

YOYOPower Plus Accessories

Remote and automatic power control and monitoring

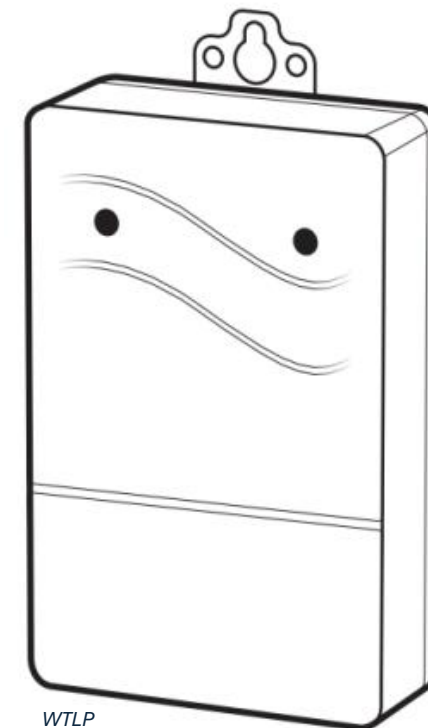
QUICK START GUIDE

Get started quickly with your **YOYOPower Plus** accessory and the **YOYOPower SMS 2.0** mobile app.

Wireless Temperature and Light Sensor (WTLP)

Senses ambient temperature level and light conditions (light/darkness) even outdoors.

- ▶ Wireless transmission of temperature and light status to the Main unit
- ▶ Low battery and lost connection are notified by SMS by connected Main unit
- ▶ Installation outdoors or indoors
- ▶ Connects to YOYOPower Plus 4G Control (EMP) and YOYOPower Plus 4G Outdoor (EOP)



The latest update of this document can be found here: <https://yoyomotion.com/produktinformation/>

Content

1 Wireless Temperature and Light Sensor (WTLP) - installation

- 1.1 Commissioning and connection
- 1.2 Mounting
- 1.3 Battery replacement
- 1.4 Signals
- 1.5 Specifications

2 Set up and use functions that use WTLP

- 2.1 YOYOPower Plus - features per model
- 2.2 YOYOPower SMS 2.0 - mobile app for installation and operation
- 2.3 Automatic Power Control
 - 2.3.1 Automatic power ON/OFF with thermostat
 - 2.3.2 Automatic power ON/OFF with light sensor (twilight relay)
- 2.4 Alarms of events and deviations - Temperature monitor

3 Important information

- 3.1 Safety and Usage Guidelines
- 3.2 Waste management and recycling
- 3.3 More information, support and guides on the web
- 3.4 Ways of contact to Yoyomotion

4 SMS command list

1 Wireless Temperature and Light Sensor (WTLP) - installation

1.1 Commissioning and connection

Place the Main unit and WTLP within easy reach. Other nearby wireless accessories must not be activated while pairing. The Main unit to which WTLP is to be connected should be turned on. Connect WTLP to the Main unit as follows:

1. Unscrew and loosen the back cover, insert batteries.
2. Open **YOYOPower SMS 2.0** mobile app, select **Power Control**, then **Twilight**.
3. Under **Wireless Temperature and Light Sensor**, after **Add or Remove**, tap **OK** and send the SMS that is created.
4. A beep indicates that pairing has begun in the Main unit. The status indicator flashes 2 short, 1 long. An SMS prompts you to activate the sensor.
5. Press the test button (under the back cover) of WTLP or wait up to 5 minutes.
6. Completed pairing is indicated by a beep and the status indicator then returns to normal. Wait for SMS confirming that the sensor has been paired.
7. Activate the twilight function to test the sensor function.

NOTE:

- Should the Main unit not receive any signal or if you try to connect more than one WTLP, the pairing mode terminates with 3 beeps and an SMS.
- WTLP broadcasts new temperature and light status every 5 minutes.

Path in the app: Start page>Function page>Power control>Twilight

1.2 Mounting

Hang vertically outside or inside, where light and temperature changes should be monitored.

1.3 Battery replacement

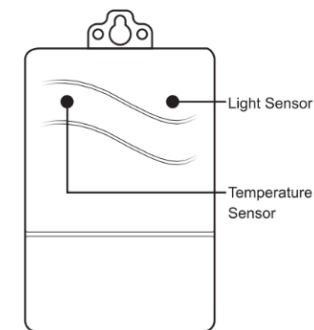
Unscrew and loosen the back cover, replace the batteries, put back the cover and screw gently.

