



**Installation and Operation Manual  
for Perenio® Power Link  
Devices**



## Introduction

The Power Link device is designed to monitor voltage, current and power of plugged in electrical equipment and provides for timely notification of overloads and other events. This device is used as part of the **Perenio Smart Building Management System** upon detection by the **Perenio<sup>®</sup>** Control Gateway or IoT Router and can also be controlled via intelligent voice assistants.

The present Manual contains a detailed description of the power plug, as well as instructions for its installation and operation.

## Copyrights

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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of the User, and shall not be responsible for any potential negative consequences which may arise from the use of an outdated version of the document, as well as for any possible technical and/or typographical errors, either omitted or accidental, or any related damage that may result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.

In case of any discrepancies between language versions of this document, the Russian version of this User Manual shall prevail.

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**

## 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);
- 2014/35/EU Low Voltage Directive;
- 2004/30/EC Electromagnetic Compatibility Directive.



The device complies with the UKCA marking requirements for selling the device in the UK



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 requirements of the Technical Regulations of the Republic of Belarus TR 2018/024/BY (Telecommunications. Security)



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



The crossed-out trash can symbol is used to label electrical and electronic equipment, and indicates its separate collection.

The symbol is given in accordance with the Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE)\* and indicates that this equipment requires separate collection at the end of its life and must be disposed of separately from unsorted household waste.

To protect the environment and human health, please dispose of used electrical and electronic equipment according to approved safe disposal guidelines



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**.

BG	CZ	DE	ES	FR
GR	IT	KZ	LT	LV
NL	NO	PL	RO	RU
SE	SK	TR	UA	UK

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## 1 General Description and Specifications

### 1.1 General Purpose

The **Perenio® Power Link** device is designed to monitor, control and automatically cutoff power consumption by electrical equipment, as well as notify users of overloads.

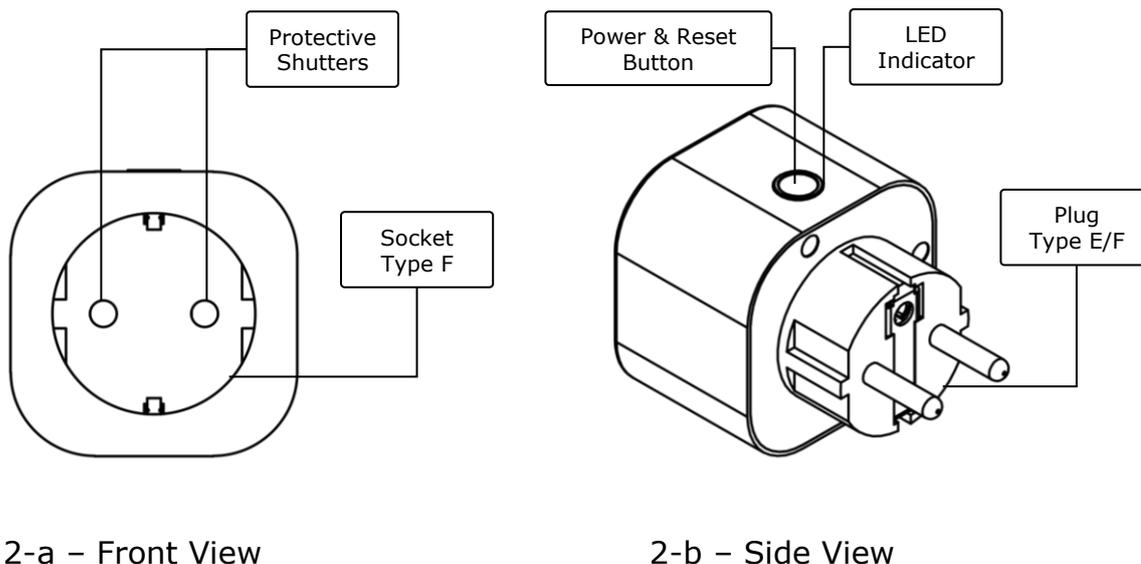
This power plug is equipped with an autonomous timer that saves User settings even in case of power failures, as well as with protective shutters that prevent foreign objects from entering the device openings and in such a way protect children from the electric shock.

The **Power Link** device has a number of distinctive features, namely:

- Support for Zigbee 3.0 and Bluetooth (MFi);
- Integration with Apple HomeKit (Siri), Google Home (Google Assistant), and Amazon Alexa;
- iOS (12.1 and higher) and Android (5.0 and higher) smartphone compatibility;
- Low power consumption of not more than 0.5 W;
- Peak power of 4,000 W;
- Overload and thermal protection;
- Autonomous timer, turn on/off timer and countdown timer;
- Voltage, current and power control;
- IP20 Protection Class;
- Plug type E/F, socket type F;
- LED indication of current load;
- Management through a free mobile application;
- Cloud service support.



Figure 1 - Exterior



**Figure 2 – Buttons, Ports and Indicators**

## Buttons, Ports and Indicators

### Protective Shutters

Special plastic covers for the power plug openings that prevent foreign objects from entering therein, which protects children from the electric shock

### Power & Reset Button

It is used to power on and off the device, as well as to switch to different operating modes, and connect to the Perenio Smart Mobile App via the Control Gateway/IoT Router

### LED Indicator

Light ring around the button perimeter where color changes depending on the power consumption level and various states of the device (See Table 1)

### Socket Type F

Compatibility with plug type E/F

### Plug Type E/F

Compatibility with socket type F

Table 1 – LED Indicator statuses

Indicator	Status	Description
Violet	Blinks	The device is switched on* and in the process of activation in the Perenio Smart app
Green	Flashes	The device is switched on* and activated in the Perenio Smart app or Apple HomeKit app

Indicator	Status	Description
	Blinks	The device is switched on*, but not activated in the Perenio Smart app or Apple HomeKit app
Dark-blue	Flashes	The device is switched off**, but activated in the Perenio Smart app
	Blinks	The device is switched off** and not activated in the Perenio Smart app or Apple HomeKit app
Pale-blue	Flashes	The device is switched off**, but activated in the Apple HomeKit app
Red	Blinks	An error occurred, or overload protection was activated
Green-yellow-red	Flashes	The device is activated in the Perenio Smart app and consumes energy. The color changes smoothly depending on the current strength – from 0 A (Green) to 16 A (Red)
	Blinks	The device is activated in the Apple HomeKit app and consumes energy. The color changes smoothly depending on the current strength – from 0 A (Green) to 16 A (Red)

\* "The device is switched on" means that the power plug is connected to the source of power and supplies energy to an appliance plugged into it.

\*\* "The device is switched off" means that the power plug is connected to the source of power, but does not supply energy to an appliance plugged into it.

**NOTE.** If the device is activated in the Perenio Smart app, you will not be able to connect it via Bluetooth in Apple HomeKit until it is switched to the MFi mode.

