



PowerBox

Portable power station
Moduloo Ex range

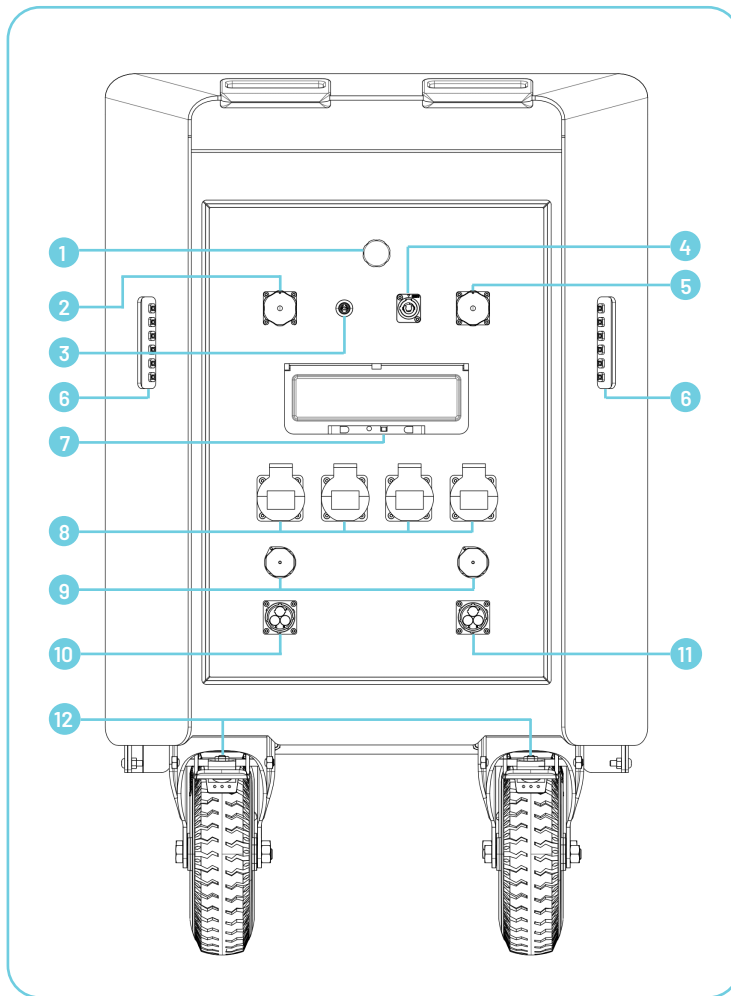
Quick start guide



V2.0 - 14/02/2024

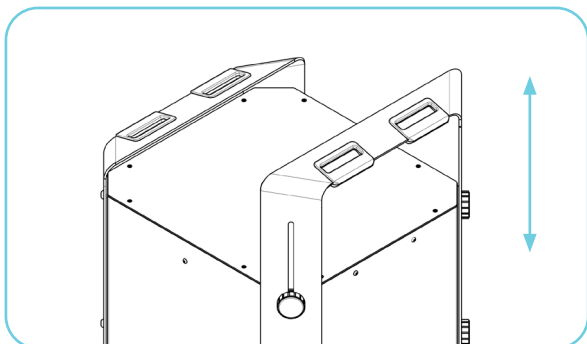
User interface

PowerBox

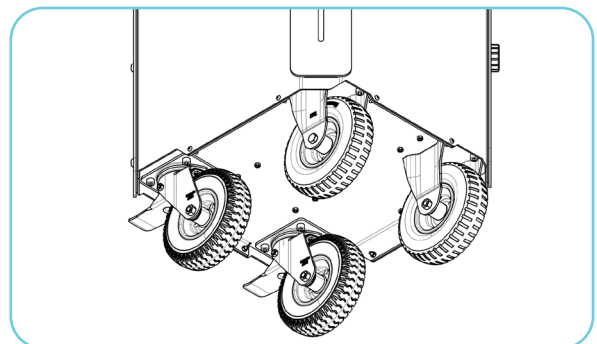


- 1 Emergency stop button
- 2 Solar input
120 - 500 VDC / 18 A
- 3 ON / OFF button
- 4 AC charge outlet
220 VAC / 16 A / 50 Hz
- 5 Signal connector
- 6 LED displays
Battery state of charge
- 7 Breaker box
- 8 Power outlets
220 VAC / 16 A / 50 Hz / 3.5 kW max
- 9 Ethernet connectors
- 10 Power connector n°1
220 VAC / 25 - 50 A / 5.5 - 11 kW
- 11 Power connector n°2
220 VAC / 25 - 50 A / 5.5 - 11 kW
- 12 Wheels with 2 swivel braked wheels

