

**ON THE NATIONAL
MISSION OF
MADE IN INDIA**



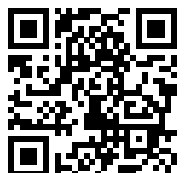
Providing Indigenous
Green Energy Solutions

India's First Lithium
Battery Manufacturing Unit

WE BELIEVE
Renewable is the Future

Working towards
Green energy
Greener earth

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



www.fhtbl.com

Home Lighting Power Bank

DC to DC

-  Solar/Grid Input
-  DC/USB Output
-  Lithium Powered
-  LCD Display

Unique features of DC and AC charging makes our Home Lighting Power Bank a versatile device which can be used in both urban and rural areas and for outdoor usage to run variety of DC devices, fans and lighting.



TECHNICAL SPECIFICATIONS

SALIENT FEATURES

- ⚡ Compact Design
- ⚡ Light weight and portable device
- ⚡ Quick charging
- ⚡ Zero maintenance
- ⚡ With Lithium high energy storage battery
- ⚡ BMS for add-on safety
- ⚡ Including AC to DC adapter for grid charging
- ⚡ Built-in sine wave inverter

PROTECTION

- ⚡ Over temperature
- ⚡ Over voltage, current and load
- ⚡ Reverse polarity
- ⚡ Low voltage & low battery indication

S.No	Parameter	Description	Unit	Model		
				PB120	PB240	PB360
1	Input	Energy	Wh	120	240	360
		Adapter AC to DC	Vac, Hz	220 V 50 Hz		
		Solar DC	V	12 / 19		
2	Output options	PORT X 2	V, A	USB 5 V 2.1A		
		DC port X 3	W	10 / 60 / 80		10 / 80 / 100
3	Battery Pack	NMC		11.1 V 10Ah	11.1 V 20Ah	11.1 V 30Ah
4	Charging Options	Solar	Wp	40-125		40-180
		Adapter AC to DC	Vac, Hz	220, 50		
5	Charging Time	Solar Panel (As per Solar Panel)	Hours	2 to 3.5	3 to 4.5	4 to 5
		AC Grid (As per Charger)		2 to 3	3 to 4	4 to 5
6	Overload Ability	%	Time	120 % < load < 130 % for 10 minutes		
				130 % < load < 150 % for 10 second		
7	Size	LxWxH	(mm)	270X140X60		
8	Weight		kg	1.3	2	2.7
9	Operating Temperature		°C	-10 to 60		

Note

1. Unless otherwise specified, all specifications are measured at 25 ° C ambient temperature.
2. All models are compatible with NMC / LiFePO4
3. Values and specifications may change as per battery chemistry

Portable UPS System

-  Lithium Powered
-  LCD Display
-  DC/ AC to AC
-  Quick Charging

All in one solar power system works on both AC/DC devices. Just turn on power switch, it immediately supplies power to all loads.

Energy Saver Feature and portability makes it suitable for all families in urban and rural areas



TECHNICAL SPECIFICATIONS

				Model		
S.No	Parameter	Description	Unit	PB020	PB030	PB040
1	Output Energy		Wh	240	360	480
2	Battery Capacity		Ah	20	30	40
3	Nominal Battery Voltage		Vdc	11.1		
4	Charging Input	Adapter AC to DC	Vac, Hz	220,50		
		DC	Vdc	12.6		
		Solar Panel	Vdc,Wp	19, 50~180		
5	Output Current	AC	A	1.5		
		DC		15		
6	Charging time	Solar Panel (As per Solar Panel)	hours	2 to 3.5	3 to 4.5	4 to 5
		AC Grid (As per Charger)		2 to 3	3 to 4	4 to 5
7	Overload ability	Max	%, time	120 % for 10 min		
8	Dimensions	l x w x h	mm	285x190x125		
9	Weight		Kg	4	4.5	5.5
10	Operating Temperature		°C	-10 to 60		

SALIENT FEATURES

- ⚡ Can operate all AC and DC devices
- ⚡ Quiet Operations
- ⚡ Long service life
- ⚡ Intelligent solar charging
- ⚡ Energy saving
- ⚡ Can connect to multiple loads

PROTECTION

- ⚡ Over temperature
- ⚡ Over voltage, current & load
- ⚡ Low voltage & low battery indication
- ⚡ Reverse polarity

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Battery Pack

For UPS Inverter

 Robust

 Reliable

 Modular

 Expandable

In order to meet eco friendly and long life reliable source of energy storage, we have designed robust battery packs based on Lithium ion and Lithium Phosphate chemistries.

