 0.0016 mA Alarm Mode: not more than 19 mA
Battery Level	Yes (Available in the Mobile App)
Operating Temperature	0°C to +45°C
Operating Humidity	10% to 85% (non-condensing)
Storage Temperature	-10°C to +50°C
Storage Humidity	10% to 95% (non-condensing)
Installation	Edge of the door/window frame (for indoor installation only)
Casing Material	ABS/PC



Parameter	Value
Color	White
Dimensions (L $x W x H$)	Sensor size: 45 mm x 30 mm x 19 mm Magnet size: 45 mm x 15 mm x 19 mm
Weight	24.2g (32.4 g with accessories)
Warranty Period	24 months
Service Life	24 months
Certification	CE, EAC, RoHS, UA.TR

1.3 Scope of Delivery

The following items and accessories are supplied within the **Perenio® PECWS01** Door & Window Sensor package:

- 1. PECWS01 Door & Window Sensor with a magnet (1 set)
- 2. Battery (CR2032) (1 pc.)
- 3. Screws and dowels (1 set)
- 4. Reset pin (1 pc.)
- 5. 3M Tape (2 pcs.)
- 6. 3M Sponge (1 pc.)
- 7. Quick Start Guide (1 pc.)
- 8. Warranty Card (1 pc.)
- 9. Sticker (1 pc.)



* Images of accessories are provided for informational purposes only



1.4 Packaging and Labelling

The **Perenio® PECWS01 Door & Window Sensor** is supplied in an individual blister package of $171 \times 126 \times 27$ mm (L x W x H) containing the full name and marking of the device, the list of accessories provided and basic technical specifications thereof, as well as the date of manufacture and information about the Manufacturer of devices.

Weights of the blister package are as follows:

- Net weight: 33 g;
- Gross weight: 60 g.

1.5 Safe Operation Rules

For the proper and safe operation of **Perenio® PECWS01 Door & Window Sensor**, follow the instructions and safety procedures described in the present Manual. The Manufacturer shall not be liable for any damage caused as a result of improper operation of devices.

Safe Operation Conditions

- 1. The device shall be installed indoors only.
- 2. The User must follow rules for installation and positioning of the Sensor and the Magnet relative to each other as specified in Section 2 of this Manual.
- 3. The Users shall observe storage/transportation conditions, as well as the operating temperature mode of the device as declared by the Manufacturer.
- 4. The User shall not install the device in the area with high humidity and high content of dust.
- 5. The User must not disassemble or attempt to repair the device on their own.
- 6. The User must not drop, throw or bend the device.
- 7. In order to avoid personal injury, it shall not be allowed to use the cracked or in any other way damaged device.
- 8. Use dry cloth or cloth soaked in a small amount of water for cleaning (don't use harsh chemicals/cleaning agents). The device must be powered off before cleaning.
- 9. Children shall not be allowed to use the device unsupervised and/or play with it.



1.6 Standalone Operation of Perenio® Sensors

The Control Gateway in not necessarily required for all **Perenio**® Sensors in order to alert Users on potentially dangerous situations.

So, the Door & Window Sensor cannot be used as a standalone device, i.e. when the door or window opening is detected, it will not give any sound signal. Therefore, its operation is arranged by sending notifications to the smartphone. However, to run active scenarios, the User must have an installed **Perenio Smart Building Management System** Mobile App and an activated Control Gateway, as well as unite the above devices in a system.



2 Installation and Setup

Before installation, the User shall select one of the following possible locations and mounting modes for the device:

- On a horizontal surface (box, trunk, cellar door, etc.);
- On a vertical surface (door or window frame, etc.);
- Using 3M mounting tape or screws.

Also, make sure that the selected location meets the following requirements:

- Absence of metal surface in the installation site of the Sensor;
- Ability to install the Sensor and the Magnet coaxially (with/without the 3M Sponge);
- Flat and stable surface in the installation site of the Sensor.

NOTE. It is not recommended to install the device in areas with a high level of noise and a high-frequency interference. Reinforced concrete floors may reduce the distance of wireless signal transmission. It is recommended to install the Door & Window Sensor at a minimum distance from the Control Gateway.

Figures below show possible installation locations for the Sensor:



Figure 4 – Examples of Installation of the Door & Window Sensor

* Images of accessories are provided for informational purposes only

For installation of the Door & Window Sensor <u>using 3M tape</u>, it is necessary to prepare the surface as follows:

- 1. Wipe the surface of the Sensor to which the 3M tape will be attached with alcohol and wait until it is dry.
- 2. Attach the 3M tape to the Sensor surface.
- 3. Make sure that the place of installation is smooth and free from dust, dirt, etc.