Telescopic handle



All-terrain wheels



Electrical specifications

PowerBox	E5	E11
Available energy /kWh	6	11
5 kW DC / AC single-phase converter	1	2
Output power /VAC	220	220
Frequency /Hz	50	50
16 A outputs	4	4
Peak discharge power /kW	3.5	3.5
25 A and 50 A outputs	2 x 25	2 x 50
Peak discharge power /kW	5.5	11
Recommended charge time /hours	4	4

Power outlet	E5	E11
Input power /VAC	220	220
Maximum continuous charge power /kW	1.6	2.8

Solar recharge	E5	E11
Input power /VDC	120 - 500	120 - 500
Maximum continuous charge power /kW	5.5	5.5
Maximum continuous charge current /A	18	18

Mechanical specifications



Dimensions

962 x 650 x
590 mm



Weight

70 kg (E5)
110 kg (E11)



Sealing

IP54



Temperature

Operating
- 10 to + 40 °C
Charge
0 to 40 °C



Chemistry

Li-ion NMC

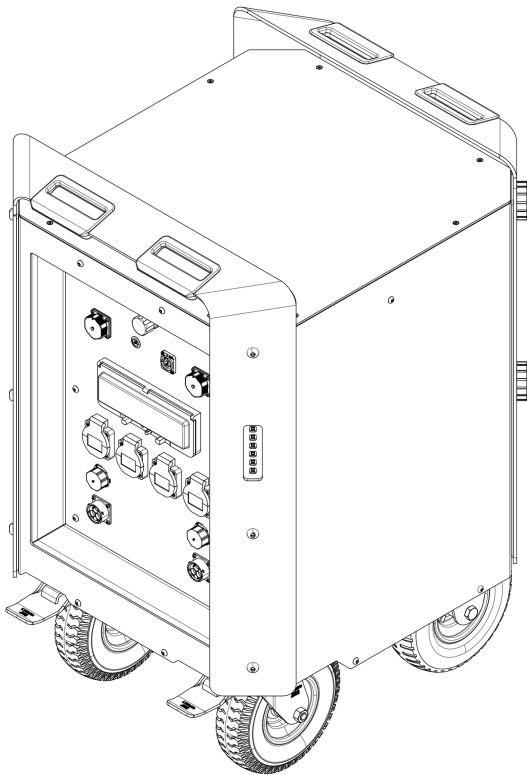


Outer case

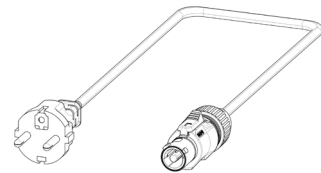
Aluminium

Package content

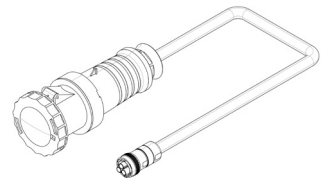
Included in delivery



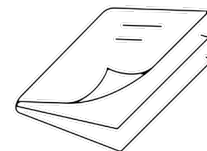
Portable power station
PowerBox



Outlet power cable
220 VAC 16 A



32 A 220 VAC adapter



Quick start guide

Optional accessories

Obtain additional accessories for your PowerBox by contacting TYVA Energie:



220 VAC 63 A
adapter



Additional
220 VAC 32 A
adapter



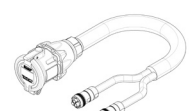
Communication
harness
(paralleling)



Power harness
(paralleling)



Marechal adapter
DS3 position 17



Marechal adapter
DS6 position 17

Starting up

1

Control before use

1. Make sure the emergency stop button is disarmed.
2. Put every switches of the breaker box on the position ON.
3. Adjust brakes according to your needs.
4. Keep the charge cable nearby.