**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 2 – Basic Technical Specifications

Parameter	Value
Article	PEHPL01/PEHPL03 (white color) PEHPL02/PEHPL04 (black color)
Communication Technology	Zigbee 3.0 (IEEE 802.15.4), Bluetooth (MFi) for iPhone/iPad/HomePod/Apple TV
Compatibility	Android (5.0 and higher) and iOS (12.1 and higher)
Integration	Apple HomeKit, Google Home, Amazon Alexa
MCU	NRF52840
Coverage Area	Zigbee: Up to 100 meters (open area) Bluetooth (MFi): Up to 100 meters (open area)
Zigbee Antenna	Type: Built-in Transmitting Power: 8 dBm Receiver Sensitivity: -95 dBm Antenna Gain: -2 dBi
Repeater Function	Yes
Operating Frequency	2,400 MHz to 2,485 MHz
Server	Remote
Power	Input voltage: AC 180 V to 250 V Max current: 16 A

Parameter	Value
	Frequency: 50 Hz to 60 Hz Operating power: 3,500 W Peak power: 4,000 W Power consumption: 0.5 W max
Operating Temperature	0 °C to +40 °C
Operating Humidity	Up to 75 % RH (non-condensing)
Storage Temperature	0 °C to +50 °C
Storage Humidity	Up to 85 % RH (non-condensing)
Степень защиты	IP20
Timer	Autonomous
RTC Module	Built-in
Installation	Directly into the mains socket. For indoor installation only.
Casing Material	PC945, Class UL94-V0
Color	White or black
Dimensions (L x W x H)	54 x 76 x 54mm
Weight	100 g
Warranty Period	2 years
Service Life	2 years
Certification	CE, EAC, RoHS, UA.TR
Data Protection	GDPR Compliance

**NOTE.** The firmware update will occur within twenty-four (24) hours after connecting the Power Link device to the mobile application, if there is an uninterrupted Internet connection.

### 1.3 Scope of Delivery

The following items and accessories are supplied within the **Perenio® Power Link** package:

1. Power Link device (1 pc.)
2. Quick Start Guide (1 pc.)
3. Warranty Card (1 pc.)
4. Sticker (1 pc.)



**Figure 3 - Scope of Supply\***

\* Images of accessories are provided for informational purposes only

### 1.4 Packaging and Labelling

The **Perenio® Power Link** device is supplied in a carton Gift Box of 104 x 104 x 64mm (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 manufacturing plant of devices.

Weights of the package are as follows:

- Net weight: 100 g;
- Gross weight: 185 g.

### 1.5 Safe Operation Rules

For the proper and safe operation of **Perenio®** power plugs, 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. Do not plug the device into other smart plugs in the mains.
3. Users shall observe storage/transportation conditions, as well as the operating temperature mode of the device as declared by the Manufacturer. Do not use the device in rooms with high humidity or extreme temperature variations.
4. When installing the device, Users shall provide for a gap of at least 10 cm wide on each side of the device to ensure its adequate ventilation at the place of installation (Do not cover the device with newspaper, tablecloth, curtains, etc.)
5. The device may be plugged into the power source, only if the mains voltage matches the value indicated on the device casing and/or specifications.
6. Do not immerse the device in water or other liquids due to the risk of fire and/or electric shock.
7. Keep the device away from open flame sources and hot surfaces.
8. Users must not drop, throw or bend the device or attempt to repair the device on their own.
9. In order to avoid personal injury, it shall not be allowed to use the cracked or in any other way damaged device.
10. 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.
11. Children shall not be allowed to use the device unsupervised and/or play with it.
12. It is not recommended to use the device by persons with physical or mental disabilities, unless they are under proper supervision or were properly instructed on possible hazards and safe usage of the device.

**ATTENTION!** Faulty wiring and excessive mains voltage can cause electric shock.

There is a danger of burns because the device becomes hot during operation! Let the device cool down completely.

## Warnings related to non-compliance with electrical safety rules when connecting devices

**Perenio® Power Link** smart plug is designed for use in domestic areas and connection of general-purpose devices thereto.

When several power consumers are plugged into the smart plug at the same time, the following parameters must be considered:

1. Technical specification.

The smart plug shall be plugged into the household electrical outlet of 100 V to 240 V designed for current of no more than 16A. It means that such an electrical outlet can withstand a maximum power of up to 3,840 W (or 3.8 kW). At the same time, the **Power Link** device is equipped with a relay that can withstand a peak current of 20 A for no more than 30 seconds.

2. Electric wiring of domestic premises.

One of the important requirements for electrical wiring is the load (power) it must be able to withstand. The maximum allowable power depends on the mains voltage and current. For example, the maximum power shall be 3,520 W (or 3.5 kW) in domestic premises with a standard mains voltage (220 V) and current (16 A).

**NOTE.** The mains voltage may vary from country to country. In Europe and most Asian countries, the voltage ranges from 220 V to 240 V (A socket of a higher voltage (380 V) is usually used for connection of powerful household appliances and power tools); in America and Japan, the power ranges from 100 V to 127 V.

The maximum amperage value for an electrical outlet is regulated by relevant documents and industry standards. Modern parameters are suitable for any household equipment installed in an apartment or a house. When such premises are commissioned, the current is increased from 10 A to 16 A for outlets, and it is very unlikely that outlets of 20 A to 32 A (such outlets are designed for electric stoves and cooktops) are used in domestic premises.

3. The rated voltage, maximum power and current of the connected load allowed for an extension cord or a T-connector being used.

If several devices are plugged into the single outlet at the same time using an extension cord or a tee, the power in the outlet will be equal to the sum of powers of those devices. Thus, it shall be noted that the total wattage and amperage of connected electrical appliances **MUST NOT** exceed the rating for the outlet stated by

the manufacturer, as well as the values allowed for the extension cord or the T-connector, and the values specified for the particular electrical system. Failure to follow the above rules may cause short circuits or overcurrent, and result in the risk of fire.

**ATTENTION!** Current overload results in a fire-hazardous emergency situation and occurs when high current flows through a power grid element. Inappropriate conductors, conductive parts and connection points are subjected to heat and thermal damage, which in turn leads to a decrease in insulation properties and destruction of components in the power grid, which causes fires.

## 1.6 Standalone Operation of Perenio<sup>®</sup> Devices

The Control Gateway/IoT Router is not necessarily required for all **Perenio<sup>®</sup>** devices in order to alert Users on potentially dangerous situations

Thus, due to integration with Apple HomeKit the power plug can be used autonomously.

**NOTE** that if it is required to manage the device via Google Home, or Amazon Alexa, its preliminary activation in the Perenio Smart application is required.

Guides to connect the smart plug in third-party applications can also be uploaded to the company's website at **[perenio.com/faq](https://perenio.com/faq)**.

## 2 Installation and Setup

Installation of the **Perenio® Power Link** device is not required, since it shall be just plugged into the electrical socket to start operation.

**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.



**Figure 4 - Examples of Installation\***

*\* Images of accessories are provided for informational purposes only*

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

- Insert the Power Link device to the source of power (mains socket);
- Activate the device via the **Perenio Smart** Mobile App or Apple HomeKit;
- Activate the device in Google Home, and/or Amazon Alexa, if required (This option is possible only after activation of the device via the **Perenio Smart** Mobile App).

**NOTE.** The *Perenio Smart Home & Office document* is available for downloading at the web-site.

## 2.1 Initial Installation and Configuration

### 2.1.1 Powering On the Device

To power on the device, it is enough to unpack it, plug into the electrical socket and press the Power Button so that the LED Indicator lights up (or blinks slowly) green.

After that you can connect household appliances to the device.

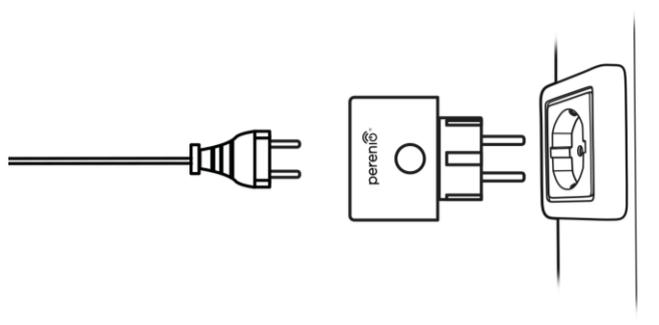


Figure 5 – Connection to the mains socket

### 2.1.2 Selection of the Connection Method

There are two modes when activating the power plug in the Mobile Application:

- **Zigbee Mode** that is used for activation in the **Perenio Smart** App through the Control Gateway or the IoT Router, including further activation of this device in Google Home applications;
- **Bluetooth (MFi) Mode** that is used for activation in Apple HomeKit without the Perenio® Control Gateway or the IoT Router.

