

# WATTSUN WSD2000 Dock and Pack User Manual

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#### WATTSUN WSD2000 Dock and Pack



#### **Product Information**

#### Wattsun Dock en Pack

The Wattsun Dock en Pack is a patented stackable lithium-ion battery system that provides a portable power source for various devices. The intelligent control system allows for easy stacking of up to 5 Packs on a Dock, without the need for cables between them. The top Pack delivers energy first, and when it runs out, the next Pack in the stack takes over automatically. The system is designed for ease of use, with a simple display that shows the remaining time, battery status, current usage, and the number of Packs stacked on the Dock.

Model No: WSD2000, WSD1500, WSP

Website: <u>www.wattsun.net</u>Contact: <u>hello@wattsun.net</u>

## **Product Usage Instructions**

- 1. Read the user manual carefully before using the Wattsun Dock en Pack.
- 2. Check that all components are present and undamaged.
- 3. Charge the Dock and Pack(s) using the provided charger.
- 4. Press the On/Off button on the Dock for 4 seconds to turn it on.
- 5. The display will show the remaining time, battery status, current usage, and the number of Packs stacked on the Dock.
- 6. To stack a Pack on the Dock, simply place it on top of the Dock. The intelligent control system will automatically detect the additional Pack.
- 7. The top Pack delivers energy first, and when it runs out, the next Pack in the stack takes over automatically. The display will update to show the new remaining time and battery status.
- 8. To remove a Pack from the stack during use, simply lift it off the Dock and replace it with a fully charged Pack.
- 9. When not in use, turn off the Dock by pressing the On/Off button for 4 seconds.
- 10. Store the Wattsun Dock en Pack in a cool, dry place.

**Note:** Do not dispose of the Wattsun Dock en Pack with regular household waste. Contact local authorities for proper disposal methods.

#### Dear customer,

Congratulations on the purchase of this Wattsun product.

For technical enquiries, please contact customer support.

Mail your questions to: hello@wattsun.net

For more information go to: www.wattsun.net or scan the QR code below.



# **General safety instructions**

**WARNING:** The Wattsun Dock and Pack are designed to be safe and reliable under normal use and maintenance, provided they are operated correctly. Study the manual before using the Wattsun Dock and Pack. Failure to comply with these safety instructions could result in fire, electric shock, injury, or damage to the product or other property. No guarantees whatsoever are given for the use or maintenance of the Wattsun Dock and Pack in violation of or non-compliance with these safety instructions.

- Only use the original Wattsun 360 charger.
- Do not cover the Wattsun Dock and Pack.
- Do not allow the battery contacts to come in contact with metal objects.
- Protect the product against heat, eg continuous bright sunlight and fire.
- Wattsun pop-up power B.V. can't be held liable for damage or accidents caused by improper use of the product.
- Do not stand or sit on the Wattsun Dock or Pack.
- Do not carry out maintenance yourself: there are no parts that are to be maintained by the user; for maintenance contact customer service.
- Do not open the product.
- Do not use running water or a high-pressure cleaner for cleaning the Wattsun Dock and Pack.

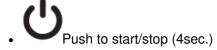
# **Symbol**



Hazardous voltage.



To reduce the risk of injury, the user must read and follow the user manual.



- Direct current (DC)
- Alternating current (AC)

- . W watt
- V<sub>Volt</sub>
- . Hz<sub>Hertz</sub>

# Getting to know your Wattsun Dock and Wattsun Pack



# **Wattsun Dock**







- 1. 230 Volt socket with protective cover
- 2. Oled Display
- 3. Push button (to start/stop, hold for 4 seconds)
- 4. LED bar
- 5. Touch button
- 6. Integrated handle
- 7. Ventilation system with removable dust filter
- 8. + / battery poles
- 9. Opening for cable lock
- 10. Charger port with protective flap

# How does it work?

# **Wattsun Dock**

The dock is the base of the Wattsun system. Plug in and you are immediately supplied with power. On the convenient display, all important information, such as battery status, can be found at a glance.



#### **Wattsun Pack**

Need more capacity? Stack the Pack(s) on top of the Dock. The intelli-gent operating system takes care of the rest.



#### **Wattsun Stack**

Stack up to five modules.(1 Dock plus 4 Packs) to expand the capacity. Empty pack? No problem, just change it! You'll be ensured of power contently.