2

Power up / down

1. Press the ON / OFF button once.
2. The indicator light on the button is blinking to indicate the system's switching on. It stays lit once the PowerBox is ready for use.
3. Press once more to switch off the station. Make sure not to store it while discharged.

3

Use

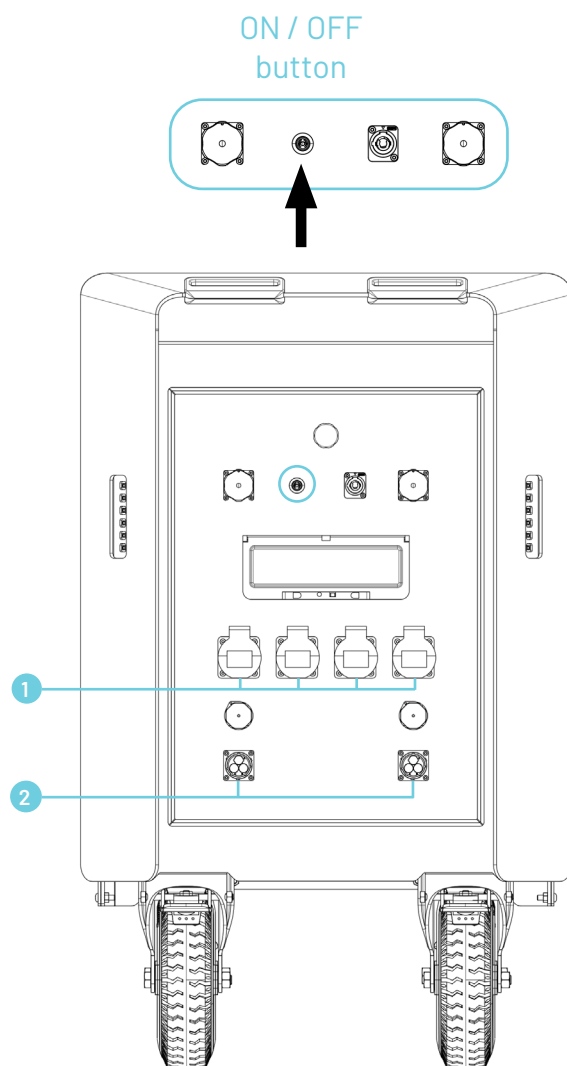
1. Take the suitable adapter among the accessories included in delivery.
2. For a current lower or equal to 16 A, connect the cable to the PowerBox on one of the four plugs ① provided for this purpose. For a current higher than 16 A, connect on one of the two plugs ② dedicated. Finally, plug the opposite end to your application.
3. You are now powering your application thanks to the PowerBox and you can use it as you wish.
4. Unplug the cable and switch off the PowerBox to end the use.



The PowerBox can only be used in a - 10 °C to + 40 °C temperature range. It follows a specific security protocol that cannot be bent outside this range.

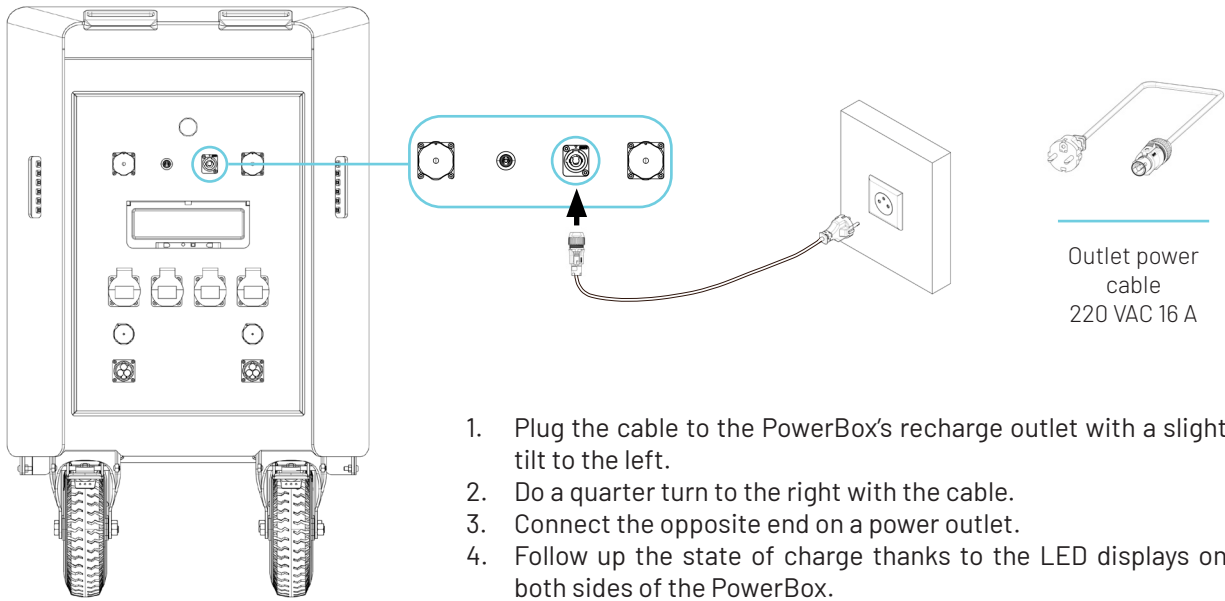
Charge is impossible if you exceed the 0 to + 45 °C temperature range.

