

## PESS i-Pack

### Portable Energy Storage System



“Portable Energy Storage System” i-Pack, is designed to supply 220 VAC energy for emergency tools and communication devices used at disaster sites. i-Pack includes, a lithium battery pack for energy storage, a rectifier/charger for charging the battery pack and Inverter for delivering stored energy to the emergency tools. All these devices controlled by BMS (Battery Management System) hardware and embedded software designed by BATKON.

i-Pack systems can be carried by two personnel with the two side handles of IP-67 compatible carrying case. Top cover should be removed at site before use PESS i-Pack as an energy source.

Top panel of i-Pack has 2 220VAC outlets. Any outlet extender can be attached to these ports. Total output power is limited as 1kW.

i-Pack can be charged with 220 AC by connecting charge cable onto IEC320-C14 compatible “220VAC Input” port. System can charge portable devices such as mobile phones via USB charge ports.

i-Pack has a BMS electronics under the top panel. If an Ethernet patch cable is connected to RJ45 port of the BMS and “192.168.0.10” IP no entered on a web browser such as Chrome, MS Edge, Mozilla etc. System status and operational data can be observed.

System protects itself if a load bigger than 1kW would be connected to output port by shutting down the output current.

BMS of i-Pack has 5 level LED indicator for State of Charge representation. Two more LEDs show status of the system and Alarm situations.

Internal temperature controlled by the BMS and if necessary cooling fans can be activated automatically.



### PESS i-Pack130A Features

- 1 KVA 220VAC Output Power
- 1 KVA 220VAC Charge Power
- ~3 kWh energy storage capacity
- 2 pcs USB charger port for mobile devices
- RJ45 Ethernet connection for monitoring
- TCP/IP Web interface
- Event logging onto USB memory
- Impact and UV proof polimer, IP-67 compatible case

#### Technical:

##### Physical :

- 40 x 60 x 50 cm (Height x Width x Depth)
- 40 kg

##### Electrical:

- Input Voltage: 90 ... 264 VAC
- Input Frequency: 47 ... 63 Hz
- Charge Efficiency: ~%85
- Charge Power: max 1000W
- Output Voltage: 220 VAC
- Output Frequency : 50 Hz
- Discharge Efficiency : ~%91
- Discharge Power: Typical 1000W, 1150W-180 sn, 1500W-10 sn
- Lithium Battery Pack DC Voltage: 25 VDC

##### Environmental:

- Working Temp.: 0 ... +50 °C, Humidity: max %90 RH

##### Interfaces:

- USB-A USB memory
- Ethernet RJ45 (10/100 Mbps) – TCP/IP Web

##### Standards:

- EN 62040-1 LVD (UPS –Part 1-1: General and safety requirements for UPS used in operator access areas )
- EN 62040-2 EMC (UPS - Part 2: Electromagnetic compatibility (EMC) requirements )
- EN 62368-1 Safety (the hazard-based product-safety standard for ICT and AV equipment )
- IP-67