

The energy that resembles nature
- Golf Cart Batteries

LONGEST



True Deep Cycle Battery



Head Office



Chang-Won Factory

Industrial battery & Motive Power,
EV(Electric Vehicle)
- Capacity : 1.5 Million/year
- Gross Area : 28,000 m²



Gwang-Ju Factory

Automotive battery
- Capacity : 14 Million/year
- Gross Area : 22,000 m²

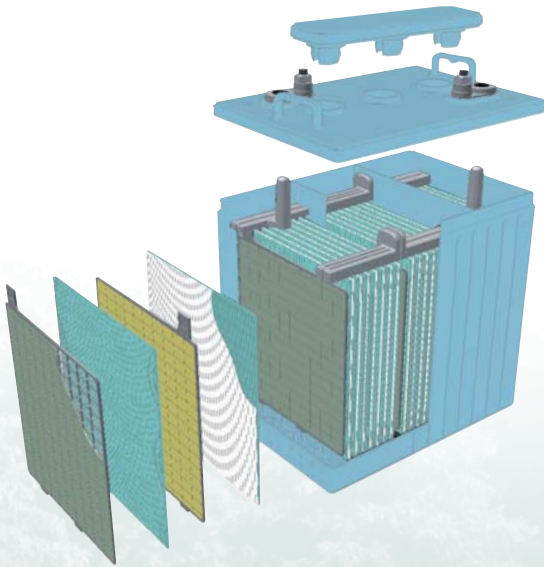


R&D Center

History

- Sep. 1952 Established the Naval Technology Research Institute (NTRI) non-profit foundation
- Apr. 1975 Government approval of joint venture and technical cooperation with YUASA Battery of Japan
- Nov. 1975 Completion of Changwon factory and relocation
- Sep. 1978 Corporate name changed to Global Battery
- Nov. 1979 Began Changwon's second factory expansion
- Jun. 1987 Second stage expansion of the third factory in Changwon
- Nov. 1987 Company made public offering and is listed on the stock market
- Jul. 1988 Technical cooperation with HAGEN of Germany
- Nov. 1989 Completion of factory in Gwangju
- Oct. 1992 Technical cooperation with SAFT of France
- Jul. 1993 Changwon factory, ISO 9002 certified (DNV QA)
- Apr. 1994 Gwangju factory, ISO 9001 certified
- May.1994 Changwon factory, ISO 9001 certified
- Nov. 1994 Expansion of Gwangju's second factory
- Aug. 2003 Korea Electric Power Industry Code (KEPIC) 1st class certification in nuclear power and electricity
- Dec. 2003 Gwangju factory, KFQ ISO/TS 16949 certified
- Mar. 2006 Completed construction of Gwangju factory for Ni-MH batteries
- Aug. 2006 Renewed KEPIC certification
- Nov. 2008 Awarded the Tower of USD 300 Million export from Korea International Trade Association
- Mar. 2009 Renewed KS certification
- Oct. 2009 Renewed ISO certification
- Nov. 2010 Awarded the Tower of USD 400 Million export from Korea International Trade Association
- Dec. 2010 Annual sales turnover in 2010, USD 718 Million

Technical Features



1. Case/Lid :
 - a. Less weight, shock-resistant and acid-resistant by PP Resin
 - b. Special-designed structure to prevent short-circuit from active-material shedding in the bottom
2. Terminal
 - a. Casted with special lead alloy.
 - b. Special plating to minimize heat generation and electric resistance.
 - c. Designed to Vibration resistance
 - d. Easy detachable with standard & Bolt/Nut Structure
3. Cap :
 - a. Engineering structure to vent gas out.
 - b. Easy to refill and maintenance.
4. Separator
 - a. Porous Rubber material against acid and corrosion
 - b. Excellent physical characteristics and lower electric resistance
 - c. Using micro-fiber Glass-mat against active-material shedding
5. Plates
 - a. Negative - 99.9% pure lead with hard paste feature, specific additives for deep cycle purpose.
 - b. Positive Corrosion-resistant grid with hard paste feature, specific additives for deep cycle purpose

Terminal Configurations



Embedded Terminal (ET)



Dual fit Terminal (DT)



"L" Terminal (LT)

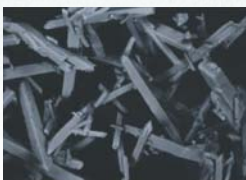


Automotive Post (AP)