Behind the sturdy design and the ease of use, hides a unique technique. The patented stackable battery systems makes it possible to connect different modules without using cables.

The top module is the first to provide energy. As soon as it's empty, the next module automatically takes over. In the meantime you can easily change the empty module, continuously staying supplied with power. Even while in use!

#### Installing

- · Carry the Wattsun with both hands.
- Place the Wattsun on a safe, dry, flat and stable surface.
- · Place the Wattsun on the four feet.

## Connecting

- Hold the power button for 4 seconds.
- Plug your electrical device in the 230V socket.
- Place the Wattsun on the four feet.

#### Check before use

- · Check the battery level.
- View the remaining time in hours and minutes with current use.
- The display will automatically switch off after 3 minutes. Briefly press the power button to turn it on again.

## **Expand capacity**

- · Stack a Pack on a Dock to expand the capacity.
- The Packs can be stacked both ways (left or right).
- Stack up to five modules. (1 Dock plus 4 Packs).
- Packs can be switched while being in use.
- The top module is the first to provide energy. As soon as it's empty, the next module automatically takes over.

## **Storage**

- · Always turn off the Dock after use.
- Hold the power button for 4 seconds to turn the Dock off.
- · Make sure the Wattsun is clean and dry before storing.

# Charging the battery

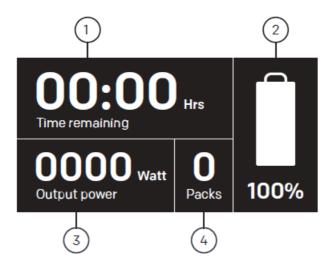
- Turn off the Dock before charging.
- Each Wattsun is equiped with a charger port on the backside of the module. Plug the Wattsun charger into a power outlet (230V) and connect it to the module.
- Turn on the Wattsun charger by flipping on the on/off switch on the charger itself.
- The battery status of the Dock is shown on the Docks' display. The 5 Leds on the Pack indicate the charging status of a Pack.

# **Display Wattsun Dock**

## Starting up

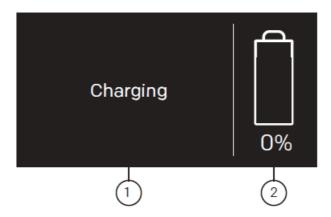


Use



- 1. Remaining time in hours and minutes with current use.
- 2. Total battery level of the Stack
- 3. Current use expressed in watts
- 4. Number of modules stacked on the Dock.

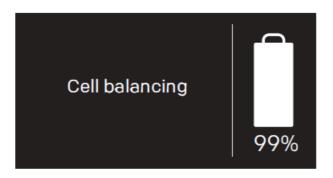
# Charging



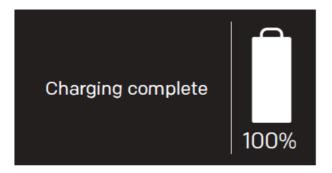
- 1. The Wattsun dock is charging.
- 2. Battery level of the Wattsun Dock.

# **Cell balancing**

Starts automatically when the battery reaches 99%. Leave the charger on until the 'Charging complete' message appears on the display and the battery level indicates 100%.

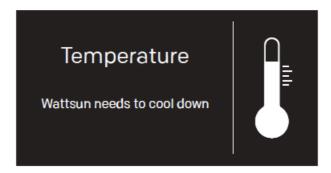


The battery is fully charged and balanced. The charger can be disconnected from the module.



# **Temperature**

The temperature in the Wattsun has exceeded the limit. Allow the product to cool down by switching off the connected device. Prevent the temperature from getting to high. Place the product in a colder environment e.g. the shade.



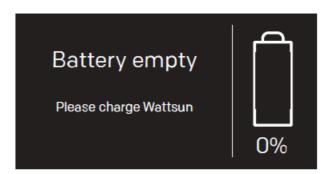
## **Error**

The product has a malfunction. Check the product and restart it.



# **Battery empty**

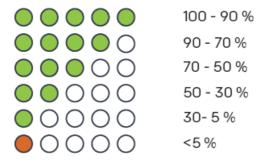
The battery is empty. Charge the battery to resume using the Wattsun.



The LED bar shows the status of the battery with 5 LED lights. The battery status of the Pack is displayed for 5 seconds when the push button is pressed.

