

Li-ion Inverter **Battery**

UDAY **SHAKTI**



51.2V 100Ah

High Capacity



4000+

Life Cycles



Key Highlights



Reliable LiFePO₄ Cell Technology



Active Cell Balancing for Enhanced Battery Life



Intelligent Smart BMS Protection



Seamless Integration with Saatvik Hybrid Inverters



Expandable Energy Storage Architecture



High Backup Power Capability



Optimized for Daily Solar Energy Storage



Durable Wall-Mounted Construction



IP50 Protected Enclosure



Wide Temperature Performance



Maintenance-Free Natural Cooling Design



Long-Term Performance Assurance

Technical Data Sheet

Electrical Specification

Nominal Voltage	51.2V
Nominal Capacity	100Ah
Energy	5.12KWh
Current Limiter	Available
Maximum Modules in Parallel	16

Charge Specification

Standard Charge Current	50 A
Maximum Charge Current	60A @ 25°C<T≤45°C
Max Charge Voltage	57.6VDC

Mechanical Specification

Dimensions (LxWxH)	610*384*200 mm
Weight (approx.)	60 (+/- 2) kg
Case Material	MS
Enclosure Protection	IP50

Front Panel Specification

Status Indicators	SOC/ALM/RUN
Communication Ports	RS485 1*1, RS485 2*2, RS232*1, CAN*1
Reset Key	Available
On/Off Switch	Available
Power Switch	MCB (125A)
LED Interface	Available

Key Specification

High Safety Ensured by integrated Smart BMS
High Energy Density by Adopting LFP cells
Extendable capacity through parallel connection
Wide working Temperature range

BMS Specification

BMS Type	Smart BMS
Balance Type	Active Balancing
Max Balancing Current	2 A

Discharge Specification

Standard Discharge Current	50 A
Maximum Discharge Current	100 A
Low Voltage Disconnect	44.8V
Operating Voltage	44.8V – 57.6V

Temperature Specification

Charge Temperature	0 to 60°C
Discharge Temperature	-20°C to 60°C
Storage Temperature	Within 6 months: -20°C-35°C
Allowed Humidity Range	Storage ambient humidity<65%RH

Installation Specification

Installation Method	Wall Mount
Mounting Bracket	Included
Orientation	Vertical
Indoor / Outdoor	Indoor

Performance Specification

Long Cycle Life: 4000+ cycles @ 80% DOD
High Charge/Discharge efficiency ≥ 95%
Stable structure of LFP crystal with high decompose temperature
Higher Cost Effectiveness than other Li-ion chemistries
Easy handling and installation

