超威 CHILWEE

A Reliable Power Solution Provider

CHILWEE 12V32AH SUPER GRAPHENE 12V 32Ah(20hr) SUPER GRAPHENE BATTERY



Chilwee SUPER GRAPHENE 2023 Series high energy Battery is specially designed based on Super Graphene Technology for Hot temperature which has obviously improve the battery's capacity, output power, cycle life and high/low temperature performance. The Chilwee GRAPHENE 2023 Series provides Fast charging ; longer range, larger power and extremely long life for motive power applications, i.e. electric bicycles, electric tricycles, electric motorcycles and other device require DC power source.

FEATURES & BENEFITS ALTERNATIVE CHOICE FROM LITHIUM ION SUPPORT FAST CHARGING

Super Energy Density up to 60WH/KG.

Direct Cast-Welding Technology is applied to connect each cell, which makes the battery has lower internal resistance.1.8C super large discharge current Up to 30 minutes.

Super long cycle life: 50% DOD is up to 1500 cycles (at 25°C), which should be match Graphene charger. 50%DOD is up to 700 cycles (at 45°C)

Super performance on High temperature area .

Super fast charging.： reach 80% nominal capacity in 2 hours fast charging

COMPARISON BETWEEN CHILWEE SUPER GRAPHENE SERIES AND STANDARD BATTERY

TESTING ITEM	Other brand in India	SUPER GRAPHENE 12V32AH/20HR	COMPARISON
INITIAL CAPACITY, FOR THE FIRST 3 CYCLES @ 2hr	22AH~22.8Ah Max	24AH	Average **8.33%** IMPROVED
INITIAL CAPACITY, FOR THE FIRST 20 CYCLES @ 20hr	28AH	32AH	**14.29% IMPROVED**
MILEAGE PER FULLY CHARGE @600w MOTOR	110KM	135-142KM	**At least 25 KM MORE**
MILEAGE PER FULLY CHARGE @1500w MOTOR	45KM	88KM	**43KM MORE**
WEIGHT	6.8-7.0KGS	7.2±0.1Kgs	**150 grams more with super graphene material added**
FAST CHARGING	NOT AVAILABLE	4-10A FAST CHARGING	**FAST CHARGE**
DISCHARGE TIME @ END-VOLTAGE : 12V	65 MINUTES	90 MINUTES	**38%** IMPROVED
WATER LOSS RATE	0.1 GRAM / CYCLE	0.06 GRAM/ CYCLE	**40%** DECREASED
REAL GRAPHENE MATERIAL	NONE	YES	
NEED SPECIAL CHARGER	NONE	YES .	The super graphene material have much better charging acceptance than regular battery , 3A will have heat problem
CYCLE LIFE @ 50% DOD@25 ℃	500 CYCLES	1500 CYCLES	**200%** IMPROVED

SPECIFICATION

Nominal Voltage (V)		12V
Open Circuit Voltage (V/Block)		13.1V - 13.45V
Number of Cells (Per Block)		6 Cells
Rated Capacity (Ah, 25℃)	2h rate (to 1.75V/Cell)	24Ah
	3h rate (to 1.75V/Cell)	26Ah
	5h rate (to 1.80V/Cell)	27Ah
	10h rate (to 1.80V/Cell)	30Ah
	20h rate (to 1.85V/Cell)	32Ah
Nominal Weight (Kgs)		**Approx.7.2±0.1 Kgs**
Dimension (L X W X H, Total Height. mm)		(181mm±0.5) X (78mm±0.5) X (172mm±0.5), (172mm±0.5)
Container Material		Enhanced ABS
Charge Voltage	Float (V/Block)	13.50V - 13.80V
	Cycle (V/Block)	14.60V - 14.80V
Maximum Discharge Current (A)		150A (5s)
Charge Current (A)		4-10A
Working Temperature(℃)	Operation (maximum):	-20℃ to 50℃
	Operation (recommended):	20℃ to 30℃
Storage Temperature(℃)		-20℃ to 50℃