When you first switch on the Power Link device, or did not activate it in the Perenio Smart App through the Control Gateway or the IoT Router, the default mode will be the Bluetooth (MFi) Mode.

However, after it is activated in the Perenio Smart App through the Control Gateway or the IoT Router, the Power Link device will automatically switch to the Zigbee Mode and will not be available for connection in the Apple HomeKit application.

The device may be switched from Zigbee Mode to Bluetooth (MFi) Mode in one of the following ways:

1. Find the power plug in the Devices tab, click on the Settings icon (⚙️), and select "Disconnect device" to remove it from the Perenio Smart App.

2. Press and hold the Power Button until the LED indicator starts flashing violet. Release the button and wait for the indicator to start blinking blue.

### 2.1.3 Activation in the Perenio Smart Mobile Application

To connect the Power Link device through the Control Gateway or the IoT Router, the User shall perform the following steps:

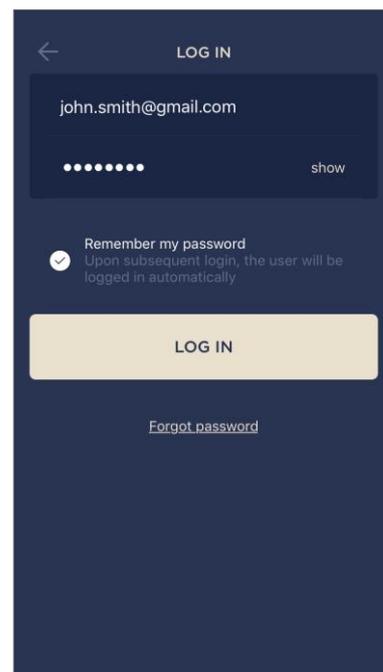
1. Unpack the device and plug it into the source of power (See par. **2.1.1**).
2. Login in to the **Perenio Smart Home & Office** User Account (See par. **A** below).
3. Activate the device in the application (See par. **B** below).
4. Enter the desired power plug name and select the Room of installation.

#### A. LOGIN TO THE EXISTING USER ACCOUNT

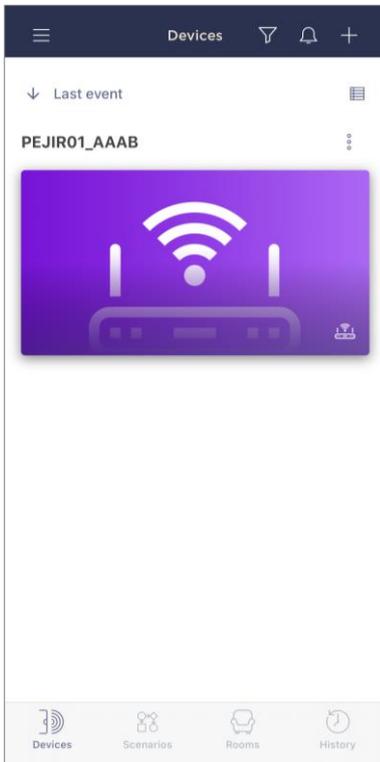
- a. Enter your e-mail address and password in the login screen;
- b. Click on the **LOG IN** button.

**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.



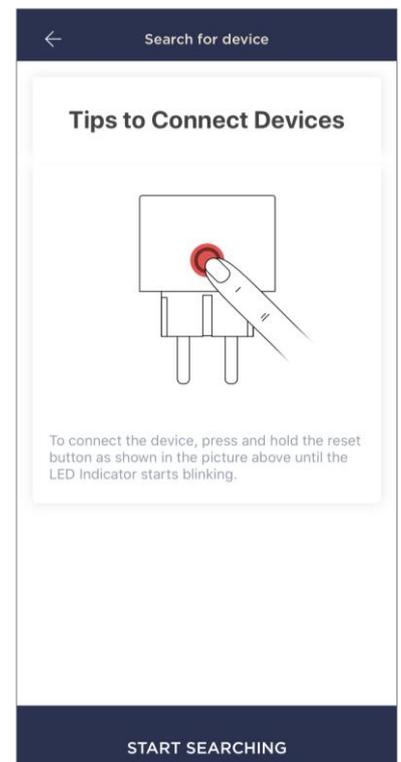
## B. CONNECTION TO THE CONTROL GATEWAY/IOT ROUTER

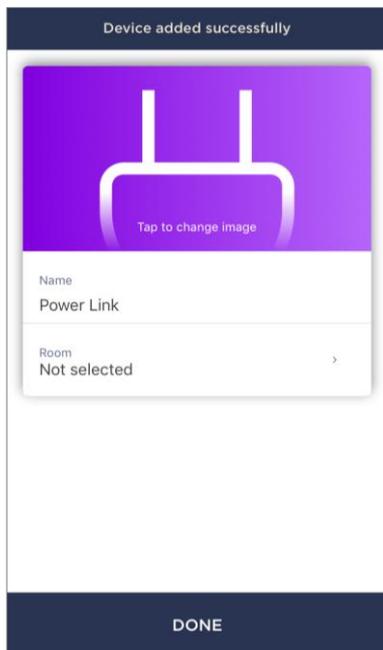


- a. Make sure the Control Gateway/IoT Router is activated and "Online" in the mobile app;
- b. Click on the "+" icon in the upper right corner of the Devices tab, select "Add new device" and then the Power Link device in the list;
- c. Select the Control Gateway/IoT Router to which the power plug shall be connected (This screen will be displayed, only if there are several Control Gateways/IoT Routers activated in the User Account);

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

- d. Start searching for devices;
  - e. Press and hold the reset button until the LED Indicator starts blinking violet;
- NOTE.** Several smart plugs and other Zigbee devices may be connected to the Control Gateway/IoT Router at once.





f. After the Power Link device being detected, click on "DONE";

g. To complete the connection process, the following shall be entered:

- Device name;
- Room of installation;
- Image (optional).

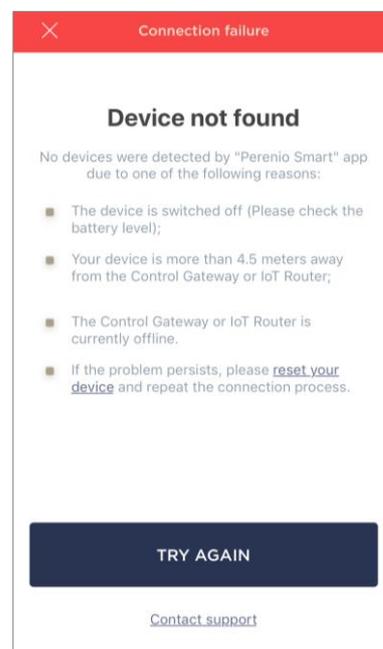
**NOTE.** All the above data may be entered or edited later in Settings Section of the Power Link device.