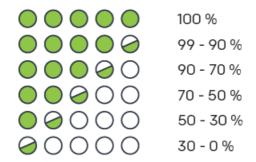
## **Battery level**

The battery level is indicated by the number of green LED lights. If the battery level of a Pack is lower than 5%, the LED light on the far left will light up orange.



## Charging

While charging, the LED bar stays illuminated. The charging status is indicated by the LED light blinking. When it's complete (100%) and the battery cells are fully balanced, all LED lights light up green.



#### **Error**

In case of a system error, all LED lights blink red.



#### Safety break

During a safety break, all LED lights blink green. Safety break is automatically activated in case of an overload, by requesting more than 1500 watts of power, or when the temperature of the battery is too high.



#### In the stack

The LED bar of the Pack that supplies power is always illuminated. The LED bars on the other Packs in the stack are turned off by default. Press the touch button to display the battery level of the individual Packs.

# **Charging the Wattsun Dock and Pack**

- Turn off the Wattsun Dock before you start charging. The Pack is automatically turned off when it's not being used in a stack.
- 2. Connect the "Wattsun charger 360" to the mains (230 Volt).
- 3. Lift the cover on the rear of the product.
- 4. Plug the connector of the charger into the charging port (A).
- 5. Turn the connector to the right (B) until a "click" is heard (C). The charger is now locked.
- 6. Switch the on / off button on the charger and the product will start charging.

- 7. The battery status of the Dock is shown on the Docks' display. The 5 Leds on the Pack indicate the charging status of a Pack.
- 8. Never use any other charger but the originally supplied charger: The Wattsun Charger 360.



# **Technical specifications Dock**

	Wattsun Dock 1500	Wattsun Dock 2000
General		
Voltage	220 - 240 Volts	220 - 240 Volts
Frequency	50 Hz	50 Hz
Continuous power	1500 Watts	2000 Watts
Peak power 60 sec	~1730 Watts 60 sec	~2300 Watts 60 sec
Launch peak 3 sec	~2600 Watts 3 sec	~3500 Watts 3 sec
Weight	16,8 kg	17 kg
Size	52,5*34*23 cm	52,5*34*23 cm
Technical specifications battery		
Cell technology	Lithium-Ion	Lithium-lon
Brand	Panasonic	Panasonic
Capacity	1400 Wh	1400 Wh
Number of cycles	600 cycles	600 cycles
Nominal Voltage	51,8 Volts	51,8 Volts
Charging		
Voltage	58,8 Volts	58,8 Volts
Charging capacity	360 Watts (6A)	360 Watts (6A)
Charging time	4,5 hours	4,5 hours
Cooling	Active workload and temperature controlled cooling system to ensure optimum battery lifespan.	

0 to 25 °C
-10 to 35 °C
0 to 30 °C
10 - 90%
Short-Circuit and overload
Maximum and minimum temperature protection
EN 60950-01

# **Technical specifications Pack**

	Wattsun Pack
General	
Weight	15,2 kg
Size	51*34*23 cm
Technical specifications battery	
Cell technology	Lithium-lon
Brand	Panasonic
Capacity	1600 Wh
Number of cycles	600 cycles
Nominal Voltage	51,8 Volts
Charging	
Voltage	58,8 Volts
Charging capacity	360 Watts (6A)
Charging time	5 hours
Cooling	Active workload and temperature controlled cooling system to ensure optimum battery lifespan.

Environmentol requirements		
Temperature while charging	0 to 25 °C	
Temperature while using	-10 to 35 °C	
Storage temperature	0 to 30 °C	
Relative air humidity	10 - 90%	
Security		
Temperature protection	Maximum and minimum temperature protection	
Security standard	EN 60950-01	

# CE – statements (EU)

Wattsun pop-up power B.V. hereby declares that the following products: WSD2000, WSD1500 and SWP meet the following ce-statements:

EN-IEC 60950-1:2006 + A1:2010 + A11:2009 + A12:2011 + AC:2011 + A2:2013

Date: 10-05-19 Koen Olieslagers

# **Handling the Wattsun Dock and Pack**

- 1. Do not disassemble or make any changes to the product. Danger of causing short circuit or electric shock.
- 2. Carry the product with both hands at all times.
- 3. The operator or user is responsible for accidents, personal injury or damage to the property of others.
- 4. Protect the product against heat, continuous sunlight and fire. In connection with the risk of explosion
- 5. Never allow anyone who hasn't read these instructions use this product.
- 6. Keep the product out of rech of children
- 7. The product is suitable for all weather conditions, it is recommended however, to keep the product away from water and moisture. Long-term contact with water or moisture can cause corrosion on the contacts. This could

