

# Peak Power Pack

www.victronenergy.com

A lithium-ion battery pack with intrinsically safe LiFePO4 cells, a built-in charger, and suitable for high discharge currents.

**Nominal voltage: 12.8 V**

**Battery capacity: 20 Ah to 40 Ah (not suitable for parallel or series connection)**

### Lightweight and easy to install

- Ideal for mobile applications.

### Effective protection against improper use

- Ideal for solar power and other applications where excessive discharge might quickly cause damage to lead acid batteries.

### Output 1 "mover": high-capacity output for caravan manoeuvring and other applications that are energy-intensive

- Ideal for caravan manoeuvring (caravan movers).
- Short-circuit proof.
- Protected against excessive battery discharge.

### Output 2 "domestic": for low DC loads

- Intended for lighting, audio and video, pumps, fridges.
- Short-circuit proof.
- Protected against excessive battery discharge.

### Input 1 "car/solar": charging while driving or charging with a solar panel.

- Equipped with voltage and current control for safe charging of the lithium-ion battery. In fact, any source of electric power can be connected to this input (e.g. an alternator or a battery charger), as long as  $11V < V_{in} < 25V$ . The current limit is automatically set to a safe value.

### Input 2 "adapter": the adapter supplied with the Peak Power Pack can be connected to this input

- Battery charging current: 3A, and suitable for 110/230 V power supply.

### Rapid charging is possible via output 1 (high capacity output and 30 Ah/40 Ah models only)

- A battery charger or inverter/charger can be connected to the high capacity output. The maximum charging current is 15 A and 20 A respectively and the recommended charging voltage is 14 V (maximum 14.2 V).

### Storage mode

- Reduces power consumption to almost zero. Prevents damage due to excessive discharge of the battery during storage.

### Remote control with status indicator

- Push button (supplied) with a dual-colour LED status indicator:
  - o Short push of the button: high capacity output activated for 30 minutes (mover applications), red LED.
  - o Hold down for 2 seconds: high capacity output always activated, slow flashing red LED.
  - o Hold down for 5 seconds: storage mode, blue LED flashes 10 times.
  - o Battery is charged via input 1: slow flashing blue LED.
  - o Battery fully charged: blue LED.
  - o Overload or overheating: flashing red LED.

### VE.Direct port: can be connected to a PC or smartphone

('VE.Direct to USB' or 'VE.Direct Bluetooth Smart dongle' required)

- Operation:
  - o Output 1: on / 30-minute timer / off
  - o Output 2: on/off
  - o Input 1: on/off
- Monitoring:
  - o Battery voltage
  - o Temperature and alarms



12.8 V, 20 Ah



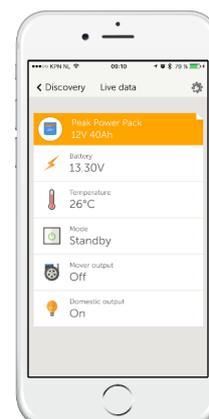
12.8 V, 30 Ah



12.8 V, 40 Ah



High capacity output (mover) and low capacity output (domestic)



Peak Power Pack	PPP-20	PPP-30	PPP-40
Capacity	20 Ah	30 Ah	40 Ah
Stored energy	256 Wh	384 Wh	512 Wh
Battery type	Lithium-ion (LiFePO4)		
Nominal voltage	12.8 V		
Capacity loss	(per 100 cycles, @ 25 °C, 100 % DoD): <1 %		
Energy loss	(per 100 cycles, @ 25 °C, 100 % DoD): <1 %		
Round trip efficiency	92 %		
Self-discharge when activated	< 13 Ah /year (< 1.4 mA)		
Self-discharge in storage mode	< 6.5 Ah /year (< 0.7 mA)		
<b>Output 1: high capacity "mover"</b>			
Continuous output current	150 A		
Maximum output current (10 seconds)	200 A		
Short-circuit current	300 A		
Safety features	Overload / short-circuiting / temperature / excessive discharge		
Maximum charging current	n.a.	15 A (no protection)	20 A (no protection)
Recommended charging voltage	14 V (no protection)		
Maximum charging voltage	14.2 V (no protection)		
Maximum cable diameter	16 mm <sup>2</sup> (screw clamps)		
<b>Output 2: on-board power network "domestic"</b>			
Continuous output current	30 A		
Maximum output current (10 seconds)	50 A		
Short-circuit current	80 A		
Safety features	Overload / short-circuiting / temperature / excessive discharge		
Maximum charging current	n.a.	10 A (no protection)	10 A (no protection)
Recommended charging voltage	14 V (no protection)		
Maximum charging voltage	14.2 V (no protection)		
Maximum cable diameter	6 mm <sup>2</sup> (screw clamps)		
<b>Input 1: "car/solar"</b>			
Input voltage range	11 V < Vin < 25 V		
Current limitation	7A		
<b>Input 2: "adapter"</b>			
Output voltage	15 V		
Output current	3 A		
Input voltage	110 / 230 V 50 / 60 Hz		
<b>General</b>			
Operation	Multifunctional push-button with dual-colour LED		
VE.Direct port	Communication with a smartphone (VE.Direct Bluetooth Smart-dongle required) Connection to a PC (VE.Direct to USB cable required)		
Operating temperature	Battery charging: 0 °C to 40 °C Battery discharge: -20 °C to +40 °C Storage: -20 °C to +40 °C (charging and discharging not possible outside the given temperature range)		
Humidity (no condensation)	Max. 95 %		
Weight	3,8 kg	5,4 kg	8,6 kg
Dimensions (h x w x d)	132 x 190 x 172 mm	172 x 190 x 172 mm	212 x 190 x 172 mm
<b>Standards</b>			
Safety	NEN-EN-IEC 60335-1, NEN-EN-IEC 60335-2-29, NEN-EN-IEC 62109-1		
Emission / Immunity	NEN-EN 55014-1, NEN-EN 55014-2, NEN-IEC 61000-3-2, NEN-IEC 61000-3-3, NEN-EN 50498		



VE.Direct and push-button

Adapter and car/solar inputs  
(plug for the car/solar input is included)



Fixing strap  
Adapter  
Power cable  
Push-button with cable (2m) and dual-colour LED