



Transforming The Transportation Thus Nation

"Our bit towards the eMobility drive"
with the best range of lithium batteries

- ⚡ Standardized Batteries
- ⚡ 100% Capacity Guaranteed
- ⚡ Instant Replacement
- ⚡ Portable Charger
- ⚡ Made in India





Established in 1998, India's first Lithium Ion cell and 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 with 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 (I2C, HDQ Port), 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.

DRIVING FORCE

Dr. G. P. Singh

Chief Technical Advisor
and Head of R&D

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

Managing Director

A renowned banker with 26 years of experience in financial 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).

He is passionate about bringing green energy to India by putting up this first of it's kind manufacturing unit of Lithium cells and batteries.

Dr. P. J. Singh

Honorary Director Corporate Affairs

A visionary & successful industrialist.

Key speaker for many educational institutes that includes Punjab and Kurukshetra Universities.

Government of India honoured him with two prestigious awards:

- ▶ National Award as the best entrepreneur of the country.
- ▶ Distinguished Entrepreneurship Award.

Thailand Government awarded:

- ▶ Asia Pacific International Award for individual contribution for International integration.

His expertise and vision are driving factors of our business.

TECHNICAL STRENGTH

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 collaboratio

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



PRODUCTION, TESTING, R&D

CAPACITY

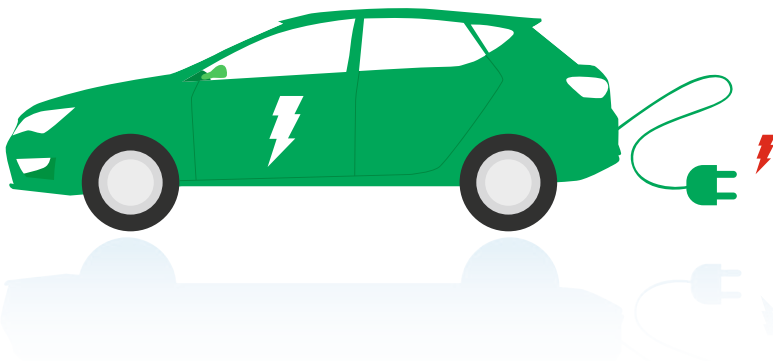
- ▶ Battery production : 120 MW/pa
- ▶ Testing: 90 MW/pa

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



eRickshaw Battery

LFP / NCM

- 🔄 Life 3,00,000 Kms
- ₹ Low Running Cost
- 🍃 Light Weight
- 🔧 Maintenance Free



eRickshaw Batteries are available in Li-ion & LFP, cylindrical and prismatic variants, well designed as per Indian environment and road conditions.

Cost effectiveness, standardization, portability make these batteries compatible with Government of India e-mobility policies.

Battery / Enclosure dimensions / Shapes / Capacities can be customized as per vehicle requirements.

SALIENT FEATURES

- ⚡ Eco friendly
- ⚡ Quick charge
- ⚡ Plug and Play battery
- ⚡ Built in BMS for protection
- ⚡ 100% charge/discharge efficiency
- ⚡ No maintenance
- ⚡ Customizable enclosure
- ⚡ Digital Display

PROTECTION

- ⚡ Shock absorption
- ⚡ Over temperature cut-off
- ⚡ Over voltage cut-off
- ⚡ Short circuit protection
- ⚡ Reverse polarity
- ⚡ Over charge/discharge Cut-off

Battery Management System With Digital Display

Our dynamic /smart BMS is specially designed for rechargeable lithium battery packs to enhance efficiency and performance of complete solution.

This communicative BMS monitors all cells current and voltage fluctuations in pack and temperature of pack.

Display of all parameters prompts to take required actions timely .


Available in two models, one with elaborated information and other is basic.

DYNAMIC BMS FEATURES

- ⚡ SOC/SOH
- ⚡ Programmable
- ⚡ Active balancing feature
- ⚡ Individual cell monitoring
- ⚡ Temperature monitoring
- ⚡ Short circuit protection
- ⚡ GPS communicative BMS
- ⚡ Under/over voltage protection at cell & pack level
- ⚡ Over current protection (charge, discharge)

SMART BMS FEATURES

- ⚡ SOC/SOH
- ⚡ Voltage display
- ⚡ Current display



V _{pack} : 49.79V	T _{Max} : +19 °C
I _{chg} : 0.00A	T _{Min} : +18 °C
SOC : 48%	

eRickshaw Battery

LFP / NCM

OPTIONAL FEATURES

- ⚡ Communicative BMS
- ⚡ CAN Compatible
- ⚡ Swappable Battery
- ⚡ Portable Charger



Technical Specification

Sr. No.	Parameters	Factor	Unit	48 V 60 Ah		
1.	Series			Grand	Bravo	Prime
2.	Model			FP002	EB003	LH055
3.	Chemistry			LFP	NCM	NCM
4.	Voltage Cut-off	Upper	V	54.7	54.6	
		Lower		40.5	44.2	39
5.	Continuous Discharge Current		A	60		
6.	Charge Current			10, 15		
7.	Internal Resistance		mΩ	≤ 25		
8.	Peak Discharge Current	Pulse for 5s	A	90	150	90
9.	Compatible Motor		W	800~1000		
10.	Cell Balancing			Yes		
11.	Dimensions	l x w x h	mm	620 x 260 x 240	250 x 160 x 336	400 x 260 x 240
12.	Weight		kg	35	24	
13.	Operating Temperature	Charging	°C	0 ~ 45		
		Discharging		-20 to 60		
14.	Charging time		hr	5 ~ 6		
15.	Speed		km/ hr	25		
16.	Life	Years	Years	5 +	3 +	2+
		Cycles	Nos.	2500 ~ 3000	1200 ~ 1500	600 ~ 800
17.	Mileage *	Total	km	1,82,000	1,10,000	51,000
		Per charge		62	60	57
18.	Running Cost		Rs. / km	0.35	0.54	0.97

*Flexible. Values may vary.
*Tested under ideal conditions.



48 V 80 Ah			48 V 100 Ah		
Grand	Bravo	Prime	Grand	Bravo	Prime
FP004	EB004	LH051	FP007	EB005	LH056
LFP	NCM	NCM	LFP	NCM	NCM
54.7	54.6		54.7	54.6	
40.5	44.2	39	40.5	44.2	39
60	80	60	60	100	60
20			25		
≤ 25			≤ 20		
90	200	90	90	250	90
800~1000			800~1000		
Yes			Yes		
620 x 260 x 240	290 x 230 x 260	620 x 260 x 240	620 x 260 x 240	320 x 300 x 245	620 x 260 x 240
45	30	35	60	35	40
0 ~ 45			0 ~ 45		
-20 to 60			-20 to 60		
4			5		
25			25		
5 +	3 +	2+	5 +	3 +	2+
2500 ~ 3000	1200 ~ 1500	600 ~ 800	2500 ~ 3000	1200 ~ 1500	600 ~ 800
2,43,000	1,42,000	63,000	3,05,000	1,78,000	79,000
81	78	74	103	101	96
0.32	0.54	0.97	0.32	0.54	0.97



The future lies with
Future Hi-Tech

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:



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

MNRE Channel Partner

ICAT / ARAI / BIS

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Creating Eco Friendly, Safe & Green Batteries