- 4. Wipe the surface to which the 3M tape will be attached with alcohol and wait until it is dry.
- 5. Attach the device in the place of installation using the 3M tape.

The entire process of setting-up the Sensor can be divided into several key stages:

- Logging in to the User Account of the **Perenio Smart** Mobile App;
- Checking for the availability of the CG connected to the mains and the Internet;
- Connection of the Sensor to the Control Gateway.

2.1 First Installation and Configuration

In order to connect the Door & Window Sensor to the Control Gateway through the **Perenio Smart** Mobile App, it is necessary to perform the following steps:

1. Unpack the Sensor and switch it on (See par. **A** below).

2. Login in to the **Perenio Smart Building Management System** User Account (See par. **B** below).

- 3. Connect the Sensor to the Control Gateway (See par. **C** below).
- 4. Enter the desired Sensor name and select the Room of installation.
- 5. Install the Sensor in the selected room.

A. SWITCHING ON AND INSTALLATION OF THE DOOR & WINDOW SENSOR

To install the **Perenio® PECWS01 Door & Window Sensor,** follow steps below:

- 1. Unpack the device.
- 2. Choose a suitable installation area for the Sensor and the Magnet (window frame, door leaf, etc.) as follows:
 - a. Attach the Sensor on the door or window frame using 3M tape (See Figure 5-a). You can also mount the Sensor using the screw.
 - b. Attach the Magnet to the door or window frame at the same level as the Sensor.

ATTENTION! It is required to install the Sensor and the Magnet in such a way that concave parts of their bodies are next to each other (See Figure 5-a below).







NOTE. The Sensor and the Magnet shall be mounted coaxially so that in the closed position of the door or the window the Magnet is at a distance of no more than 2 cm from the Sensor.



NOTE. The Sensor may be installed using the screw (supplied).

To align the position of the Sensor and the Magnet (when the door frame is thicker than the door leaf), the User may use the 3M Sponge supplied with the device.

To clean the Sensor, use a soft cloth with a small amount of water or alcohol. Cleaning can only be performed after switching off the Sensor.

- 3. Switch on the Door & Window Sensor by removing the battery isolation film.
- 4. Install the Sensor onto the removable cover in the selected location.

NOTE. If the LED starts flashing slowly after removal of the battery isolation film, you can immediately begin connecting it to the Control Gateway skipping **Step d** of par. C. CONNECTION TO THE CONTROL GATEWAY, i.e. performing the reset.

After the above Steps 1-4 are successfully completed, the Door & Window Sensor is considered to be installed and ready for operation.

B. LOGIN TO THE EXISTING USER ACCOUNT

- **a.** Enter your e-mail address and password in the login screen.
- **b.** Click on the **LOG IN** button.

NOTE. If the password was lost, the User can restore it by clicking on a corresponding link on the screen.

To restore a forgotten password, use the e-mail address linked to your User Account, to which instructions on changing the password will be sent.





C. CONNECTION TO THE CONTROL GATEWAY



- a. Click on the "+" icon in the upper right corner of the Devices tab, select "Add new device" and then the "Door & Window Sensor" device in the list;
- **b.** Select the Control Gateway to which the Sensor shall be connected (This screen will be displayed, only if there are several Control Gateways activated in the User Account).

NOTE. The Control Gateway must be connected to the mains and the Internet, as well as activated in the Perenio Smart App.

- c. Start searching for Sensors;
- **d.** If the LED flashes slowly after the first power on of the device, proceed to the **Step e**, otherwise press and hold the reset button as shown in the picture above until the LED Indicator starts blinking.

NOTE. Several sensors may be connected to the Control Gateway at once.

e. After successful connection, enter the Sensor's name and select the Room.

C.1. CONNECTION ERRORS

The connection failure of the device may occur due to one of the following reasons:

- **a.** The device is switched off or at a too long distance from the Control Gateway (4.5 meters);
- **b.** The Control Gateway is offline;
- **c.** The LED Indicator was blinking before start of the sensor connection (You should remove the sensor battery and insert it back into the casing).

NOTE. To eliminate connection failures, follow instructions specified on corresponding screens of the smartphone.





The entire process of the Sensor connection in the Mobile App is shown below.