## B.1. CONNECTION ERRORS

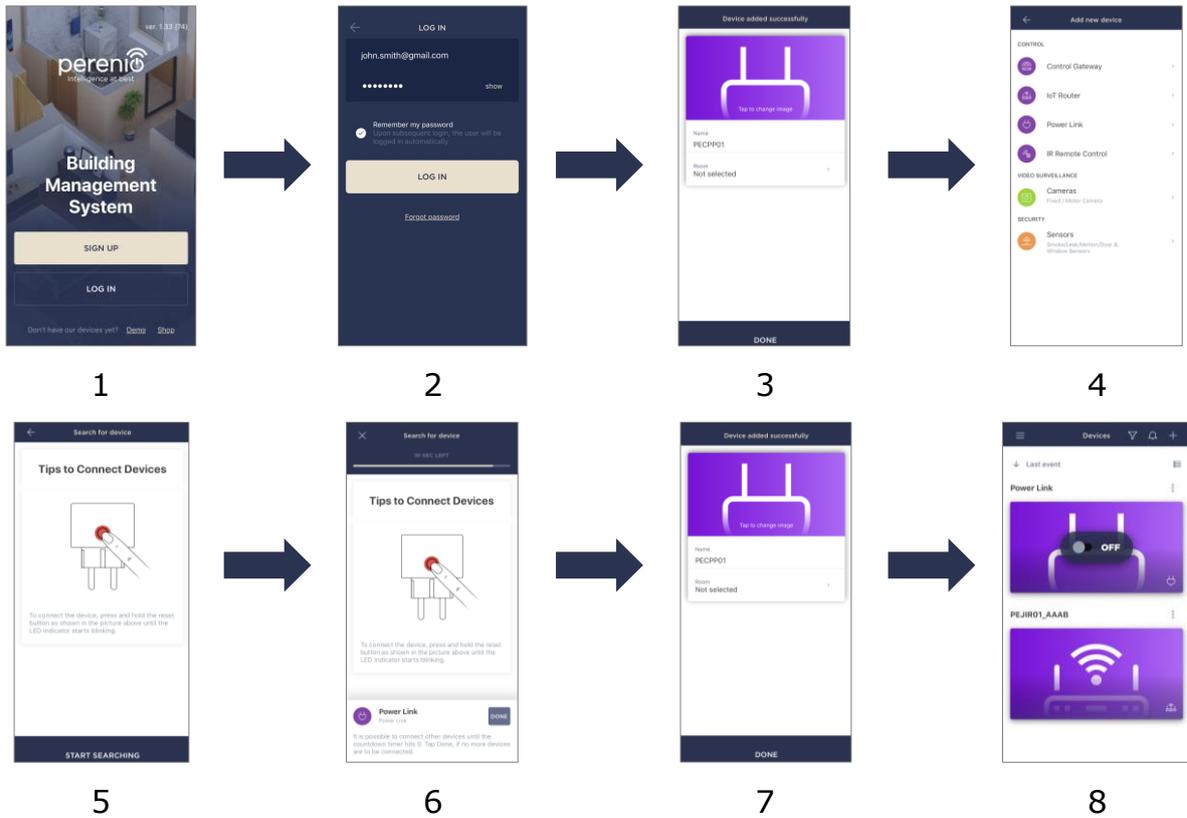
The connection failure of the device may occur due to one of the following reasons:

- a. The device is switched off or at a too long distance from the Control Gateway/IoT Router (4.5 meters);
- b. The Control Gateway/IoT Router is offline;
- c. The LED Indicator was blinking before start of the device connection.

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



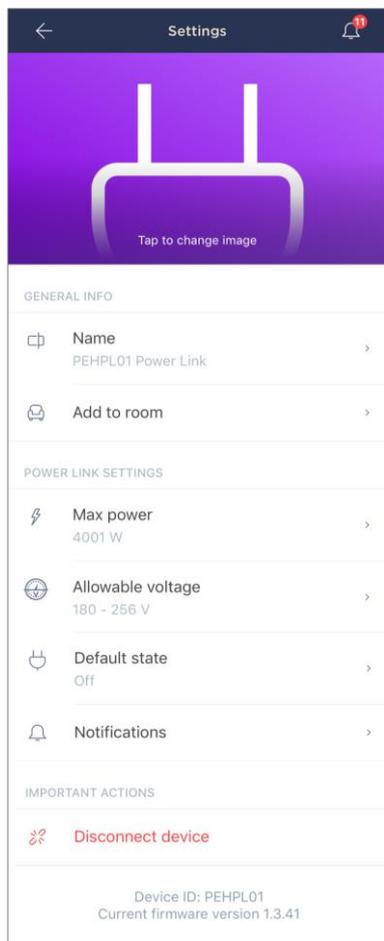
The entire process of the Power Link connection in the Mobile App is shown below.



**Figure 6 – Add new device (Power Plug) procedure**

## 2.1.4 Additional Settings

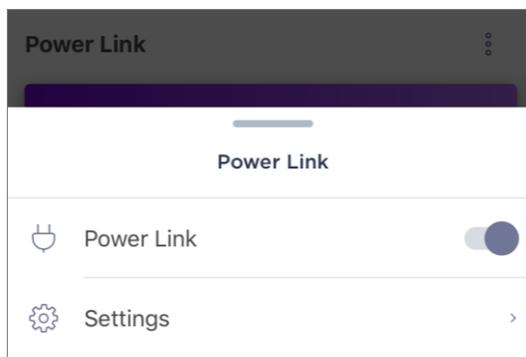
After activation of the power plug in the **Perenio Smart** application, the User may perform the following settings remotely:



- Change or upload an image for the Power Link device to make it easier to recognize it in the list of connected devices;
- Change the name of the device;
- Add a device to the room or change the room of installation;
- Set ranges of power and voltage, as well as the default state;
- Enable the push notifications function;
- Remove the device from the mobile application.

**NOTE.** There are two ways to go to the settings screen:

1. Click on the “three-dot” icon in the upper right corner of the power plug image in the application and select “Settings”.



2. In the power plug control panel, click on the settings icon.

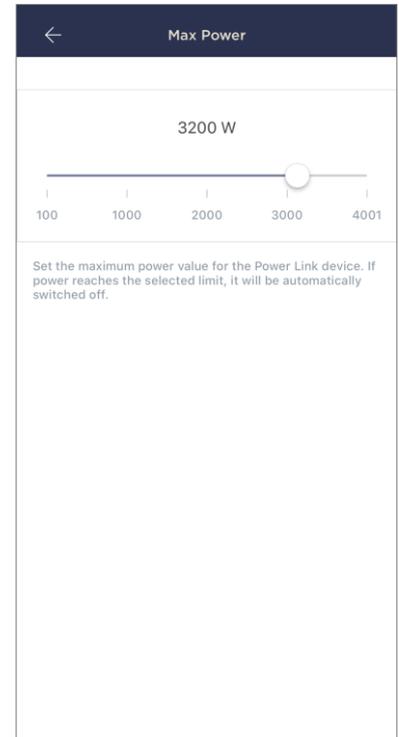


## Setting the Power Range

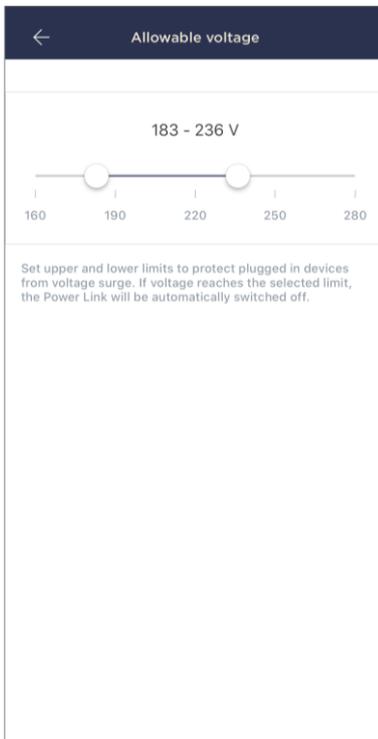
The Power Link device has a peak power of 4,000W. However, the User may set a custom maximum value so that the supply or power to the power plug will be automatically blocked and the User will be notified accordingly when this set limit is exceeded.

To set the desired value, click on the “Max power” field in the power plug settings and move the slider to the required position.

**NOTE.** The power change step is 100 W.



## Setting the Voltage Range



The default voltage range of the Power Link device is 180 V to 253 V. However, the User may set a custom range. In the event that the mains voltage goes beyond specified values, the power supply to the power plug will be automatically blocked, and the User will be notified accordingly.