Longest Golf Cart Battery

Type		Capacity				Dimensions(mm)				Weight (kg)
		@25A (Min)	@75A (Min)	5HR (Ah)	20HR (Ah)	L	W	H	TH ^A	
DEEP CYCLE 6V	GC2-605	383	105	175	210	264	181	245	276	27.0
	GC2-105	447	115	185	225	264	181	245	276	28.6
	GC2-125	488	132	195	240	264	181	245	276	30.7
	GC2-145	530	145	215	260	264	181	264	295	33.0
DEEP CYCLE 8V	GC2-875	295	75	145	170	264	181	245	276	29.0
	GC2-890	340	90	155	190	264	181	245	276	31.6
	GC2-8125	425	110	190	240	264	181	283	314	37.6
DEEP CYCLE 12V	GC2-1275	290	70	120	150	329	181	245	276	38.0

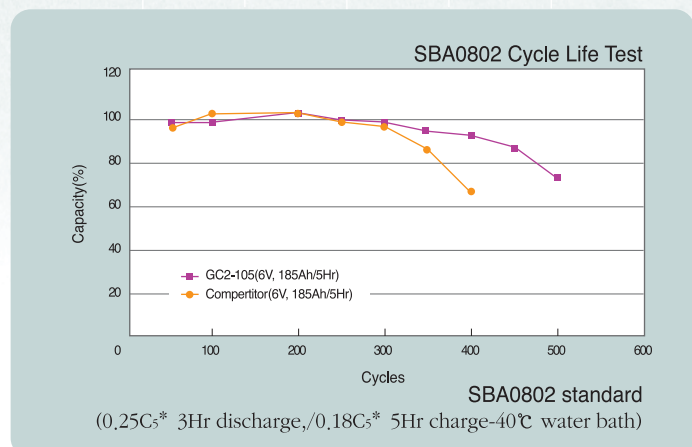
Independent cycle life test



Improved Paste and 4BS(Tetra Basic lead sulfate) application to longer life cycle and capacity maximization



Unified and embedded terminal application to prevent terminal damage in event of high rate discharging



LONGEST 6210 (GC2-605)

Recommended Charge Profile

Constant-current Constant-voltage Controlled Charge

Phase 1 (Constant-current)

constant current charge at 20.5~26.6 amperes until the battery voltage measures between 7.14~7.29 V/Battery(25°C) on charge voltage.

Phase 2 (Constant-voltage)

constant voltage charge at 7.14~7.29 V/Battery(25°C) until the current measures between 2.05~6.15 amperes.

Phase 3 (Constant-current)

constant current charge at 2.05~6.15 amperes until the battery voltage measures between 7.5~8.1V/battery(25°C) or until dV/dt reaches to less than 0.035.

* END OF CHARGE at 110~120% of AH returned.

* Note : Charging condition(Voltage,Current, Time) will very depending on battery size, charger(Charging Type, output) depth of discharge and temperature.



Specification

Nominal Voltage	6V
Length(mm)	261
Width(mm)	181
Height(mm) (Embedded Terminal)	279
Weight(kg)(With Electrolyte)	27
Terminal Options	ET, DT, ST

Capacity

20Hr	210Ah
5hr	175Ah
75A	105min
25A	383min

5Hr Capacity by Temperature

40°C	105%
30°C	100%
0°C	80%

Material Specifications

Cover Style	Individual Filling Structure
Cover Vent Style	Gang & Bayonet Style
Container & Cover Material	Light-Blue Polypropylene Plastic
Case to Cover Seal Method	Heat Sealing
Inner-Cell Connector Type	Through The Partion Weld
Plate Lug Weld Method	Automated Cast-On Process
Positive Grid Material	Antimony Lead Alloy
Negative Grid Material	Antimony Lead Alloy
Separator Type	Microporous Rubber With Glass Mat

LONGEST 6225 (GC2-105)

Recommended Charge Profile

Constant-current Constant-voltage Controlled Charge

Phase 1 (Constant-current)

constant current charge at 22.5~29.3 amperes until the battery voltage measures between 7.14~7.29 V/Battery(25°C) on charge voltage.

Phase 2 (Constant-voltage)

constant voltage charge at 7.14~7.29 V/Battery(25°C) until the current measures between 2.25~6.75 amperes.