Figure 6 - Add new device (Sensor) procedure



2.2 Changing the Room or Location for the Sensor

When using the Sensor, it may be necessary to change its installation area. The following options are possible:

- 1. Change the room/location (The CG remains the same) as follows:
 - a. Demount the Sensor and move it to another room;
 - Make sure that the Sensor is at an allowable distance from the Control Gateway;
 - c. Install the Sensor in a new room (Use a new 3M tape, if required);
 - d. Change the Room in Sensor settings in the User Account.
- **2. Change the room/location** (Connection to another CG is required) as follows:
 - a. Sign in to the Perenio Smart app and select the Location where the Sensor is activated;
 - b. In the 'Devices' tab, select the required Sensor from the list and click on the icon (Settings);
 - c. In the pop-up window, choose 'Disconnect device';
 - d. Demount the Sensor and move it to another room/building;
 - e. Make sure that the Sensor is at an allowable distance from the Control Gateway;
 - f. In the User Account, select the Location where you want to move the Sensor;
 - g. Initiate the Sensor search by the Control Gateway through the Perenio Smart application according to par. C. 'CONNECTION TO THE CONTROL GATEWAY';
 - h. Install the Sensor in a new room (Use a new 3M tape, if required).

NOTE. The User can manually disconnect the Sensor from the Control Gateway. To do this, press and hold the Reset button on the Sensor until the LED flashes (It usually takes no more than 5 seconds).

To check that the Sensor was successfully disconnected, you should update the list in the 'Devices' tab (Pull the screen down until the progress icon appears and the data is updated). If the sensor is disconnected, it will disappear from the list of connected devices.



2.3 History and Push-Notifications

All notifications and other messages including changes in **Perenio**® device statuses are displayed in the History tab. At the same time, the most important events are shown online in the notification window ($\hat{\Box}$) in the User Account. Available types of notifications are as follows:

- Alarms (These are always received like push-notifications on a smartphone, as well as recorded in the notification window and in the History tab in the Mobile Application);
- Important messages (These are recorded in the notification window in the Armed Mode, as well as always recorded in the History tab);
- Standard events (These are recorded in the History tab only).

Alarms. The most important messages such as device actuation notifications when in the Armed mode, including all alarms from both the Smoke Sensor and the Leak Sensor (even if in the Disarmed mode), as well as changes in the Control Gateway Online/Offline status.

Important messages. Notifications of the start and completion of the Control Gateway firmware update process, as well as low battery notifications and changes of the Armed/Disarmed mode for the Location.

Standard events. Various news and other information from *Perenio IoT*, as well as alerts from both the Door&Window Sensor and the Motion Sensor when in the Disarmed mode.

2.4 Battery Replacement

The Door & Window Sensor can operate with one battery for a period of up to two (2) years. The battery level can be controlled via the Mobile App (Door & Window Sensor panel). Also, the Door & Window Sensor will send light and sound signals if the battery level becomes too low.

In order to properly replace a discharged battery, the User observe the following rules:

- Make sure that the new battery is the same as the original (supplied with the Sensor);
- When replacing the battery, the User shall observe the polarity (See below).





Figure 7 – Positioning of the battery in the Door & Window Sensor

After battery replacement, the LED of the Sensor will blink.



3 Maintenance and Repair

The **Perenio® PECWS01 Door & Window Sensor** does not require special maintenance in the normal course of operation. However, in order to maintain the proper state and stable operation of the device it is recommended to perform the following actions from time to time:

- Clean the device casing from dirt and dust at least once every six months;
- Check and adjust the Sensor position periodically;
- Check for updates of the Perenio Smart app;
- Check for battery condition and replace it in a timely manner;
- Repair mechanical damages to devices (in Service Centers).

The **Perenio® PECWS01 Door & Window Sensor** repairs shall be carried out in Service Centers, because casings will have to be opened in the case of any element failure.

In the case of warranty repairs or replacement, the User shall provide the Seller with the sales receipt and the purchased device.

For details on the replacement and repairs of the **PECWS01 Door & Window Sensor**, please contact your local Company representative or the Tech Support Department at **perenio.com**.



4 Warranty Obligations

The warranty period for the Door & Window Sensor shall be **Twenty-Four (24) months** from the date of sale to the End User. General-purpose batteries (such as AAA, CR123A, CR2450, etc.) shall not be covered by the warranty of the Manufacturer of IP Cameras, the Smart Hub and sensors.

The Warranty Card shall be deemed valid provided that it is correctly and completely filled in by the Seller. Upon the purchase, the Customer shall check that both the Serial Number and the Model name of the device correspond to those indicated in the Warranty Card.

