

AH-RESI™

Residential Battery Energy Storage System (BESS) Series

Model: RESI-55 (5kVA / 5 kWh)

AH-RESI™ Series is an intelligent Battery Energy Storage System (BESS) which is based on stable Lithium-Ion Phosphate (LiFePO₄) chemistry batteries for maximum safety and longevity. It is an integrated system of Battery Pack + Inverter + Intelligent Controller.

It's sleek and ergonomic design combined with ease of handling and "plug & play" architecture makes it an ideal choice for residential Energy Storage Application.

The system is designed to be charged by solar system, along with electric grid, DG set or any other AC power source.



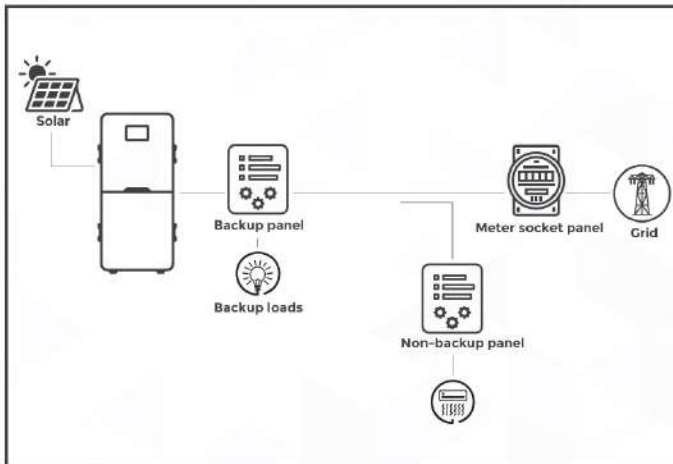
KEY FEATURES

- ✓ Compact & ergonomic 'Plug & Play' design.
- ✓ Portable unit with option for wall mounting / stand mounting.
- ✓ Integrated battery and inverter along with the Controller in the same unit.
- ✓ Very safe for residential use and complies to NFPA and also IEC 62933.
- ✓ Emergency switch for cut off.
- ✓ Expandable & scalable design.
- ✓ Monitoring software.
- ✓ Graded cells for Battery Pack for longer life and higher output
- ✓ > 95% DC efficiency.
- ✓ Communication BMS system with EMS.
- ✓ Laser welded cells.
- ✓ Priority settable for Grid Solar and Battery.
- ✓ Offgrid capability with solar.
- ✓ 05 years Battery warranty extendable to 10 years

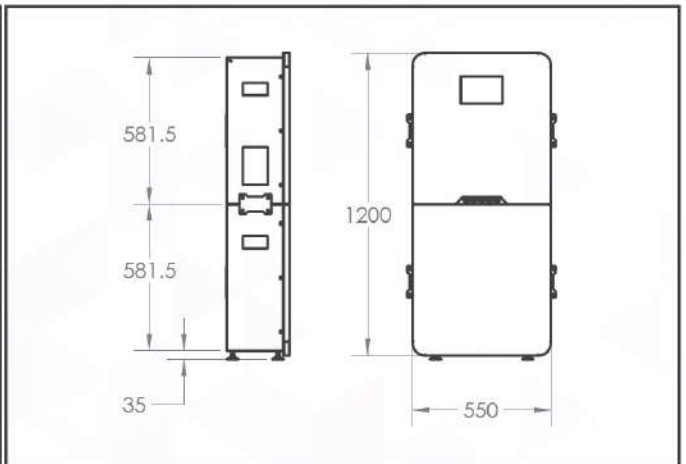
TECHNICAL PARAMETERS

Single phase		PV & AC Input	
Rated Power	5 kVA / 5 kWh	Solar Charging Type	MPPT
Input		Max. PV Charge Current	80 A
Voltage	230 VAC	Max. AC Charge Current	60 A
Voltage Range	110 - 280 VAC	Max. Charge Current	140 A
Frequency Range	50 Hz / 60 Hz (Auto sensing)	Max. PV Array Open Circuit Voltage	145 DC
Output		Max. PV Array Power	4000 W
AC Voltage Regulation	230 VAC + 5%	MPP Range @ Operating Voltage	60 - 115 VDC
Output THDV	<3% for linear load, <8% for non-linear load	Discharge AC Current	25 A
Surge Power	10 kVA for 5 sec.	Physical Details	
Efficiency (Peak)	98% Line Mode, 90% Battery Mode	Net Weight	90 kg
Waveform	Pure sine wave	Dimensions	250 x 550 x 1200
Transfer Time	10 ms	Environmental Conditions	
Battery		Humidity (non-condensing)	5% - 90%
Depth of Discharge (DoD)	90%	Ambient Temperature	100C to 450C
Battery Type	LFP	Operating Temperature	100C to 500C
Ampere Rating	100 Ah	Mounting Arrangement	
Battery Voltage	48 VDC	Wall mounted / Stand mounted with wheels	
Floating Charge Voltage	54 VDC		
Overcharge Protection	66 VDC		
Battery Cycles	4000		

Single Line Diagram for System Design



Overall Measurements



Impulse Green Energy is a young and dynamic organization delivering reliable customer centric solutions and services in the solar and energy storage Industry.

With pan India sales and service network backed by warehousing facilities at strategic locations and own custom handling agency, we proudly serve major and renowned customers in the space of Renewable Energy in India today.

With new offerings in the field of 'Solar Trackers' and 'Energy Storage' we are poised to do our bit in helping corporates achieve its goal of Net Zero Emissions.