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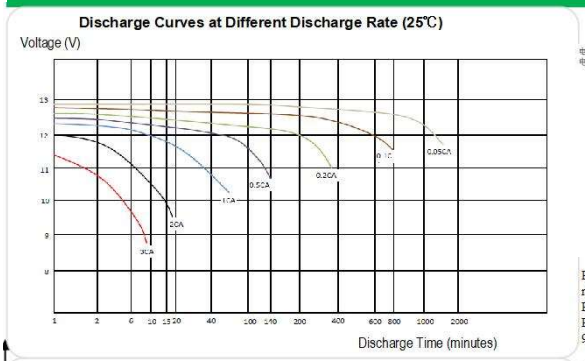
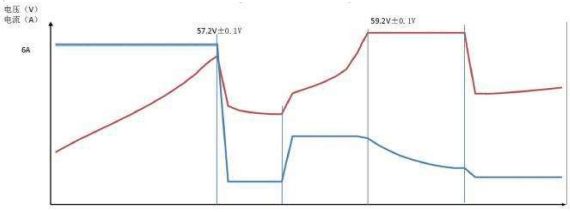
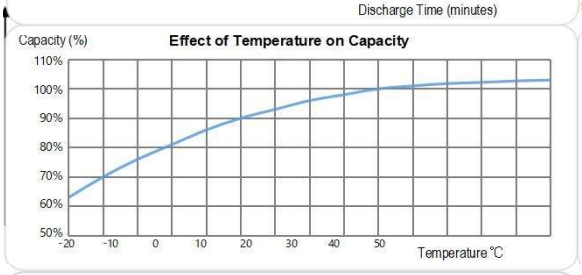
12V32AH SUPER GRAPHENE — 12V32Ah(20hr) GRAPHENE BATTERY

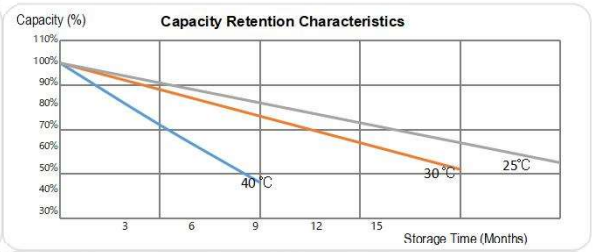


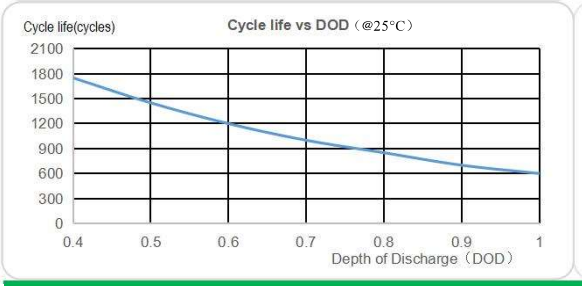
Charge Curve for 12V32AH/20HR(4 Blocks/String)

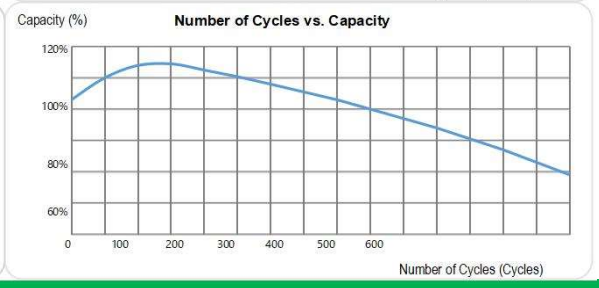


Phase 1: Constant charge current is 4A-10A until charge voltage is gradually risen up to 57.2V±0.1V; keepstill for 5 minutes
Phase 2: Constant voltage59.2V±0.1V and constantcharge current 2A.
Phase 3: When charge current drops to 0.6A then turn to 0.2A constant currentcharge for 90minutes. Temperature compensation rate is 2.5-4.0MV（Cell/℃）









RECOMMENDED SETTING PARAMETERS

Item		48V Battery Bank	60V Battery Bank	72V Battery Bank
Charger Parameters	Max. Charge Voltage (V)	58.6V-59V	73.3V-73.7V	88.0V-88.4V
	Float Charge Voltage (V)	54.8V-55.2V	68.6V-69.0V	82.3V-82.7V
	Charge Current (A)	4-10A	4-10A	4-10A
	Shifting Current (A)	0.55A-0.6A	0.55A-0.6A	0.55A-0.6A
	Temperature Compensation Coefficient (mV/℃/Cell)	2.5～4.0 mV/℃/Cell	2.5～4.0mV/℃/Cell	2.5～4.0mV/℃/Cell
Controller Parameters	Low-voltage Protection (V)	42V±0.5V	52.5V±0.5V	63V±0.5V
	Limited Current (A)	≤25A	≤25A	≤25A
	Turn-on Lock Current (A)	≤0.15A	≤0.15A	≤0.15A
Electric Motor Setting	Average Current (A)	≤10A	≤10A	≤10A
	Electric Motor Power (W)	≤450W	≤600W	≤650W

** All the data and technical curves are for customer's reference only. This information is subject to change without any prior notice.*

For More Information, please contact:

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