

# eSTORE 512-1000-50-O

**LiFePO4 HV battery rack + 50kW HV inverter**



|                         |                               |
|-------------------------|-------------------------------|
| Order code:             | <b>eSTORE 512-1000-50-O</b>   |
| Order code HV inverter: | <b>HV-50-3P-01</b>            |
| Description:            | High performance battery pack |
| Technology:             | LiFePO4                       |
| Cell:                   | Grade A prismatic cell        |
| Cycles:                 | Over 6500 cycles with 80% DoD |
| Rack batteries:         | <b>RB 512-100-R</b>           |
| BMS:                    | High end BMS                  |
| Compatibility:          | Robotina xEMS, Modbus         |

## Features

Industry grade ESS with high energy and power density, scalability and excellent performance. When integrated with Robotina xEMS, this LiFePO4 battery implements client's energy strategy.

## Technical specification for battery

|                           |                        |
|---------------------------|------------------------|
| Nominal capacity:         | 51.2kWh                |
| Nominal voltage:          | 512V                   |
| End of discharge voltage: | 440V                   |
| Charging voltage:         | 584V                   |
| Continuous Charge I:      | 100A                   |
| Continuous Discharge I:   | 100A                   |
| Peak Charge/Discharge I:  | 150A                   |
| Internal impedance:       | >10mOhm                |
| Charge temperature:       | 0..45°C                |
| Discharge temperature:    | -10..50°C              |
| Parallel Connection:      | up to 10 (more option) |
| MBS communication:        | CAN/S485               |
| Self discharge:           | <2.5%/Mo               |
| Weight:                   | 700kg                  |
| Dimensions (WxHxD):       | 700x2250x700mm         |
| Installation method:      | floor-standing         |
| Environment:              | Outdoor IP54           |
| Air conditioning:         | 1.5 kW, DC power       |

# Technical specification for inverter

## AC output data

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| Rated output power of AC and UPS (W): | 50000                             |
| Rated AC Input/Output current(A) :    | 75.8/72.5                         |
| Max AC Input/Output current(A):       | 83.4/79.8                         |
| Output frequency and voltage:         | 50/60Hz; 230Vac/400Vac (3 phases) |

## PV input data

|                         |             |
|-------------------------|-------------|
| Max DC input power (W): | 65000       |
| PV input voltage (V):   | 1000        |
| Starting voltage (V):   | 180         |
| PV input current (A):   | 36+36+36+36 |

## Connected battery input data

|                              |         |
|------------------------------|---------|
| Battery voltage range (V):   | 160-800 |
| Max charging current (A):    | 50      |
| Max discharging current (A): | 50      |

## General technical data

|                            |            |
|----------------------------|------------|
| Working temperature (°C):  | -40 ~ 60   |
| Communication with BMS:    | RS485, CAN |
| Weight (kg):               | 80         |
| Degree of protection (IP): | IP65       |

## Dimensions

