

# **Parallelization box**

User manual





## Please read this user manual carefully.

We would like to thank you for choosing a PESS Energy product and we hope that you will enjoy using your device in your daily work.

If, in spite of this manual, you encounter any misunderstandings or situations that have not been mentioned in this document, please contact us by e-mail at contact@pessenergy.com or by telephone on +334 91 58 86 74. Please read all the instructions in this manual carefully.

Follow all warnings and information contained in this manual. PESS Energy cannot be held responsible for any damage or injury caused by incorrect use. This user manual applies to the Powerbank ROCK-E, hereinafter referred to as 'the device'.

In order to continuously improve our products and ensure customer satisfaction, we reserve the right to make technical changes to the device without prior notice.

For more information about our company and our products, you can find us on our official website www.pessenergy.com.



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# I. Safety instructions

- If one of the LEDs on the paralleling box lights up, this means that 230VAC voltage is present on the associated input connector. If one of the connectors is not wired and its LED is still lit, this means that there is also 230VAC on the non-wired connector. Please lower the circuit breakers on the paralleling box before connecting a device to avoid the risk of electric shock.
- Never disconnect a power socket without lowering the associated circuit breaker on the paralleling box and switching off the associated powerbank. Risk of electric shock
- Do not put your fingers in the sockets (risk of electric shock)
- Do not immerse the box
- The use of the paralleling box does not dispense with the use of the earth spike on each powerbank.
- Beware of heavy lifting (safety shoes and electrically insulated protective gloves for handling)

# II. Device presentation

#### 1. General characteristics of the device

This device is a parallelization box that enables Flywatt zero emission generators to be linked in power and capacity. It comes in two boxes, a 2-pack for connecting two devices and a 6-pack for connecting from 3 to 6 devices.



#### 2. Technical characteristics of the device

	Box of 2	Box of 6	
	1x Maréchal DS6 90A	2x Maréchal DS6 90A	
Output	or 1x P17 63A single-phase	or 2x 125A P17 single-phase	
	or 1x 125A P17 single-phase	or 1x Powerlock T+P+N (400A)	
Input	2x 50A 230V AC single-phase sockets	6x 50A 230V AC single-phase sockets	
	- INPUT : 2P Type C iC60N 10kA 50A circuit breakers for	- INPUT : 2P Type C iC60N 10kA 50A circuit breakers for	
	protection of Input sockets	input sockets protection	
	-OUTPUT : Earth leakage circuit breaker 80A	- OUTPUT : Earth Leakage Circuit Breaker 80A 30mA 2P	
Electric protections	30mA 2P Type AC (per Marechal socket)	Type AC (Marechal socket)	
	OR Earth leakage circuit breaker 125A 30mA 2P Type AC	OR Earth Leakage Circuit Breaker 125A 30mA 2P Type AC	
		OR Earth Leakage Circuit Breaker 125A Type AC with adjus-	
		table selectivity Vigirex RH21M 0.03A to 0.3A 0.06s.	
Dimensions	21 x 48 x 19 cm	40 x 32 x 32 cm	
Weight	7 kg	25 kg	
	Shock-proof rubber, waterproof, black	Shock-proof rubber, waterproof, black	
Physical	Handles, stackable	Handles, stackable	
	Voltage presence indicators per socket	Voltage presence indicators per socket	
Waterproofing	IP54	IP54	





	Box of 2			Box of 6		
Output	1x 90A Maréchal DS6	1x P17 63A single-phase	1x P17 125A single-phase	2x 90A Maréchal DS6	2x P17 125A single-phase	lx Powerlock T+P+N (400A)
Max power/ socket	21 kW	15 kW	29 kW	21 kW	29 kW	92 kW
Max box power	21 kW	15 kW	22 kW	42 kW	58 kW	58 kW
Output circuit breakers	90A	63A	125A	2x 90A	2x 125A	1x 125A
Differential selectivity	30mA	30mA	30mA	2x 30mA	2x 30mA	Adjustable (30mA to 5A)
Circuit brea- kers	2x 50A	2x 50A	2x 50A	6x 50A	6x 50A	6x 50A



	Вох	of 2		Вох	of 6	
Number of connected devices	1	2	3	4	5	6
Theoretical Pmax Flywatt output	11 kW	22 kW	33 kW	44 kW	55 kW	66 kW



# **III. Wiring**

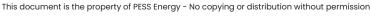
#### 3. Wires

XLR	Male	SUD	Male
COM 1 COM 2		СОМ 3	COM 4

# 4. Wiring steps - switching on

To parallelize the devices, all your generators need to have approximately the same percentage of battery (in order to have the same voltage).