To set the desired value, click on the “Allowable voltage” field in the device settings and move the slider to the required position.

**NOTE.** The allowable voltage range is 160 V to 280 V. The voltage step is 1 V.

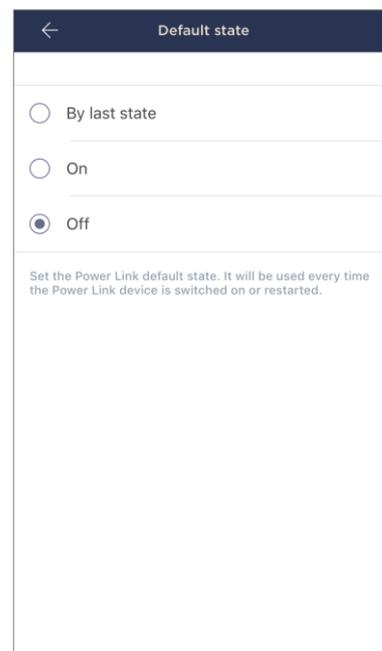
## Setting the Default State

By default, the power plug is switched to the OFF state every time it is rebooted, unlocked or plugged in.

However, the User may set a custom default state. The following options are available:

- Last state, i.e. the one in which the Power Link device was before rebooting, unlocking and plugging into the mains;
- Turned on;
- Turned off.

To set the default state, click on the "Default state" field in the device settings and select the desired option.



### 2.1.5 Activation in Apple HomeKit

To manage the device in Home application (Apple HomeKit), the User shall switch it to the Bluetooth Mode (See par. 2.1.2 above) and add it as an accessory by scanning the QR Code contained on the back cover of the Quick Start Guide.

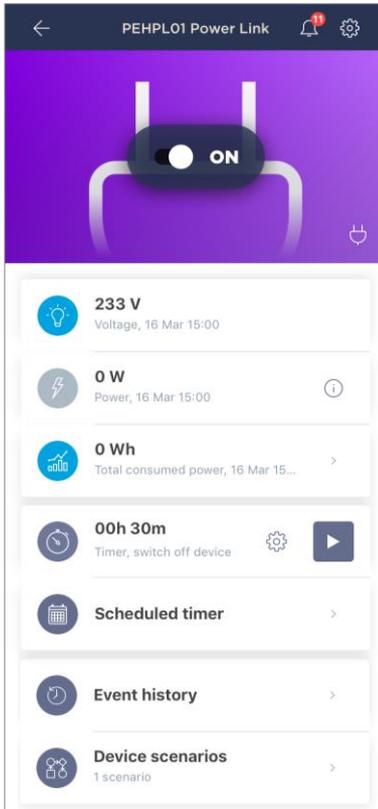
**NOTE.** When connecting, the User shall follow instructions in the Apple application which are also uploaded to the company's website at [perenio.com/faq](https://perenio.com/faq).

### 2.1.6 Management Through Google, Amazon Apps

To control the smart plug via the Google Home application, or Amazon Alexa, it must be previously activated in the **Perenio Smart** application (See par.2.1.3 above).

**NOTE.** When activating the Power Link in Google Home, or Amazon Alexa, the User shall follow instructions specified in corresponding Google applications or uploaded at [perenio.com/faq](https://perenio.com/faq).

## 2.2 Power Link Control Panel



The Power Link device control panel is displayed when you click on its image in the list of connected devices in the “Devices” tab.

In this control panel, the User may perform the following actions:

- Turn on and off the power plug remotely;
- View data on the current mains voltage and power online;
- View statistics of energy consumption of devices connected to the power plug;
- Set the countdown timer and/or schedules for turning on/off the power plug;
- Set a weekly timer;
- View event history;
- Create scenarios with the device.

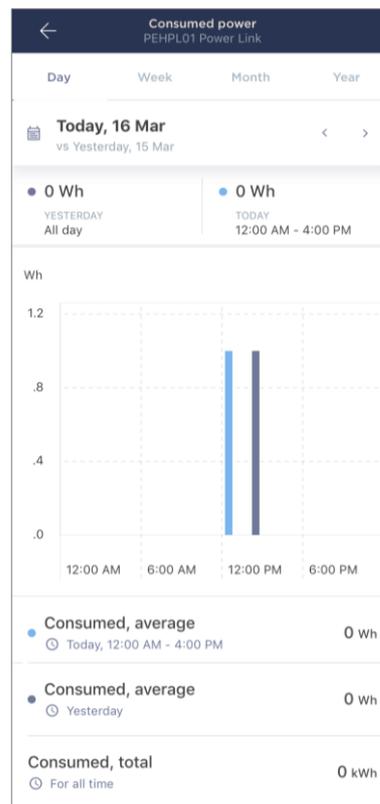
## 2.2.1 Viewing Energy Statistics

To switch to the statistics screen, click on the “Total consumed power” icon in the device control panel.

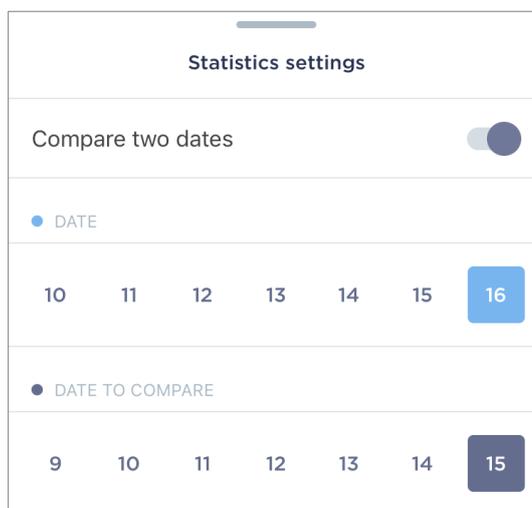
The data is displayed as a chart of the current power consumption in Wh versus yesterday’s data.

Also, the User may view energy consumption for other days by clicking the Right/Left arrows on the chart.

**NOTE.** Power consumption statistics is stored for 7 days only, so the dates available for comparison are limited to one week.



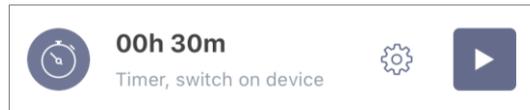
The user can compare the energy consumption data for any two days during the week. For this purpose, you need to go to the “Calendar” in the upper left corner of the Statistics screen and select the required days for comparison.



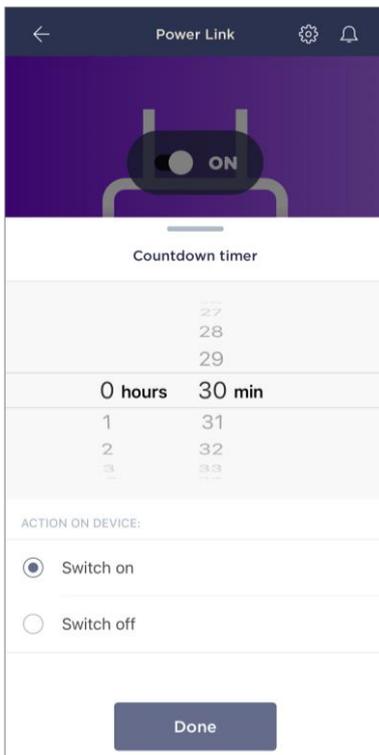
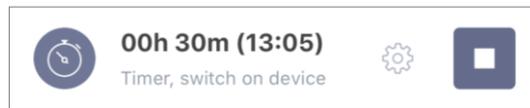
### 2.2.2 Setting the Countdown Timer

A countdown timer allows the User to turn the device on or off automatically after a specified period of time within twenty-four (24) hours.