Discharge is impossible if you exceed the - 20 °C to + 60 °C temperature range.

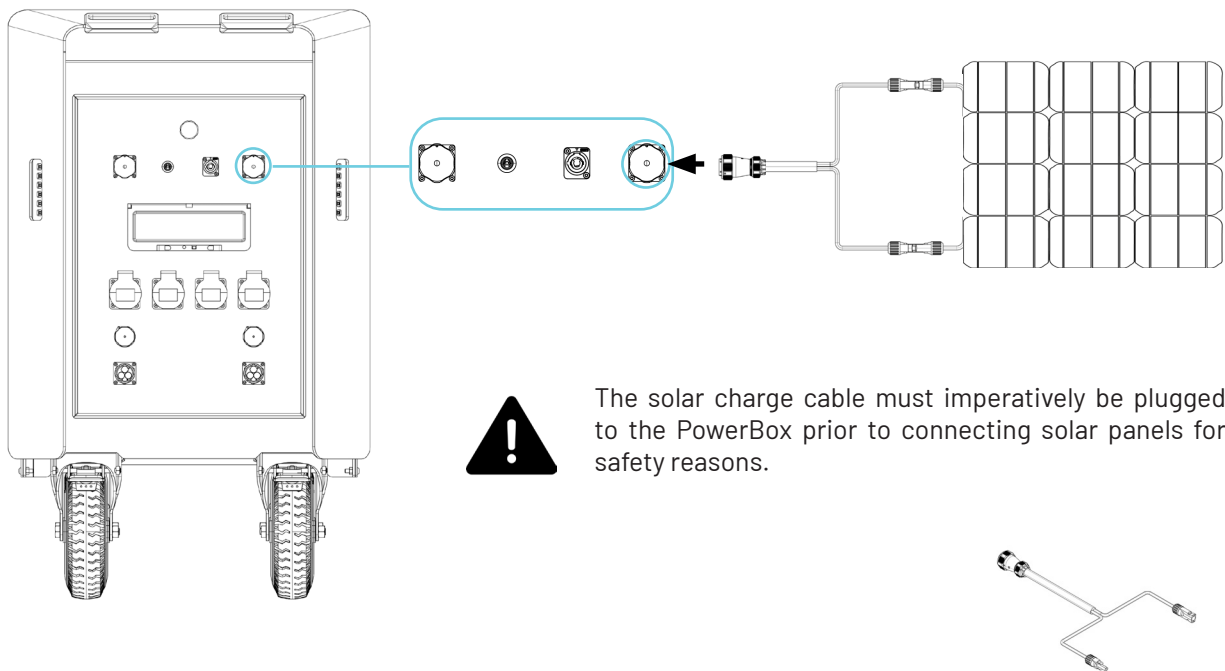


Recharge

Outlet charge



Solar charge

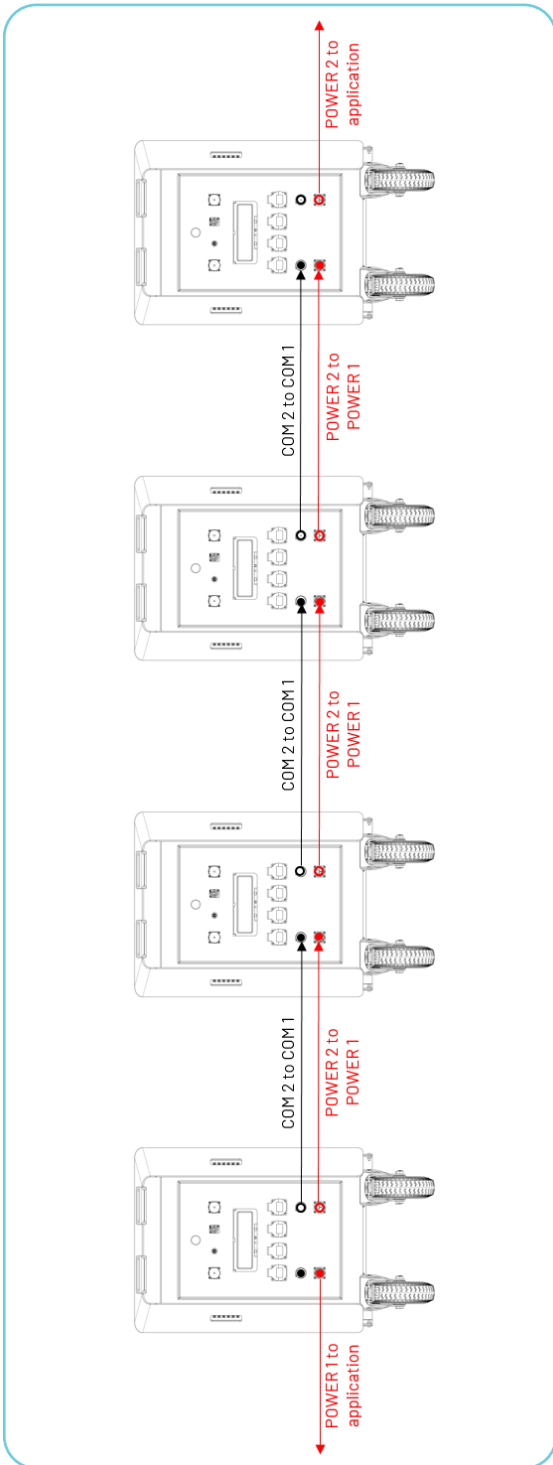


You can recharge the PowerBox with solar panels by connecting it to the plug provided for this purpose. To this end, you must get hold of the suitable solar power cable among TYVA Energie's optional accessories.