Incomplete or illegible Warranty Card shall be deemed not valid. In this case, it is recommended to contact the Seller and ask for a duly filled in Warranty Card. It shall be also allowed to provide the original of the sales/cashier's receipt or such other documentary evidence of the fact and the date of sale of the device. The date of sale shall be the date indicated on the sales/cashier's receipt or other relevant document. If the date of sale is not possible to be determined, the start of the warranty period shall be the date of manufacture of the device.

The Manufacturer shall guarantee that all materials, components and assemblies of **Perenio**® devices are free from defects under normal operation within the warranty period. The limited warranty shall be applied to the first End Customer of **Perenio**® devices only and cannot be transferred to a subsequent customer.

For warranty replacement, the device must be returned to the Seller along with its receipt. Warranty obligations for **Perenio**® devices shall be provided in the country of their purchase only.

WARRANTY SERVICE PROCEDURE

In the case of any alleged defect or deficiency of the device detected, the Customer shall contact the Authorized Service Center before the warranty period expiration and provide the following:

- 1. The device with an alleged defect or deficiency.
- 2. The Warranty Card filled out in accordance with the applicable legal requirements, or the original of the document confirming the purchase of the device, including clear indication of the name and the address of the Seller, as well as the date when this device was sold.



LIMITATION OF LIABILITY

Perenio® devices SHALL NOT BE SUBJECT TO a free warranty service in the case of identification of at least one of the following damages or defects:

- Any damage caused by force majeure, accidents, and willful or careless acts (omissions) of the Customer or third parties;
- Any damage caused by the impact of other objects including but not limited to exposure to moisture, dampness, extreme temperatures or environmental conditions (or jumps in such conditions), corrosion and oxidation, as well as penetration of food or liquid, and the effects of chemicals, animals, insects and byproducts thereof;
- In the event when the device (accessories and/or components) was unsealed (the seal integrity was violated), modified or repaired by any party other than the Authorized Service Center, including repair works using unauthorized spare parts;
- Any defects or damage caused by improper or unintended use of the device, including operation contrary to available manuals;
- Any defects caused by attempts to connect to incompatible software;
- Any defects caused by natural wear and tear of Products, including bags, casings, batteries or Installation and Operation Manuals;
- In the event when the Serial Number (Name Plates), the date of manufacture or the Model name on the device casing was in any way removed, erased, affected, altered or made illegible;
- In the case of violation of operating procedures and conditions, as well as the device installation instructions described in relevant Manuals;
- Cracks, scratches and other defects caused as a result of transportation and/or operation of the device by the Customer or acts of negligence on their part;
- Mechanical damages that occurred after transferal of the device to the Customer including damage caused by sharp objects, bending, squeezing, falling, etc.;
- Any damage caused by non-conformity with the standards of power supply, telecommunication and cable networks or similar external factors.

THE PRESENT LIMITED WARRANTY IS AN EXCLUSIVE AND THE ONLY PROVIDED GUARANTEE THAT SHALL REPLACE ANY OTHER EXPRESS AND IMPLIED GUARANTEES. THE MANUFACTURER SHALL PROVIDE NO GUARANTEES, WHETHER EXPRESS OR IMPLIED, BEYOND THE DESCRIPTION CONTAINED IN THE PRESENT DOCUMENT, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE CUSTOMER MAY USE DEFECTIVE OR INAPPLICABLE DEVICE AT HIS/HER OWN DISCRETION. THE MANUFACTURER SHALL NOT BE RESPONSIBLE FOR DAMAGE TO OTHER PROPERTY CAUSED BY DEVICE DEFECTS, THE LOSS OF USABILITY OR TIME OR FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGE OR LOSS INCLUDING BUT NOT LIMITED TO COMMERCIAL



LOSS, LOSS OF PROFITS, LOSS OF CONFIDENTIAL OR OTHER INFORMATION, AS WELL AS DAMAGES CAUSED BY BREAKS IN COMMERCIAL OR PRODUCTION ACTIVITIES DUE TO THE FACT THAT THE DEVICE WAS RECOGNIZED AS FAULTY, DEFECTIVE OR NOT ALLOWED FOR USAGE.

The present limited warranty shall provide the Customer with certain legal rights. The Customer may also have other rights in accordance with the local consumer protection laws that vary from country to country and may not coincide with this limited warranty. For full understanding of the Customer's rights, you shall read local acts.

