



Chilwee BG (BLACK GOLD) Series high energy VRLA Battery is specially designed based on Graphene Technology, which has obviously improve the battery's capacity, output power, cycle life and high/low temperature performance. The Chilwee BG (BLACK GOLD) Series provides 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

- \* Designed based on Graphene Technology enables the BG (BLACK GOLD) series Battery with the the features of excellent long range, larger power and extremely long life.
- \* Unique structure of battery container and lid to ensure excellent gas recommendation efficiency, less gas released so that water loss rate is reduced.
- \* Sepcial grid alloy material and special lead paste prescription have been utilized to resist corrosion on plates, prolong the life of the battery.
- \* Increased positive active material to improve the battery's initial capacity and service life.
- \* Redesigned battery container and terminal, more attractive appearance and easy for installation.

### COMPARISON BETWEEN BG SERIES AND STANDARD BATTERY

TESTING ITEM	STANDARD BATTERY	BLACK GOLD SERIES	COMPARISON
INITIAL CAPACITY, FOR THE FIRST 3 CYCLES	32AH	35AH	<b>10% IMPROVED</b>
CAPACITY , AFTER 69 CYCLES	33AH	36.5AH	<b>16% IMPROVED</b>
DISCHARGE TIME @ END-VOLTAGE : 12V	65 MINUTES	90 MINUTES	<b>34% IMPROVED</b>
WATER LOSS RATE	0.1 GRAM / CYCLE	0.06 GRAM/ CYCLE	<b>40% DECREASED</b>
DISCHARGE TIME @ -15 °C	94 MINUTES	112 MINUTES	<b>18% IMPROVED</b>
CYCLE LIFE @ 100% DOD	350 CYCLES	450 CYCLES	<b>52% IMPROVED</b>

### 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°C)	2h rate (to 1.75V/Cell)	33Ah
	3h rate (to 1.75V/Cell)	35Ah
	5h rate (to 1.80V/Cell)	37Ah
	10h rate (to 1.80V/Cell)	40Ah
	20h rate (to 1.85V/Cell)	42Ah
Nominal Weight (Kgs)		Approx. 9.5±0.3 Kgs
Dimension (L X W X H, Total Height. mm)		(267mm±0.5) X (78mm±0.5) X (170mm±0.5), (170mm±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)		225A (5s)
Maximum Charge Current (A)		4.4 A
Working Temperature(°C)	Operation (maximum):	-20°C to 50°C
	Operation (recommended):	20°C to 30°C
Storage Temperature(°C)		-20°C to 50°C