By default, the countdown timer is set to 30 minutes and is off. To turn on the timer, the User shall click on the corresponding icon in the power plug control panel.



Once the timer is activated, the time when the power plug will be powered on/off will be displayed in parentheses.



The User may also set a custom time period for the countdown timer (time step – 1 minute), as well as the desired state of the power plug in the end.

To change the timer settings, click on the settings icon in the "Settings" field of the Power Link device control panel (See above).

The screen for selecting time and the device status will be displayed (See left).

**NOTE.** In this case, the User shall select the time interval after which (upon the timer activation) the power plug will be turned on or off.

To save the timer settings, click "Done".

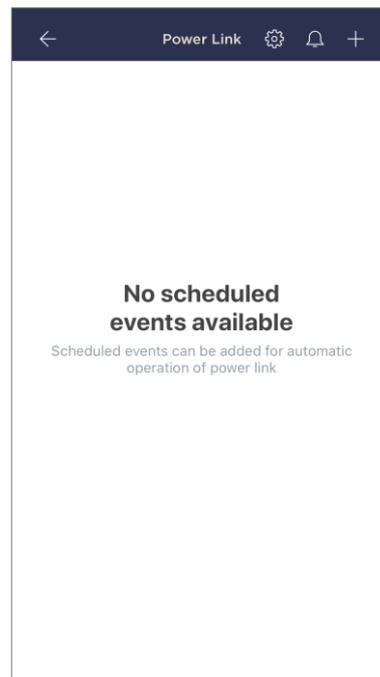
### 2.2.3 Setting Scheduled Timers

Scheduled timers are used to automatically turn on and/or off the power plug at a specified time on specified days of the week.

Weekly timers are set in the "Schedule" tab in the Power Link device control panel.

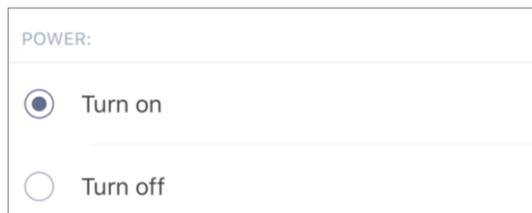
By default, no weekly timers are available as presets for the device, so the User shall click on the "+" in the right upper corner of the screen (See right). The setup window will be displayed.

**NOTE.** Available options to set timers depend on the selected action for the power plug (turning on or off).

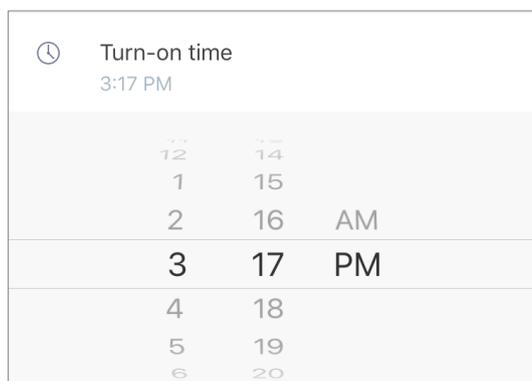


### Setting scheduled timer to turn on the Power Link

1. In the "Add scheduled event" screen select the power type – "Turn on".



2. Select the time to turn on the power plug.



3. Activate and select the time to turn off the power plug.

Enable Turn-off time

Power link will turn power off at selected time

---

Turn-off time  
4:17 PM

1	14	
2	15	
3	16	AM
<b>4</b>	<b>17</b>	<b>PM</b>
5	18	
6	19	
7	20	

**NOTE.** The switch-off time activation is optional.

4. Select days of the week when the power plug shall be turned on.

SELECT WORK DAYS:

Mon Tue Wed Thu Fri Sat Sun

5. Click on the "Save" button.

6. Activate the timer in the "Scheduled timer" tab.

3:17 PM - 4:17 PM  
Active time, Tuesday

7. The User may make changes to the created timer by clicking on it in the "Scheduled timer" tab.

**NOTE.** If the User shall try to change settings of an activated timer, it will be automatically disabled.

A maximum of eight (8) weekly timers can be activated at a time.

## Setting the scheduled timer to turn off the Power Link

1. In the "Add scheduled event" screen, select the power type – "Turn off".

POWER:

Turn on

Turn off

2. Select the time to turn off the power plug.

🕒 Turn-off time  
2:27 AM

11	24	
12	25	
1	26	
<b>2</b>	<b>27</b>	<b>AM</b>
3	28	PM
4	29	
5	30	

3. Activate and select the time to turn on the power plug.

Enable Turn-on time

Power Link will turn power on at selected time

Turn-on time  
4:27 PM

**NOTE.** The switch-on time is optional.

4. Select the days of the week during which the power plug should be switched off.

SELECT WORK DAYS:

Mon Tue **Wed** Thu Fri Sat Sun

5. Click on the "Save" button.

6. Activate the timer in the "Scheduled timer" tab.

📅 **11:16**

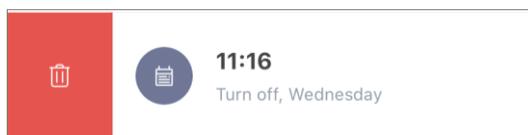
Turn off, Wednesday

7. The User may make changes to the created timer by clicking on it in the "Scheduled timer" tab.

**NOTE.** If the User shall try to change settings of an activated timer, it will be automatically disabled. A maximum of eight (8) weekly timers can be activated at a time.

### Deleting the scheduled timer

To delete a timer, the User shall slide a finger over it from left to right in the "Scheduled timer" tab and click on the trash icon.



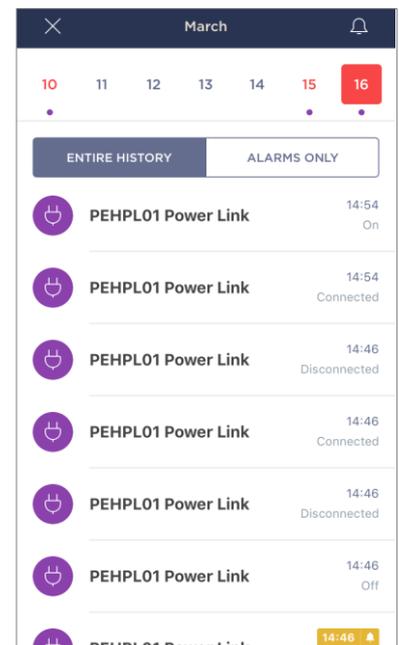
**NOTE.** The User may only delete a disabled timer.

### 2.2.4 Event history

In this tab, the user can view the device statuses, as well as the time when this or that event occurred.

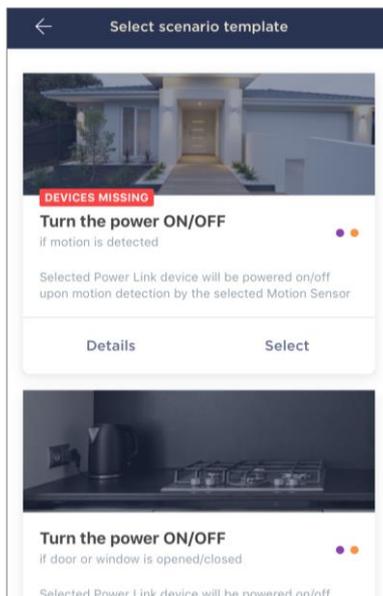
Functionality:

- "ENTIRE HISTORY" filter, which allows viewing the following events:
  - change of system statuses ("Connected", "Disconnected");
  - start and end the firmware update.
- "ALARMS ONLY" filter, which displays only the facts of device activation when the security mode is activated;
- filter by date.



**NOTE.** The number of days available for viewing in the event history depends on the type of subscription (for a free subscription - 7 days).