- cause power loss and a shorter lifespan.
- 8. Avoid shocks and hits to the product. Do not drive over the power cable, do not squeez it or pull it.
- 9. In case of damage and improper use of the product, vapors may be released. Provide fresh air and consult a doctor in case of complaints. The fumes may irritate the respiratory system.
- 10. Keep the product clean. Pollution can lead to an electric shock.
- 11. Only connect the power cable from the power supply to a power outlet with a circuit breaker of 30 mA or less to reduce the risk of electric shock.
- 12. Don't use the product in bad weather conditions, especially in case of severe weather conditions.
- 13. Only use the product in daylight or adequate artificial light.
- 14. Check the product before use and after an incident for any damage and have it repaired if necessary. For service and repairs contact us via <a href="mailto:hello@wattsun.net">hello@wattsun.net</a>
- 15. Do not use the product while being in a state of overall poor judgement, when you are tired, ill or under the influence of alcohol, drugs or medication.
- 16. Do not cover the product when it's in use or while charging. The product could overheat and may stop function optimally.
- 17. Prevent any contact with body parts, paper clips, coins, keys, nails, screws and other small metal objects that can cause the contacts to bridge. A short circuit between the contacts may result in electrical shocks, burns or even fire.
- 18. Use the product on a dry and flat surface and always place it on the four feet.
- 19. Turn off the product, unplug the power cable the socket before moving the product. Turn off the product when the power cord is tangled or when the product is left unattended, even if just for a brief moment. Keep the power cord away from heat, oil, sharp objects and edges.

#### Check before use



## Description

- 1. Before use, check the casing, the contacts, the OLED display and the power button.
- 2. Clean the product with a soft brush.
- 3. Check the (Wattsun Charger 360) charger before use.
- 4. Charge the product. Including before long-term storage.
- 5. Check the power cord of the electrical device you want to connect to the Wattsun Dock before each use.

- 6. Do not use the product if there's a potential defect.
- 7. Before use, make sure the ventilation system is free of blockage.
- 8. Clean dust filters. (See maintenance)

#### **Maintenance**

## Cleaning the casing

It's important to regularly and carefully clean the casing of the product. Brush the dirt off the outside of the casing with a clean and soft brush. Then, clean the casing again with a damp, soft cloth. Always make sure the product is dry before storing. During cleaning, check for any damaged parts that may affect the proper operation of the product. Have damaged parts repaired before using the product. Please contact Wattsun customer service for service and repairs.

## Cleaning the dust filters

There are two dust filters (four in total) located on the front- and back- of the product, which, like the casing, must be cleaned regularly and carefully. With daily use, it's recommended to clean the dust filter four times a year. With weekly use, twice a year is sufficient.

Unscrew the ventilation grill from the product by hand with a hexagonal wrench 2.5. Remove the dust filter from the designated space and get rid of the dust from the dust filter. For stubborn dirt, blow or vacuum clean. Place the dry filter back in the product. Then screw the ventilation grill back with the "point" pointing upwards. (see image below) During cleaning, check whether any parts are damaged that may affect the proper operation of the product. Have damaged parts repaired before using the product.



# **Storage**

When storing the product for a longer period of time, there are two important factors that influence the overall condition of the battery.

- 1. The ambient temperature; choose a dry storage room with an ambient temperature of 15 ° C to 25 ° C, store the product without it being exposed to bright daylight.
- 2. The charge percentage of the battery; charge the battery to around 50% before storing it for a long period of time. Regularly check if the battery level remains around 50% if you don't use the product for more than 6 months.

We also recommend cleaning the product before storing it for a longer period of time. In addition, ensure that the product is placed on the floor so it can't fall.

# **Transport**

- 1. Turn off the Wattsun Dock before transport. The Pack is automatically turned off when it's not being used in a stack.
- 2. Make sure the product is secured properly. Prevent the product from sliding or tumbling.
- 3. The modules contain Lithium-Ion batteries. Always consult an expert on hazardous goods before shipping.
- 4. When using a third party for shipping, (e.g. air- or road transport) special requirements regarding packaging and marking are applicable.
- 5. Always make sure to comply with all laws, rules and regulations applicable in your country.
- 6. Always make sure the product is placed on it's four feet during transport.
- 7. Don't stack the product during transport or shipping.
- 8. Use suitable loading tools (loading dock or lift) to get the product in or out of a vehicle. The product should always be carried with both hands.
- 9. vehicle. The product must always be carried with both hands.