1.4 Signals

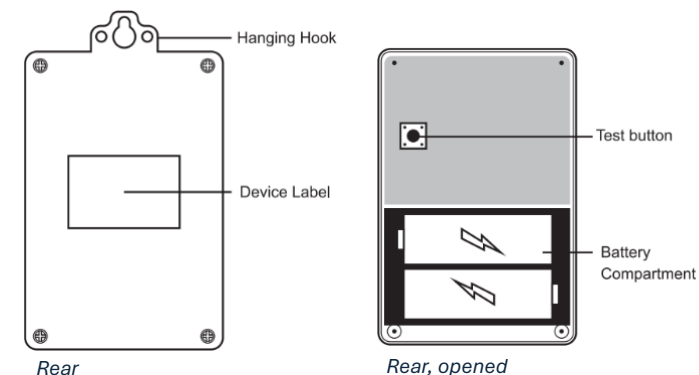
An internal status indicator lights up when the button is pressed. No audio signals are emitted.

1.5 Specifications

Range:	-20°C - +50°C
Range:	up to 20 m (in clear line of sight, obstacles reduce range)
Radio frequency	434Mhz FSK (Wireless Connection to Main unit)
Power source:	2 pcs. 1.5V batteries type AA/LR6 (not included)
Power consumption:	10uA in sleep mode, 10mA in activity
Operating environment:	temperature -20°C - +50°C
Dimensions and weight:	110x64x20 mm, 50 g excl. battery
Protection class:	IP44 – Leakproof (10L, 60-100kPa) and particle-tight (1mm)



Front



2 Set up and use functions that use WTLP

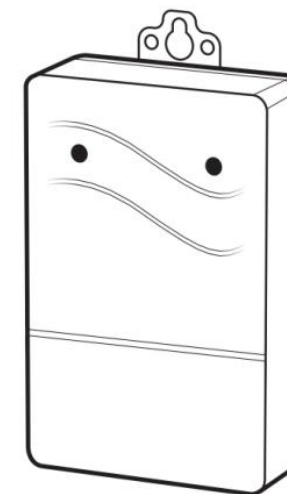
2.1 YOYOPower Plus - features per model

YOYOPower Plus 4G Model	Switch EXP	Control EMP	Outdoor EOP	Extraenhet ESP
Expansion with YOYOPower Plus Slave unit Up to 4 slave units can be connected.	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
Remote manual power control With app, SMS, phone call or remote control (accessory).	<input checked="" type="radio"/> ¹	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/> ^{1, 2}
Automatic power control By weekly schedule, thermostat or delay.	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/> ³	<input checked="" type="radio"/>
Automatic power control with twilight relay Power control with wireless light and temperature sensor.	<input type="radio"/>	<input checked="" type="radio"/> ⁴	<input checked="" type="radio"/> ⁴	<input type="radio"/>
Power failure alarm SMS when the power is lost and when it returns.	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Temperature monitor SMS at deviations in temperature.	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/> ³	<input checked="" type="radio"/>
Home alarm functions Detection and alarm with wireless alarm sensors (accessory).	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Power monitoring Status, SMS at load over 3500W and deviation (1-3500W).	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Power consumption Consumption (kWh); current status and periodic report.	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Outdoor usage Grounded power socket, IP44.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Wireless Temperature and Light Sensor (WTLP) connects with EMP and EOP.

- 1 Cannot be controlled by remote control.
- 2 Cannot be controlled by phone call.
- 3 Temperature functions require accessory WTLP.
- 4 Twilight function requires accessory WTLP.

YOYOPower 4G Relay and previous YOYOPower-models and accessories (without a Plus in the name) are not covered by this document.



WTLP

2.2 YOYOPower SMS 2.0 - mobile app for installation and operation



Google Play

The app creates SMS commands to control any YOYOPower model. Infinite number of YOYOPower units can be registered in the app. Phone numbers and settings are stored in the app and in the YOYOPower unit itself but nowhere else (no cloud service). The app is free of charge and advertising. Download the mobile app from Google Play™ or App Store™

YOYOPower can also be controlled using SMS commands only. See [Full SMS command list](#)



App Store

2.3 Automatic Power Control

Power from YOYOPower can automatically switch ON or OFF with delay, by schedule, by thermostat and/or by light sensor (“Twilight”).

