

# ESS 10kW~40kW

## Battery Energy Storage All-in-One Three Phase



### • Features

- Unique integrated inverter, MPPT and battery pack design
- LiFePO4 Battery inside
- Optional WIFI module for real-time remote monitoring • High reliability intelligent BMS .
- Unique automatic calibration active balancing technology BMS system.

### • Applications



On&off-grid



PV generation



Peak & Valley Reduction



Back-up power

**• Technical Parameter**

ESS Battery Energy Storage All-in-One						
Model	ESS 10KW	ESS 16KW	ESS 20KW	ESS 25KW	ESS 30KW	ESS 40KW
Input						
Nominal Voltage	48V three phase/400V three phase					
Voltage Range	-10%+15%					
Frequency	50Hz±2%					
THDlin	≤3% at 100% of the nominal load					
Power Factor	>0.99 from 50% to 100% of nominal load					
Output with mains(AC-AC)						
Nominal Voltage	400V three phase					
Nominal Power	10KVA	16KVA	20KVA	25KVA	30KVA	40KVA
Active power	10KW	16KW	20KW	25KW	30KW	40KW
DC-AC Efficiency	≥96.5%					
Voltage variation (static)	±1%					
Voltage variation (dynamic 0- 100%;100-0%)	±1%					
THDv on nominal power (linear load)	According to the actual load					
THDv on nominal power (not linear load P.F.= 1)	According to the actual load					
Frequency	50Hz					
Frequency tolerance	±2%					
Current Crest Factor	>3:1					
Overload capability: 10 min 60 sec	120% 1oad rate with no bypass intervention, 60 sec 150% load rate with no bypass intervention,over current protection					
Battery						
Type	Lithium ion					
Unit capacity	48KWH	64KWH	80KWH	96KWH	128KWH	160KWH
Nominal BESS Battery Voltage	51.2VDC					
Battery charger type	PWM hi efficiency,one in each power module					
Charging Cycle	Intelligent with boost charge and advanced management					
Max Charging Current	140A					
Independent battery configuration (max)	Parallel connection up to 10 PCS					
Mechanical and Miscellaneous						
IP	IP54					
Color	RAI Grey/Black					
Technology rectifier/ booster/ inverter	MOSFET					
Communication Interface	RS485(user)x1 CAN x1 SNMP Slot x1					
Input/Output connections	3P+N+PE Connectors on Terminal Block					
Cooling Method	Air Conditioning with fan					