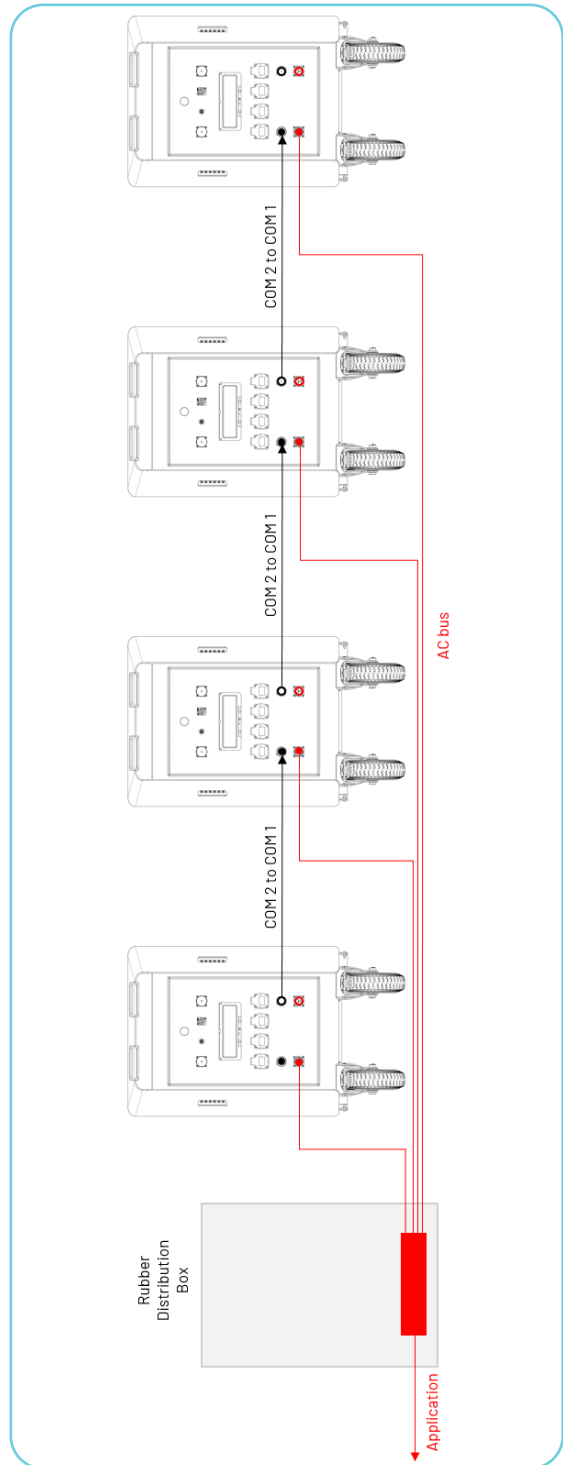
Parallelization

You have the possibility to parallelize up to 12 PowerBox E5 or 6 PowerBox E11 in order to acquire autonomy or power. Please refer to the user manual to learn more and contact TYVA Energie to obtain the necessary additional accessories.

Autonomy gain



Power gain



TYVA Smart Dashboard

Download

Download our TYVA Smart Dashboard monitoring app, the genuine mobile dashboard available on Android and iOS smartphones and tablets, then connect yourself to the system with Bluetooth!



Android devices

Download the app via the Google Play Store



iOS devices

Download the app via the App Store



By downloading the TYVA Smart Dashboard app, you accept the terms and conditions of TYVA Energie's Privacy policy. Learn more: <https://tyva-energie.com/en/privacy-policy/>

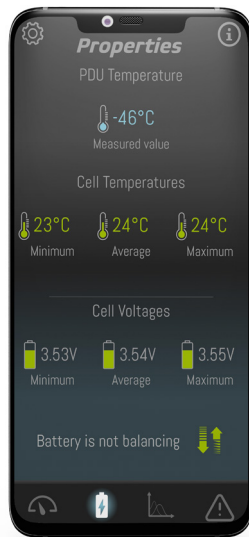
Interface

The TYVA Smart Dashboard digital app allows you to supervise the global system of your portable power station made up of TYVA Energie's lithium batteries. It includes four tabs:



Homepage

Global overview of information



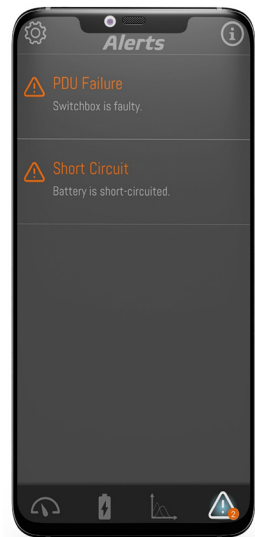
Properties

Temperature and voltage data



Graphs

Temperature, power, voltage and current follow up





















































Alerts

Warnings (blue icon) and errors (orange icon)

Status

Indicator light

The light in the middle of the ON/OFF button repeatedly blinks depending on the PowerBox's various states as described below:

Status	Type of pulse	Description
Idle	 	1 flash
PduCurrentError	   	2 flashes
VoltageError	     	3 flashes
TemperatureError	       	4 flashes
SystemError	         	5 flashes
Charge mode	         	Continuous light disrupted by 1 flash
Discharge mode	         	Continuous light disrupted by 2 flashes

Digital alerts

Notifications can be seen in the « Alerts » tab of TYVA Smart Dashboard app:



- Low Voltage
- High Voltage
- NTC Issue
- Warning Bluetooth
- Data Log Issue
- Under-temperature
- Over-temperature
- Under-voltage
- Over-voltage
- Over-current
- PDU Lock
- PDU Failure
- PDU Over-temperature
- Charge Error
- Cellule Issue
- Short Circuit
- Slave Silent
- AFE Issue
- Short Circuit on Precharge

Any question?



Access to the **Modulo Ex range's** guides, user manuals and support

Prior to this guide, you must imperatively refer to the safety instructions and the directives listed in the user manual of the PowerBox