- 1. Lower all the circuit breakers on the parallelization box
- 2. Connect the communication cables between the powerbanks according to the diagrams above
- 3. Connect the power cables from the Weiland connector on the powerbank to the parallelization box.
- 4. Switch on the powerbank by pressing the power button on the powerbank
- 5. Once the powerbanks have started up, turn up the circuit breakers on the parallelization box.







# 5. Wiring steps - switching off

- Lower all the circuit breakers on the paralleling box
- Switch off the powerbanks by pressing the power button
- Disconnect the power cables from the Weiland connector on the powerbank to the paralleling box.
- Disconnect the communication cables between the powerbanks



#### 6. Parallelize 2 Powerbank

	Device 1	Device 2
XLR	СОМ 1	COM 1
XLR	СОМ 2	COM 2
SUD	СОМ 3	COM 4
SUD	COM 4	СОМ 3

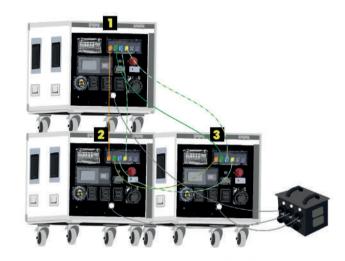


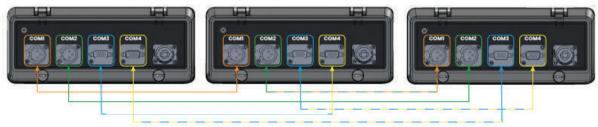




## 8. Parallelize 3 Powerbank

	Device 1	Device 2	Device 3
XLR	COM 1	СОМ 1	
XLR	COM 2		COM 2
XLR		COM 2	СОМ 1
SUD	СОМ 3	COM 4	
SUD		СОМ 3	COM 4
SUD	COM 4		СОМ 3





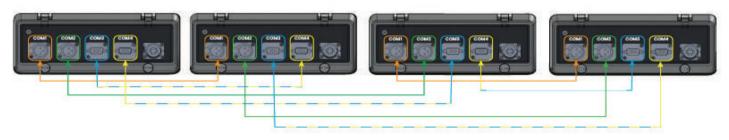




## 9. Parallelizer 4 Powerbank

	Device 1	Device 2	Device 3	Device 4
XLR	СОМ 1	COM 1		
XLR			COM 1	COM 1
XLR	COM 2		COM 2	
XLR		СОМ 2		COM 2
SUD	СОМ 3	COM 4		
SUD		СОМ 3		COM 4
SUD	СОМ 4		СОМ 3	
SUD			COM 4	СОМ 3









#### 10. Parallelize 5 Powerbank

	Device 1	Device 2	Device 3	Device 4	Device 5
XLR	СОМ 1	COM 1			
XLR	COM 2		COM 2		
XLR		COM 2		СОМ 1	
XLR				COM 2	СОМ 1
XLR			СОМ 1		COM 2
SUD	СОМ 3	COM 4			
SUD		СОМ 3		COM 4	
SUD				сом 3	COM 4
SUD	COM 4		СОМ 3		
SUD			СОМ 4		сом 3









# 11. Parallelize 6 Powerbank

	Device 1	Device 2	Device 3	Device 4	Device 5	Device 6
XLR	СОМ 1	СОМ 1				
XLR	COM 2		COM 2			
XLR					СОМ 2	COM 2
XLR		СОМ 2		СОМ 1		
XLR				СОМ 2		COM 1
XLR			СОМ 1		СОМ 1	
SUD	СОМ 3	COM 4				
SUD		СОМ 3		COM 4		
SUD				СОМ 3		COM 4
SUD	COM 4		СОМ 3			
SUD			COM 4		СОМ 3	
SUD					COM 4	СОМ 3















# PESS ENERGY PILLOT ENERGY STORAGE SOLUTION

- pessenergy.com
- pessenergy
- 164 Boulevard Mireille Lauze 13010 Marseille FRANCE
- contact@pessenergy.com
- **0** 04 91 58 86 74