NOTE:

- While power control with delay is in progress, other set power control automatics are paused.
- While power control by schedule is in progress, power control with light sensor and/or thermostat will only be active when power ON is scheduled.
- While power control with light sensor is in progress, power control by thermostat will only be active while power is ON according to the light sensor.
- Manual switching of the power (SMS, phone call, remote control or button) alters current power state until changed automatically or manually.

Example 1: Power is ON according to the set schedule and is turned OFF by button. Power will remain OFF until the next scheduled Power ON.

Example 2: Power is ON according to light sensor and turned OFF by button. Power will remain OFF until the next light sensor-controlled Power ON.

Path in the app: Start page>Function page>Power control

2.3.1 Automatic power ON/OFF with thermostat

Applies to all YOYOPower models, for EOP accessory light and temp sensor are required

Power from YOYOPower to e.g. a heater can switch ON and OFF automatically with ambient temperature variations. Set the operating mode; heating or cooling and upper and a lower temperature levels to be monitored. The maximum temperature range is -30°C to +100°C using the optional temperature sensor on cable. With other temperature sensors, the range is smaller. Read more about the temperature sensor options in section

Temperature monitor

"**Heating**" - power turns ON when the ambient temperature falls below the set temperature range and OFF when the range is exceeded.

"**Cooling**" - power turns ON when the ambient temperature exceeds the set temperature range and to OFF when the range is undercut.

By default, the thermostat function is OFF, in heating mode and the temperature range is 18-24°C.

NOTE:

- Power ON/OFF with thermostat is processed once per minute, however WTLP transmits status information once per 5 minutes.

Path in the app: Start page>Function page>Power control>Thermostat

2.3.2 Automatic power ON/OFF with light sensor (twilight relay)

Applies to EMP and EOP models, accessories require light and temp sensor (WTLP)

Power from YOYOPower, to e.g. outdoor lighting, can be turned ON and OFF automatically when ambient light conditions change. With the twilight function the power turns ON at dusk and OFF at dawn (default) or OFF after 1-8 hours since dusk. By default, the twilight function is OFF. This function requires a connected optional wireless light sensor (WTLP).

Path in the app: Start page>Function page>Power control>Twilight

2.4 Alarms of events and deviations - Temperature monitor

Applies to all YOYOPower Plus models, for EOP accessories light and temp sensor are required

To monitor ambient temperature and notify deviations by SMS, a temperature alarm function can be set and activated in each YOYOPower unit.

The temperature range to be monitored is set with an upper and a lower temperature level. With WTLP the range is -20C to +50C

By default, the temperature monitor function is OFF and the temperature range is preset to 20-25°C.

NOTE:

- The temperature is measured and processed in YOYOPower once per minute, however WTLP transmits status information once per 5 minutes.
- The temperature monitor and thermostat functions are independent of each other and are set separately.

Path in the app: Start page>Function page>Alarm>Temperature alarm

3 Important information

Please read this information before using your YOYOPower.

3.1 Safety and Usage Guidelines

- Do not expose the accessory to impact, shock, dust, liquid or moisture, extremely high or low temperature, flame, or other heat sources.
- Do not use the accessory in hospitals or near medical equipment. If you have personal medical equipment such as pacemakers, consult your doctor for advice.
- Do not use the accessory in airplanes or in any place where the use of radio transmitters is prohibited, where there is a potentially explosive atmosphere, or in the vicinity of car airbags.
- Do not attempt to disassemble the accessory. There are no user-serviceable components inside the product. Improper use, disassembly, or product modification will cause loss of warranty.
- Do not allow children to play with the accessory. Small parts can pose a choking hazard.
- For optimal performance, do not cover the accessory. Place it with good ventilation and good access.
- Yoyomotion AB is not liable for indirect losses or damages that may have arisen due to errors that have occurred after use or incorrect use of sold equipment, e.g. missing alarms, impact on electricity consumption or other similar losses that have been difficult to foresee, unless it can be shown that Yoyomotion AB acted grossly negligently or with intent.

3.2 Waste management and recycling

- Do not dispose of the accessory with normal household waste. Dispose of your end-of-life articles at a collection point for electronic equipment.
- For more information, contact your local authority, your household waste disposal depot or the retailer where you purchased the accessory.
- You may also send or return worn-out Yoyomotion items to Yoyomotion AB, Järnvägsgatan 36, 13154 NACKA. Mark the shipment with "Recycling".