## 2.2.5 Device scenarios

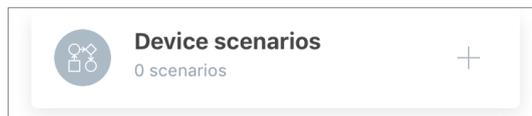


In the Device Scenarios tab, the user can add the power plug to predefined scenarios, thereby automating multiple Perenio® devices for a specific purpose.

By default, only scenarios templates are provided in the settings.

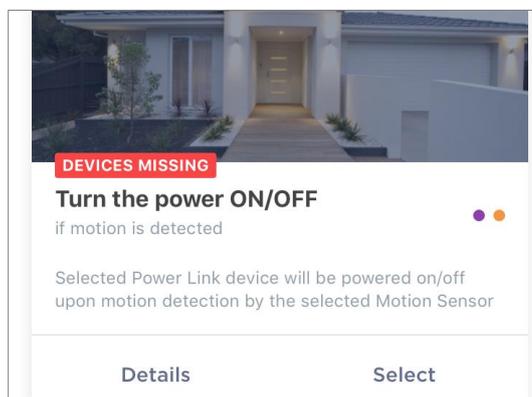
### Scenario creation and activation

1. In the control panel select "Device scenarios".



2. In the window that opens, select a suitable scenario template from 2 (two) suggested ones.

**NOTE.** If one of the devices required to create and activate the scenario is absent, the "DEVICES MISSING" indicator will light up.



**NOTE.** To view the list of devices required to activate a scenario, click on the "Details" button under the description of this scenario.

3. Customize the scenario based on the user's desire and the availability of the required devices.

**Scenario 1:** Turn on/off the power plug after motion detection

In this case you need to select from the list a sensor or sensors that will serve as a trigger to start the scenario and click on the "Next" button.

SELECT MOTION SENSOR

 PECMS01

Select the action "Turn on/off the power", select the power plug and click "Next".

SELECT ACTION

Turn on the power

Turn off the power

SELECT POWER LINK

 PEHPL01 Power Link

Enter the name of the scenario and click "Save".

Name  
Motion sensor

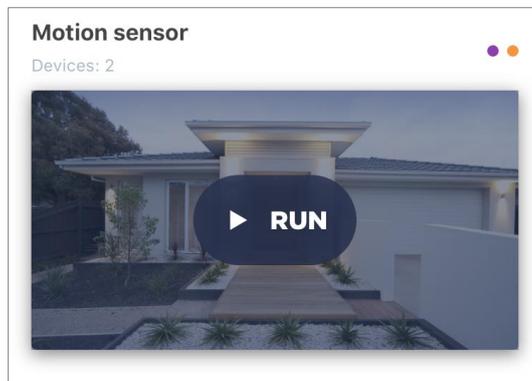
IF THIS EVENT OCCURS:

 PECMS01 Motion detected >

THEN:

 PEHPL01 Power Link Switch on >

You can run the created scenario by clicking on the button of the same name in the "Scenario" tab.



**Scenario 2:** turn on/off the power plug when the opening sensor is triggered

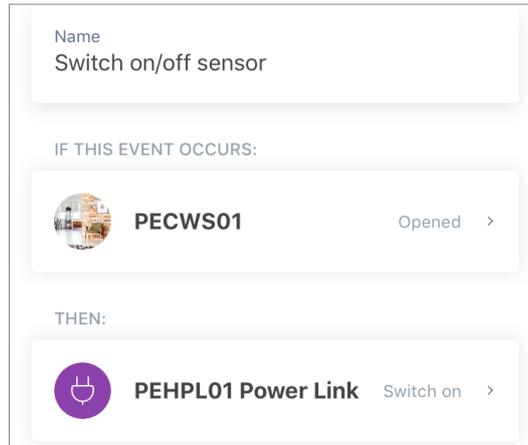
In this case, you need to select from the list the sensor or sensors that will serve as a trigger to start the scenario as well as the "Opened/Closed" state and click "Next".

SELECT STATUS	
<input checked="" type="radio"/>	Opened
<input type="radio"/>	Closed
SELECT DOOR & WINDOW SENSOR	
<input checked="" type="checkbox"/>	 PECWS01

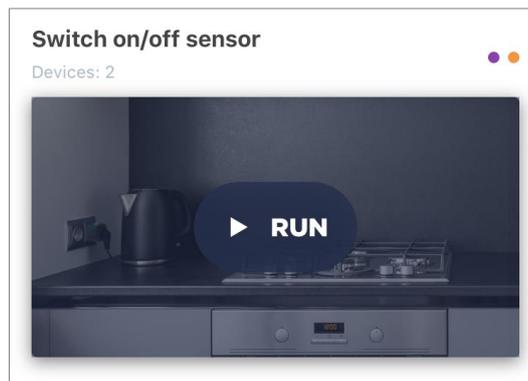
Select the action "Turn on/off the power", select the power plug and click "Next".

SELECT ACTION	
<input checked="" type="radio"/>	Turn on the power
<input type="radio"/>	Turn off the power
SELECT POWER LINK	
<input checked="" type="checkbox"/>	 PEHPL01 Power Link

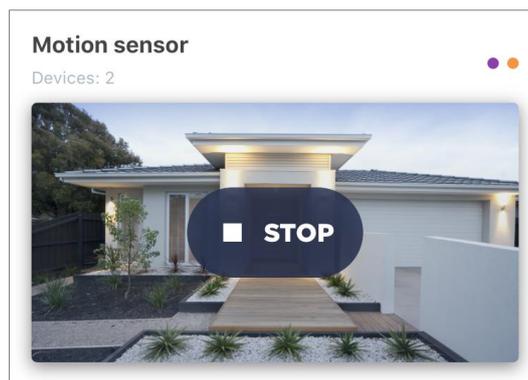
Enter the name of the scenario and click "Save".



You can run the created scenario by clicking on the button of the same name in the "Scenario" tab.

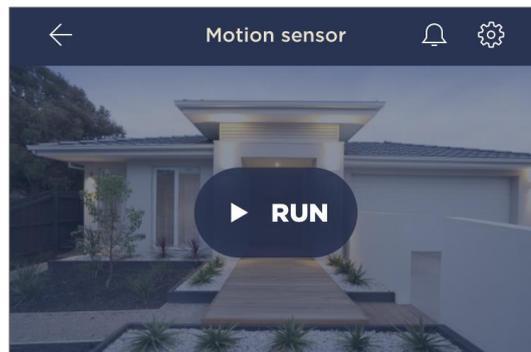


To stop a running scenario just click on the "Stop" button.

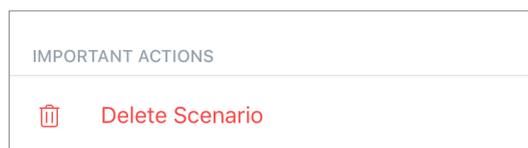


### Deleting a scenario

To delete a scenario, click on the settings icon in the upper right corner of the scenario control panel.



Then click on the “Delete Scenario” button.



**NOTE.** A deleted scenario cannot be recovered so if it is accidentally deleted it must be recreated.

## 2.3 Changing the Room or Location for the Power Plug

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

- 1. Change the room/location** (The CG/IoT Router remains the same) as follows:
  - a. Disconnect the Power Link device from the source of power and move it to another room;
  - b. Plug it into the source of power;
  - c. Change the Room in power plug settings in the User Account.
- 2. Change the room/location** (Connection to another CG/IoT Router is required) as follows:
  - a. Sign in to the Perenio Smart app and select the Location where the Power Link device is activated;
  - b. In the Devices tab, select the required Power Link device from the list and click on the  icon (Settings);
  - c. In the pop-up window, choose “Disconnect device”;
  - d. Disconnect the Power Link device from the source of power and move it to another location/room;

- e. Plug it into the source of power in a new room;
- f. In the User Account, select the Location where you want to move the device;
- g. Initiate the Power Link search by the Control Gateway/IoT Router through the Perenio Smart application according to par. **B. "CONNECTION TO THE CONTROL GATEWAY/IOT ROUTER"**.

