

# ENERGY STORAGE BATTERY PACK WITH REC SI BMS INTEGRATED



## **FEATURES:**

- nominal battery voltage: 51.2 V
- battery cells configuration: 16S LiFePO4
- capacity: 105 Ah
- constant load 2C, peak load 3C (10s)
- integrated 400 A contactor with pre-charge
- integrated REC SI BMS with charger enable and SMA Sunny Island and Studer 48 V XTENDER ready
- simple to use and programmable with REC PC Software Master Control
- main ON/OFF switch
- available in April 2017

## **TECHNICAL DETAILS:**

- 51V nominal voltage
- 105Ah 5,3 kWh
- 2C-3C EV-Hybrid Battery Pack
- UL, CE, SGS-RoHS, RBRC, ISO, and TS Certified
- Custom Lithium LiFePO4 Cylindrical Battery Pack

#### Comes with a Protective Advanced BMS installed:

- Max Continuous discharge amperage is 2C
- Max Peak discharge amperage is 3C for 1~10 seconds

# Optional Charger 3,3 Kw:

- Vented or Waterproof
- 58,4 V, 60 A peak output
- Will charge your pack in around 1 ½ hours from 90 % depletion

## Certified Cylindrical Battery Pack:

• combines cylindrical cells for higher voltage and capacity applications than those of a single cell

ENERGY TYPE	51V 105Ah 5,3 kWh 2C-3C EV-Hybrid Lithium LiFePO4 Custom Built Cylindrical Battery Pack
Max continuous discharge amperage	2 C₅A – 210 Ah
Max peak discharge amperage	3 C₅A – 315 Ah
Standard charge	0.2 C – 21 A
Fast charge	1 C – 105 A
Discharge cut-off voltage (2.65 V per parallel set)	43 V
Base voltage (3.12 V)	51 V / 5.36 kWh
Charge cut-off voltage (3.65 V)	58.4 V
Series / parallel / cell count	16 / 21 / 336
Cycle life (80 % DOD) (based on 1C discharge and charge)	2000
Self-discharge rate (30 days)	3 %
Operating temperature	-20 to 45°C (-4 to 113 F)
Charging temperature	0 to 45°C (32 to 113 F)
Storage temperature	-20 to 75°C (-4 to 150 F)
Impedance (max, @ 1000 Hz)	≤ 25 mΩ
Dimensions (w × l × h)	630 mm x 432 mm x 256 mm
Weight	70 kg
IP protection	IP23

## STORAGE AND TRANSPORTATION REQUIREMENTS:

Battery Pack should be transported at a 50% charge.

Ensure that the contacts are not shorted and that the battery pack is not immersed in or exposed to any liquid. The battery should always be between -4°F and 113°F (-20°C and 45°C). The Battery Pack should be kept upright. Do not drop the pack or stack things on top of it!

#### **SAFETY INFORMATION:**

- Avoid overcharging or over-discharging your battery pack. Lithium batteries are sensitive to being overcharged or overly discharged. Over-charging or over-discharging lithium cells may lead to a much shorter lifetime.
- Do not immerse lithium batteries in water or allow them to get wet for any prolong period of time.
- If a battery cell smells bad, is very hot, or appears deformed, remove it from the system and your Battery Pack. If the battery is under manufacturer's warranty take a picture of the battery and contact the manufacturer as soon as possible.
- In the event of a cracked or physically damaged battery cell, do not allow any lithium battery electrolyte to come in contact with your skin. If you do come in physical contact with the lithium electrolyte wash the exposed area with clean soapy water as soon as possible.
- To avoid electrical shorts, do not ship or store any metal objects near Battery Pack.
- Do not incinerate or expose lithium batteries to a fire or high heat source.
- Store lithium batteries at 50 % SOC, (State of Charge). Check and recharge every 6 months.
- Check the voltage of the battery pack before connecting the Battery Pack to ensure that it is within the safe range. Inspect the BMS for damage before charging the pack.
- Clean any dirty electrodes or components with a dry cloth.
- To avoid possible electrocution, always use extreme caution when working with your battery pack or the BMS system. Wear rubber gloves and have a professional licensed electrician to assist you when working with the Battery Pack.

#### **PRICE:**

Regular sales price for 5.2 kWh battery pack without charger = 2.800,00 € + VAT

#### **DEVELOPED BY:**