3.3 More information, support and guides on the web

- YOYOPower Plus Accessories – **Quick Start Guides** are also available online. Use link / QR-kode on the front of this document or ⓘ (infosymbol) at the top of the start page in the mobile app. Printed copies can be ordered in the web store <https://yoyomotion.com/butik/>. Shipping costs apply.
- YOYOPower Plus **product website** - link and QR code on the last page of this document.
- YOYOPower **Product and Support Information** - link / QR code on the front of this document.

3.4 Ways of contact to Yoyomotion

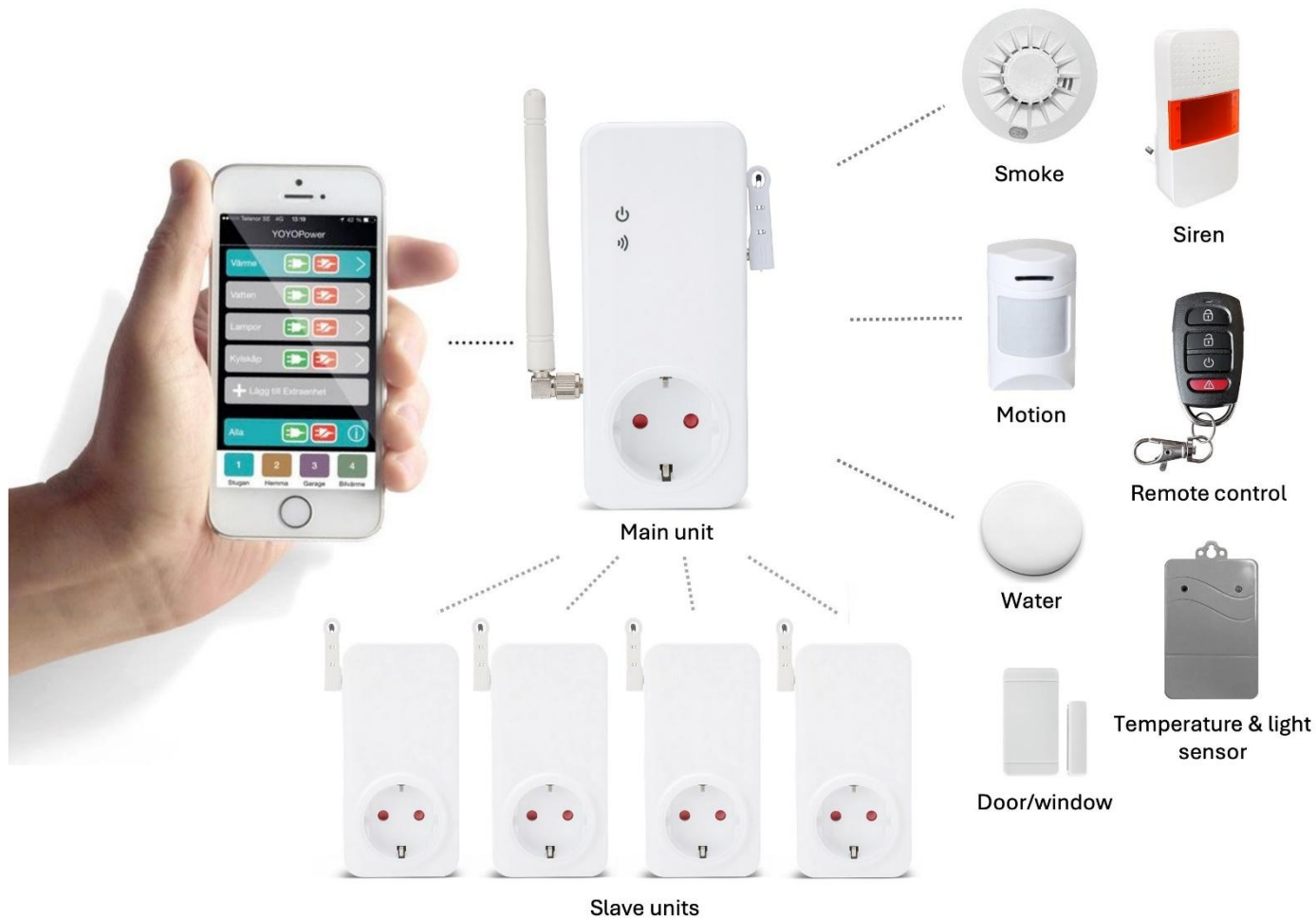
- Ordering of products, accessories and spare parts: <https://yoyomotion.com/aterforsaljare/> or <https://yoyomotion.com/butik/>
- Other orders, deliveries and commercial matters: sales@yoyomotion.com (e-mail)
- Product Support form <https://yoyomotion.com/supportformular/>
- Other support, product information, comments, complaints, etc.: support@yoyomotion.com (e-mail)
- General and other business: info@yoyomotion.com (e-mail)