These packs are indigenously designed and Made in India to suit Indian climatic conditions, individual demand of flexible shapes & sizes, long life cycles and these are cost effective.



SALIENT FEATURES

- ⚡ Long life 3 to 8 years
- ⚡ True capacity guaranteed
- ⚡ Efficient Battery Management System
- ⚡ High frequency operations
- ⚡ IP65 enclosure
- ⚡ Extendable backup

Technical Specifications

S.No	Parameters Description		Unit	Model			
				ES005	ES008	ES009	ES010
1.	Cathode Chemistry			NMC			
2.	Rated Energy		kWh	1	2	3	4
3.	Nominal Voltage		Vdc	48			
4.	Rated Capacity		Ah	20	40	60	80
5.	Operating Voltage	Charge	Vdc	54.6			
		Discharge		39			
6.	Current	Charge	A	10			
		Discharge		20	40	70	
7.	Charging Time		hours	2.5	4.5	6.5	8.5
8.	Approx. Weight		kg	8	14	20	28
9.	Dimensions	l x w x h	mm	Customizable			
10.	Life Cycle (at 70% DOD)*		Nos.	≥ 1000			
11.	Overload ability		%	120 % <Overload < 130 % for 10min			
				130 % <Overload < 140 % for 10 s			
12.	Operating Temperature	Charge	°C	0 ~ 45			
		Discharge		-20 ~ 60			
		Storage		-20~ 30			
13.	Humidity		%	5%≤RH≤85%			

PROTECTION

- ⚡ Over voltage & current ⚡ Charge & discharge release ⚡ Short circuit ⚡ Reverse polarity

UPS Power Inverter

LFP / NMC



- DC / AC to AC/DC
- Low Distortion $\leq 3\%$
- Modified Sine Wave Inverter

Lithium powered UPS Power Inverter that can operate on both DC and AC inputs. Suitable to operate all kind of electronic goods, devices and lighting in both indoor and outdoor conditions.

Light weight, portable and easy to carry anywhere.



SALIENT FEATURES

- Can operate all AC and DC devices
- Highly efficient
- Can connect to multiple load
- No EMI interference
- Easy to install, operate and maintain
- Extendable backup

PROTECTION

- Over temperature
- Over voltage, current and load
- Reverse polarity
- Low voltage & low battery indication

S.No.	Description	Parameter	Unit	Model		
				Ui008	Ui015	Ui030
1.	Output Power	Power	kW	0.5	1.5	3
2.	Output	Sine Waveform		Modified sine wave(THD<3%)		
		Frequency	Hz	50 or 60		
		Voltage	Vac	220 or 110		
		USB Port		5 V, 2.1 A		
3.	Input	Battery (Nominal)	Vdc	12.8		
		Operating voltage	V	11~14.4		
		Battery type		Lithium batteries		
		Idle Current consumption	A	≤ 0.3		
		Shut down mode current	mA	≤ 20		
		Max efficient (Typ.)	%	≥ 90		
4.	Battery Input Protect	DC current (Typ.)	A	30	50	90
		Fuse	Type	35A*4		
		Low voltage alarm		11.1		
		Low voltage shut down	V	10.7		
		High voltage protect		14.7		
5.	Output protect	Over temp (Max.)	$^{\circ}\text{C}$	75 \pm 5		
		Short circuit indicator		Red & Green light flash, repeated switch output, recover output when reduce overload		
		Over load Power	W	800	1400	2700
		Over load Indication		Red light on, self lock, recover normal output after short circuit canceled		
6.	Charging Input	Frequency	Hz	50 or 60		
		VoltageVac	Vac	220 or 110		
		Full load efficiency	%	≥ 80		
7.	Charging Output	Charging Method, indicator		Current charging current 15A, (Orange)		
				Stable charging voltage (Orange)		
				Full Charging voltage (Green)		
8.	Switch	delay time	mS	≤ 20		
9.	Environment	Working temperature	$^{\circ}\text{C}$	0-40		
		Working humidity	% RH	10~90		
		Storage temp, Humidity	$^{\circ}\text{C}$ % RH	20~60/ 5-95		
10.	Other	Weight	kg	2.4	3.3	5.3
		Size (L*W*H)	mm	300*150*110	300*115*107	410*150*180

Note

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- Values and specifications may change as per battery chemistry



The future lies with
Future Hi-Tech

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

Future Hi-Tech Batteries Ltd.

C-183, Phase-VIII-B, Industrial Focal Point,
S.A.S. Nagar (Mohali) - 160071 Punjab, India.

Tele/Fax: +911724670013

email: care@fhtbl.com

@future_fhtbl

/fhtbl