NOTE. The Manufacturer does not produce equipment for *Vital Tasks*. Vital Task Products shall include life support systems, medical equipment, implantationrelated medical devices, commercial transportation, nuclear equipment or systems, and any other fields of application where equipment failures may do harm to a humans' health or cause their deaths, as well as result in a property damage.



5 Storage, Transportation and Disposal of Devices

The **Perenio® PECWS01 Door & Window Sensor** may be shipped by any kind of covered vehicles (by rail, or road or in sealed heated airplane compartments, etc.) in accordance with the requirements of current regulatory documents applicable to fragile goods sensitive to moisture.

Similar conditions shall apply to the device storage at the Seller's warehouse.

It is also required to comply with the temperature and humidity conditions of storage and operation specified in the Table of technical specifications of the present Manual.

For disposal of devices and/or batteries, the User shall observe rules of the Directive on Waste Electrical and Electronic Equipment (WEEE) according to which all electric and electronic products, as well as batteries must be disposed of separately at the end of their service life. Such devices and accessories must not be disposed of together with unsorted municipal waste due to their potential to cause harm to the environment.

For the device disposal purposes, it shall be returned to the point of sale or to the local processing center.

For detailed information on recycling of the present device, please contact your waste management company.

NOTE. The User must comply with the temperature and humidity conditions of storage and transportation specified in the Table of technical specifications of the present Installation and Operation Manual.



6 Other Information

Manufacturer

Name	Perenio IoT spol s r.o.
Address	Na Dlouhem 79, Ricany – Jazlovice 251 01, Czech Republic
Contact Info	perenio.com, info@perenio.com

Manufacturing Plant

Name	LEEDARSON LIGHTING CO., LTD.
Address	Xingtai Industrial Zone, Economic Development Zone, Changtai County, Zhangzhou City, Fujian Province, China

Importing Company

Croatia	
Name	ASBISc-CR d.o.o.
Address	Slavonska avenija 24/6, 10000 Zagreb, RH

Czech Republic	
Name	ASBIS CZ, s.r.o.
Address	Obchodní 103, Čestlice, 25101

Poland	
Name	ASBIS POLAND Sp. z o.o.
Address	Ul. Szyszkowa 43, 02-285 Warszawa

Quality Claims Acceptance and Warranty Service Company

Croatia	
Name	ASBISc-CR d.o.o.
Address	Slavonska avenija 24/6, 10000 Zagreb, RH



Czech Republic	h Republic
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Name	ASBIS CZ, s.r.o.
Address	Obchodní 103, Čestlice, 25101

Poland

Name	ASBIS POLAND Sp. z o.o.
Address	UI. Szyszkowa 43, 02-285 Warszawa

Info on Certificates and Declarations

Certificates	
Declarations, Reports	Declaration of Conformity to RoHS and REACH as of April 19, 2018; Test Verification of Conformity #GFT-OP-11b as of March 7, 2017

Addresses of Service Centers are available at **perenio.com** in the 'Support' Section.



7 Troubleshooting

Table 2 below shows typical errors and problems that may occur in the process of connection and configuration of the **Perenio® PECWS01 Door & Window Sensor**.

Table 2 – Typical Errors and Troubleshooting Methods

Item No	Problem	Possible Reasons	Solution		
Perenio® PECWS01 Door & Window Sensor					
1	The faulted status of the sensor or false alarms	The gap between the Sensor and the Magnet exceeds 2 cm	Check that the gap between the Sensor and the Magnet in the closed position of the door/window and fastening of the device		
		Damage of the Sensor or the Magnet	Call the service center		
2	The sensor does not activate	Low battery level	Change the battery		



8 Glossary

ЗМ Таре	Double-sided mounting tape which is a rubber or acrylic adhesive applied on both sides of the foam. It is used in order to avoid drilling holes and using fasteners	
ABS	Modern synthetic polymer with a high level of impact resistance and elasticity	
CG	The Perenio® PEACG01 Control Gateway	
DSP	The Digital Signal Processor is a special microprocessor designed to ensure digitized signal handling (usually, in real time mode)	
ΙοΤ	The Internet of Things is a system of Internet-connected devices able to collect and exchange data coming from built- in services	
Location	General term which means a building or a structure in which Perenio ® Cameras, Control Gateways and/or Sensors are installed	
Perenio Smart	Software developed by <i>Perenio IoT</i> for remote control of wireless Cameras from smartphones	
Viewing Angle	The area that falls into the field of viewing of the Sensor	
ZigBee	A network protocol designed for secure transmission of data at low speeds, which is recognized for an extremely low power consumption	