4 SMS command list

SMS codes to control and configure functions that use WTLP.

Function	SMS command	Applicable models
Power ON/OFF with thermostat (temperature control)		
Power ON/OFF with thermostat - check status	#32#	EMP, EOP, EXP
Power ON/OFF with thermostat - set mode & temperature range	#24#0# <i>Mode</i> # <i>MinTemp</i> # <i>MaxTemp</i> #	EMP, EOP, EXP
Power ON/OFF with thermostat - ON	#23#0#1#	EMP, EOP, EXP
Power ON/OFF with thermostat - OFF (default)	#23#0#0#	EMP, EOP, EXP
Temperature Sensor: Wireless (WTLP)-ON, Plug-in Sensor-OFF	#10#1#	EMP (WTLP)
Temperature Sensor: Wireless (WTLP)-OFF, Plug-In-ON (default)	#10#0#	EMP
Power ON/OFF with light sensor/twilight relay (optional accessory WTLP)		
Power ON/OFF with light sensor - check status	#55#	EMP, EOP (WTLP)
Wireless Temperature & Light sensor - pair	#30#4#	EMP, EOP (WTLP)
Wireless Temperature & Light sensor - remove	#45#2#	EMP, EOP (WTLP)
Power ON when it's dark and OFF when it's bright	#55#1#0#	EMP, EOP (WTLP)
Power ON when it's dark and OFF a few hours later	#55#1# <i>Hours</i> #	EMP, EOP (WTLP)
Power ON/OFF with light sensor - ON	#55#1#	EMP, EOP (WTLP)
Power ON/OFF with light sensor - OFF (default)	#55#0#	EMP, EOP
Temperature Sensor: Wireless (WTLP)-ON, plug-in-OFF	#10#1#	EMP, EOP (WTLP)
Temperature Sensor: Wireless (WTLP)-OFF, plug-in-ON (default)	#10#0#	EMP
Temperature monitor		
Temperature monitor - check status	#35#	EMP, EOP, EXP
Temperature monitor - set temperature range to be monitored	#22#0# <i>MinTemp</i> # <i>MaxTemp</i> #	EMP, EOP, EXP
Temperature monitor function - ON	#21#0#1#	EMP, EOP, EXP
Temperature monitor function - OFF	#21#0#0#	EMP, EOP, EXP
Temperature monitor in Slave unit - check status	#68# <i>UnitName</i> #	EMP, EOP (ESP)
Temperature monitor in Slave unit - set temp range to monitor	#69# <i>UnitName</i> # <i>MinTemp</i> # <i>MaxTemp</i> #	EMP, EOP (ESP)
Temperature monitor in Slave unit - ON	#68# <i>UnitName</i> #1#	EMP, EOP (ESP)
Temperature monitor in Slave unit - OFF	#68# <i>UnitName</i> #0#	EMP, EOP (ESP)
Temperature sensor: wireless (WTLP) - ON, plug-in - OFF	#10#1#	EMP
Temperature Sensor: wireless (WTLP) - OFF, plug-in - ON (default)	#10#0#	EMP
<p>Mode: 1 = Heating, 2 = Cooling</p> <p>MinTemp/MaxTemp: -10 to 50 (degrees Celsius, integer) with standard temperature sensor -30 to 100 (degrees Celsius, integer) with the optional Temperature sensor on cable (TSG) -20 to 50 (degrees Celsius, integer) with optional Wireless Temperature & Light sensor (WTLP)</p> <p>Hours: 1-8</p>		

YOYOPower Plus 4G[®]



<https://yoyomotion.com/hem/yoyopower-plus-4G/>

