

POWERHOUSE Lithium Powered ESS JUMBO

Robust & expandable solar energy storage system that can be monitored remotely & provides self generated electricity with uninterrupted back up.







DRIVING FORCE

Established in 1998, India's first Lithium Ion cell & Battery Pack manufacturing unit by prominent technocrats & scientists at Mohali, Punjab. We acquired the company in 2012, infused financial strength and are upgrading the facilities to convert it into a world class Lithium Battery unit by integrating up to date technology.

Our focus is to provide India with indigenous green energy solutions.

Highly experienced and qualified team of mentors & workforce, sales and service is dedicated to the objective of catering the demand of Lithium power storage solutions and to promote the renewable source of energy.

We manufacture more than 800 types of 1~32S Battery Packs, including over 30 types of BMS with SMBUS etc, These are widely applied to almost all kind of battery packs.

In India, we are highly certified company in our segment, having BIS for the entire product range.

G.S.Marjara Chief Executive Officer

He has been successfully demonstrating the leadership trait with hands full of experience of 33 years in his work. His 'can-do' attitude, organized thinking, prioritization skills and ability to confront challenges while striving to reach goals are the factors that are continuously taking the company to new heights.

His capacity to analyse and take realistic calculated moves, policy recommendations, guidance and working day in and out for the growth of the company, have been the driving force behind the success of the company.

Dr. G. P. Singh CTA and R&D Head

Carries rich experience of serving:

- ►IBM as Researcher
- Hitachi (HGST) USA as Principal Engineer
- ► Tata Institute of Fundamental Research (India)
- ► Max Planck (Germany) and many more.

Owns:

25 Industrial Publications & 14 US patents registered under his name. Initiated programs in Lithium research in India. He is the guiding mentor for product development and research at Future Hi Tech.

Mr. J. P. Singh Founder Managing Director

A renowed banker with 26 years of experience in finacial management and legal advisor to many organizations, is our key promoter.

Winner of four "All India Awards" for excellence in customer service, deposit mobilization and reduction in non performing assets.

Carries degree in B.Sc(Hons.),CAIIB, LLB and PGD(PM & IR)

His passion about bringing green energy to India had been the push towards the establishment of first of its kind manufacturing unit of lithium cell and batteries.



We are well equipped and efficient enough in the field of Lithium cells and batteries under the guidance of above mentors' and the qualified / experienced in-house team of:

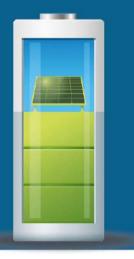
- Doctorates
- Electro Chemists
- Electrical, Electronic & Mechanical Engineers
- Management professionals and MBAs.

Many prominent guiding mentors from IIT Patna, Kharagpur and CECRI are on our advisory panel. They include:

- ► Scientists
- ► Scholars
- ► Professors
- ► Doctors

We carry technical & industrial collaboration with

- ► Punjab University
- ►IIT Kharagpur & Patna
- ► Banaras University
- ► CECRI
- ► PEC University



CAPACITY

- ► Battery production: 120 MW/pa
- ► Testing: 90 MW/pa

PRODUCTION, TESTING, R&D

We have vast in-house manufacturing, testing and R&D facilities to design, develop and produce Lithium energy storage solutions and even fully customize as per client's requirements.

All our products pass through stringent quality and aging checks to deliver optimum results with possible long life.

The setup of installed machinery in production, testing and R&D is procured from world's best machine makers, such as:

- ► Maccor, USA
- ► Honbro, China
- ► Agilent Technologies, USA
- ► Mitotoyo, Japan
- ► Arcotronics, Italia
- ► Shimadzu, Japan
- ► Neware, China
- ► Vencon Technologies, Canada



Powerhouse Jumbo is Solar/Hybrid Energy Storage System backed up by Lithium Batteries, which will keep you powered all the time.

With increasing popularity of Hybrid Energy Storage Solution, owners can get benefit of controlled electricity bill. They have control over how and when they need power.

Modular and Expandable design to achieve the desired backup, that leads to uninterrupted electricity supply in your lives. Equipped with advanced energy management, it can be monitored remotely. Compact and lightweight modules make the installation process quick and easier.