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

**NOTE.** To check that the Power Link device 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 Power Link device is disconnected, it will disappear from the list of connected devices.

## 2.4 History and Push-Notifications

All notifications and other messages including changes in the status of **Perenio<sup>®</sup>** devices are displayed in the "History" tab. The most important messages can be viewed online in the "🔔" notification window in your account.

The following types of notifications are available:

- (Critical) alarms (They always come as push notifications to your smartphone, and are also displayed in the notification window, as well as in the "History" tab of the mobile app; The indication color is red);
- Important messages (They are always displayed in the notification window and the "History" tab; The indication color is yellow);
- Typical events (They are displayed in the "History" tab only; The indication color is not available).

**Alarms.** These are the most important messages, which include notifications about the following events:

- IoT Router battery charging is low;
- The IoT Router runs on battery;
- Motion detection by the camera;
- There is not enough space on the SD card to continue recording video;
- Change of the camera status to "Offline";

- Sensor triggering in the armed mode, including all alarms from smoke and leak sensors (even when the Location is in the disarmed mode);
- Disabling the sensor armed mode;
- Failure to perform the scenario;
- Connection of a dangerous device, and overloading the network (for the Power Link Wi-Fi Smart plug);
- Sudden changes or insufficient voltage, excessive power, temperature and/or consumption (for Power Link (ZigBee) Smart plug);
- Falls and/or overheats of the Eco Smart Heater, or sudden changes in voltage;
- Important updates.

**Important messages.** These are notifications on launches and completion of the camera and the Control Gateway firmware update, as well as notifications about low battery level of the sensor and changing the armed mode for the Location.

**Typical Events.** Various Perenio IoT newsletters, as well as messages about triggering Door & Window/Motion sensor in the disarmed mode.

**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.

## 2.5 LED Indication of Loads and Overload Protection

The Power Link device may operate under power of up to 4,000 Watts. Changes in the power level will be displayed in the mobile application, as well as indicated by different colors of the Power Button LED.

Table below contains power levels and description thereof.

Table 3 – Permissible power limits

Power Range	Description
0 W	No power, or the device is offline
1 W to 1,000 W	Low power level
1,001 W to 3,000 W	Medium power level
3,001 W to 4,000 W	High power level
Above 4,000 W	Overpower protection triggering

The Power Link device is equipped with overvoltage and overpower protection, as well as protection from overheating. When this protection is activated, the LED Indicator of the Power Button starts blinking red.

When the cause of protection activation is eliminated, the device will return to normal operation, and the indicator will stop blinking.

Also, the User can exit the overload protection mode manually. To do this, press and hold the Power Button for at least ten seconds.

### 3 Maintenance and Repair

The **Perenio**® Power Link device 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:

- Follow rules of safe operation of the device;
- Clean the device casing from dirt and dust at least once every six months;
- Check for updates of the Perenio Smart app;
- Repair mechanical damages to devices (in Service Centers).

The **Perenio**® Power Link device 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 **Perenio**® Power Link device, please contact your local Company representative or the Tech Support Department at **perenio.com**.

## 4 Warranty Obligations

The warranty period for the **Perenio<sup>®</sup>** Power Link device shall be **Twenty-Four (24) months** from the date of sale to the End User.

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<sup>®</sup>** 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<sup>®</sup>** 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<sup>®</sup>** 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<sup>®</sup>** 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, implantation-related 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®** Power Link device 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.

In accordance with the Waste Electrical and Electronic Equipment (WEEE)\* regulations, all electrical and electronic products must be collected separately at the end of their service life, and cannot be disposed of together with unsorted household waste.

Parts of worn out devices must be separated and sorted by the material type. In this way, every user can contribute to reuse, recycling and other forms of recovery of waste electrical and electronic equipment. Proper collection, recycling, and disposal of such devices will help avoid potential environmental and health impacts from the harmful substances they contain.

To dispose of the device, it must be returned to the point of sale, or to a local waste collection and recycling company recommended by the state or local authorities. Disposal is carried out in accordance with the applicable laws and regulations of the respective country.

For more details on how to properly dispose of your used device, please contact your device supplier, your waste disposal service or the local authorities responsible for waste disposal.

**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.

\* Waste Electrical and Electronic Equipment, or WEEE, means used electrical or electronic equipment, including all components, assemblies, consumables that are part of the equipment at the time it is taken out of service (including supplied batteries (if any), components containing mercury, etc.).

## 6 Other Information

### Manufacturer

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

### Importing Company

Name	<i>ASBISc Enterprises PLC</i>
Address	Iapetou, 1, Agios Athanasios, 4101, Limassol, Cyprus
Contact Info	Tel.: +357-25-85-70-00, e-mail: info@asbis.com

### Info on Certificates and Declarations

Certificates	EC-RED Certificate #IP19102934 as of October 22, 2019
Declarations, Reports	EMC Test Report #IP19102934 as of October 22, 2019; LVD Test Report #IP19102934 as of October 22, 2019; RF Exposure Test Report #IP19102934 as of October 22, 2019; Radio Test Report #IP19102934 as of October 22, 2019.

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

## 7 Troubleshooting

Table below shows typical errors and problems that may occur in the process of connection and configuration of the Power Link device.

Table 4 – Typical Errors and Troubleshooting Methods

Item No	Problem	Possible Reasons	Solution
1	The LED Indicator does not light up	Power supply failures	Make sure that the power plug is plugged in and switched on, or contact Tech Support Department
2	The power plug is not activated in the mobile application	Attempt to connect under load	Remove the power cord of the household appliance from the Power Link until it is activated in the mobile application
3	Timer settings disappeared	Reset to factory settings was performed	Set timers again
4	The power plug changes status to "offline" unexpectedly	Power supply failures, or it is out of Zigbee/Bluetooth coverage	Make sure that the power plug is plugged in and switched on, or reduce the distance to the Control Gateway/IoT Router
5	Lack of connectivity in Apple HomeKit	Outdated firmware version	Connect the smart plug through the Control Gateway/IoT Router and wait for the firmware to update within 24 hours  Contact Tech Support Department

## 8 Glossary

<b>Amazon Alexa</b>	A virtual assistant that supports voice communication and control of smart home devices.
<b>Apple HomeKit</b>	A software framework that allows to use a device based on the iOS operating system in order to configure, communicate and manage smart devices
<b>Google Home</b>	Wireless speaker for managing smart devices with Google Assistant
<b>IoT</b>	The Internet of Things is a system of Internet-connected devices able to collect and exchange data coming from built-in services
<b>IP20</b>	The degree of protection of the device, indicating that the parts inside the case are protected from the penetration of fingers or objects longer than 80 mm and solid bodies larger than 12 mm. No moisture protection
<b>MFi</b>	Made for iPhone/iPod/iPad
<b>Perenio Smart</b>	Software developed by <i>Perenio IoT</i> for remote control of wireless Cameras from smartphones
<b>UL94-V0</b>	A class of plastic that provides for self-extinguishing of the material within 10 seconds on a vertically mounted sample. Formation of droplets from non-combustible particles is allowed
<b>Zigbee</b>	A network protocol designed for secure transmission of data at low speeds, which is recognized for an extremely low power consumption
<b>Location</b>	General term which means a building or a structure in which <b>Perenio<sup>®</sup></b> Cameras, Control Gateways/IoT Routers and/or Sensors are installed
<b>CG</b>	The <b>Perenio<sup>®</sup></b> PEACG01 Control Gateway

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Making life easy