## Waste disposal

Do not dispose of the Wattsun Dock, the Wattsun Pack or the Wattsun charger 360 in household waste. Contact customer service and we will come to collect your products and ensure recycling and/or a second life of the battery.

# **Troubleshooting**

## The Wattsun Dock or Pack won't charge

**Cause: Solution** 

1. Faulty charger.

Replace the charger by ordering a new original charger.

2. Faulty power cord.

Replace the power cord.

3. Charger not properly connected.

Connect the charger properly.

4. Mains voltage out of range.

Check if the mains voltage is correct (between 220 – 240 Volt AC).

5. Temperature is too high or too low.

The product can only be charged if the ambient temperature is between 0 ° C and 25 ° C. Make sure the product is not exposed to (direct) sunlight and move the product to a colder environment.

6. The Wattsun Dock or Pack is on.

Turn of the Wattsun Dock or Pack before charging.

7. The Wattsun charger is off.

Turn on the charger by flipping the on / off switch.

8. The Wattsun Dock indicates ERROR.

Check the Wattsun Dock and restart it. Still having problems? Hold the power button down for 10 seconds to reset the Dock.

# De Wattsun Dock isn't working

**Cause: Solution** 

1. Didn't hold the power button long enough.

Hold the power button for 4 seconds to turn on the Wattsun Dock.

2. Temperature is too high or too low.

The product can only be used if the ambient temperature is between -10 ° C and 35 ° C. Make sure the product is not exposed to (direct) sunlight and move the product to a colder environment.

3. The power cord of your device isn't properly plugged in to the socket of the Wattsun Dock.

Plug the power cord into the socket of the Wattsun properly, all the way in.

4. The power of your electrical device is too high.

The maximum continuous power has been exceeded. (Check the technical specifications of the Dock to see the maximum continuous power of your Wattsun Dock).

5. The charger is still connected.

The Wattsun Dock won't function when the charger is still connected. Disconnect the charger and restart the Dock.

6. The start-up peak of your electrical device is too high.

Some electrical devices have a start-up peak too high, causing the Wattsun Dock to switch to security mode.

These products can't be used in combination with the Wattsun Dock. (See if you can find a similar device with a lower start-up peak).

7. The Wattsun Dock indicates ERROR.

Check the Wattsun Dock and restart it. Still having problems? Hold the power button down for 10 seconds to reset the Dock.

8. Moist in the Wattsun Dock.

The Wattsun Dock is equipped with four moist sensors. If the sensors detect any moist/ moisture inside of the product, the Dock will switch off automatically for safety reasons. Contact customer service for help.

#### The Wattsun Pack isn't working.

**Cause: Solution** 

1. The Wattsun Pack isn't stacked on top op a Dock.

The Wattsun Pack automatically switches on when it is stacked on top of a Dock correctly.

2. The Wattsun Pack isn't stacked on top of a Dock correctly.

The Wattsun Pack has to be stacked on it's four feet on top of a Dock in a correct manner.

3. The battery is empty.

Charge the battery before use. The LED bar indicates the battery level.

4. Temperature is too high or too low.

The product can only be used if the ambient temperature is between -10 ° C and 35 ° C. Make sure the product is not exposed to (direct) sunlight and move the product to a colder environment.

5. The charger is still connected.

The Wattsun Pack won't function when the charger is still connected. Disconnect the charger and then place the Pack on a Dock.

6. The Wattsun Pack indicates ERROR.

Check the Wattsun Pack and place it on the Dock correctly again. Still having problems? Reset the pack by

briefly touching the

touch button 7 times. All the lights on the LED bar will blink green when the reset is done.

# Wattsun pop-up power BV

Westervoortsedijk 73 CB, 6827 AV Arnhem The Netherlands KvK nr: 65291395

BTW nr NL8560.53.594.B01

Hello@wattsun.net www.wattsun.net

## **Documents / Resources**



WATTSUN WSD2000 Dock and Pack [pdf] User Manual WSD2000 Dock and Pack, WSD2000, Dock and Pack, Pack

## References

• <u>Mattsun pop-up power > Wattsun</u>

Manuals+, home privacy