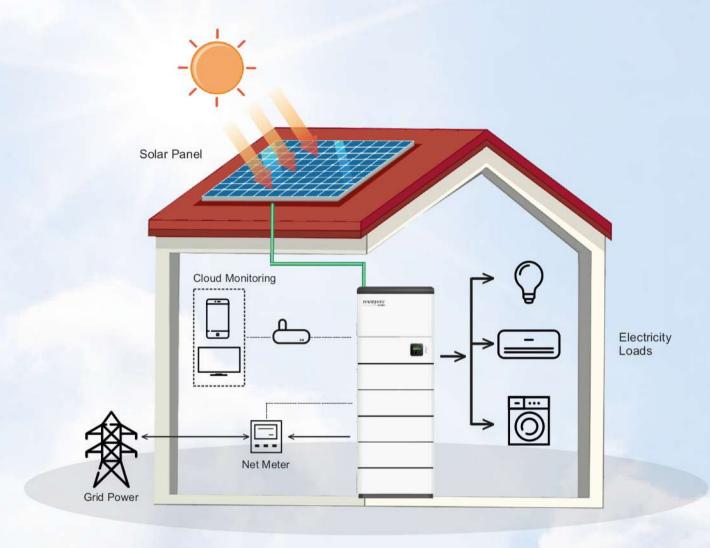




www.fhtbl.com

Salient Features ≠ 6000+ Cycle Life App Based Cloud Monitoring Sleek & Elegant Design Integrated Inverter Green Energy High Quality Cells Plug n Play Easy Installation Maintenance free **Ideal For** Offices Residence Hospitals Colleges BANK Farm House School Bank Petrol Pumps Police Station Toll Plaza







Spontaneous power backup in the areas with power shortage.

Generates Own Electricity

It provides self generated power without dependence on grid.

Saves Electricity Cost

Cost of self generated electricity is way lower than grid provided electricity.

Environmental Friendly

Powerhouse operates with zero emission hence provides environment friendly green energy.

Safe & Efficient

Safe & efficient lithium phosphate battery.

Cloud Monitoring
Cloud based monitoring, easy to access & intelligent Battery Management System Communication.



		Energy Storage S	System Specifi	ications		
Sr. No.	Parameter	Factor	Unit	5 Kwh	10 Kwh	15 Kwh
1	Model			PH005	PH010	PH015
2	Nominal Voltage		V DC	51.2		
3	Voltage Cut Off Upper		V	58.4		
	voltage out on	Lower	V		40	
4	Battery Capacity		Ah	100	200	300
5	Charge Current Continuous		- A	50	100	150
6	Discharge Current Continuous			50	100	150
7	Operating Temperature	Charging	°C	0~55		
	operating remperature	Discharging		-20~60		
8	Self Discharge Rate			<3% Per Month		
9	Communication		А	RS232/RS485/CAN		
10	Weight		Kg	105	165	225
		Solar S	pecifications			
Sr. No.	Parameter		Unit	3 kVA	4 kVA	5 kVA
1	Max DC Input Power		W	3200	4200	5200
2	DC Input Voltage Range		VDC	100-500		
3	MPPT Voltage Range		VDC	120-500		
4	Maximum DC Input Current		А	13		
		Grid Sp	pecifications			
1	Nominal AC Output Power		W	3000	4000	5000
2	Maximum AC Output Power		VA	3000	4000	5000
3	Maximum AC Output Current		А	15	20	25
4	AC Voltage Current		VAC	180-270		
5	Power Factor			0.8 leading or lagging		
6	Frequency		Hz	50/60		
		EPS Sp	pecifications			
1	Output Voltage		V	230		
2	Output Current		А	13	17.4	17.4
3	Peak Power Output		W	4500 (30sec)		
4	Switching Time		ms	10		
5	Total Harmonic Voltage Distortion			<5%		

^{**}Inverter Specifications may change withour prior infornmation, Hence please refer ESS model specification data sheet



We are committed to deliver world class energy solutions in a safe, reliable, efficient and environmentally sound manner.

We are certified for the essential parameters of the industry which includes:

ISO | ISO | ISO | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 18001 | 1800

Further we are empanelled with following agencies: DRDO-SASE | BEL | COD & many more

MNRE Channel Partner ICAT / ARAI / BIS

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