Phase 3 (Constant-current)

constant current charge at 2.25~6.75 amperes until the battery voltage measures between 7.5~8.1 V/battery(25°C) or until dV/dt reaches to less than 0.035.

* END OF CHARGE at 110~120% of AH returned.

* Note : Charging condition(Voltage,Current, Time) will very depending on battery size, charger(Charging Type, output) depth of discharge and temperature.



Specification

Nominal Voltage	6V
Length(mm)	261
Width(mm)	181
Height(mm) (Embedded Terminal)	279
Weight(kg)(With Electrolyte)	29
Terminal Options	Embedded, Dual Fit, Standard

Capacity

20Hr	225Ah
5hr	185Ah
75A	115min
25A	447min

5Hr Capacity by Temperature

40°C	105%
30°C	100%
0°C	80%

Material Specifications

Cover Style	Individual Filling Structure
Cover Vent Style	Gang & Bayonet Style
Container & Cover Material	Light-Blue Polypropylene Plastic
Case to Cover Seal Method	Heat Sealing
Inner-Cell Connector Type	Through The Partion Weld
Plate Lug Weld Method	Automated Cast-On Process
Positive Grid Material	Antimony Lead Alloy
Negative Grid Material	Antimony Lead Alloy
Separator Type	Microporous Rubber With Glass Mat

LONGEST 6240 (GC2-125)

Recommended Charge Profile

Constant-current Constant-voltage Controlled Charge

Phase 1 (Constant-current)

constant current charge at 24~31.2 amperes until the battery voltage measures between 7.14~7.29 V/Battery(25°C) on charge voltage.

Phase 2 (Constant-voltage)

constant voltage charge at 7.14~7.29 V/Battery(25°C) until the current measures between 2.4~7.2 amperes.

Phase 3 (Constant-current)

constant current charge at 2.4~7.2 amperes until the battery voltage measures between 7.5~8.1 V/battery(25°C) or until dV/dt reaches to less than 0.035.

* END OF CHARGE at 110~120% of AH returned.

* Note : Charging condition(Voltage,Current, Time) will very depending on battery size, charger(Charging Type, output) depth of discharge and temperchure.



Specification

Nominal Voltage	6V
Length(mm)	261
Width(mm)	181
Height(mm) (Embedded Terminal)	279
Weight(kg)(With Electrolyte)	31
Terminal Options	Embedded, Dual Fit, Standard

Capacity

20Hr	240Ah
5hr	195Ah
75A	132min
25A	488min

5Hr Capacity by Temperature

40°C	105%
30°C	100%
0°C	80%

Material Specifications

Cover Style	Individual Filling Structure
Cover Vent Style	Gang & Bayonet Style
Container & Cover Material	Light-Blue Polypropylene Plastic
Case to Cover Seal Method	Heat Sealing
Inner-Cell Connector Type	Through The Partion Weld
Plate Lug Weld Method	Automated Cast-On Process
Positive Grid Material	Antimony Lead Alloy
Negative Grid Material	Antimony Lead Alloy
Separator Type	Microporous Rubber With Glass Mat

LONGEST 6260 (GC2-145)

Recommended Charge Profile

Constant-current Constant-voltage Controlled Charge

Phase 1 (Constant-current)

constant current charge at 26~33.8 amperes until the battery voltage measures between 7.14~7.29 V/Battery(25°C) on charge voltage.

Phase 2 (Constant-voltage)

constant voltage charge at 7.14~7.29 V/Battery(25°C) until the current measures between 2.6~7.8 amperes.

Phase 3 (Constant-current)

constant current charge at 2.6~7.8 amperes until the battery voltage measures between 7.5~8.1 V/battery(25°C) or until dV/dt reaches to less than 0.035.

* END OF CHARGE at 110~120% of AH returned.

* Note : Charging condition(Voltage,Current, Time) will very depending on battery size, charger(Charging Type, output) depth of discharge and temperchure.



Specification

Nominal Voltage	6V
Length(mm)	261
Width(mm)	181
Height(mm) (Embedded Terminal)	298
Weight(kg)(With Electrolyte)	33
Terminal Options	Embedded, Dual Fit, Standard

Capacity

20Hr	260Ah
5hr	215Ah
75A	145min
25A	530min

5Hr Capacity by Temperature

40°C	105%
30°C	100%
0°C	80%

Material Specifications

Cover Style	Individual Filling Structure
Cover Vent Style	Gang & Bayonet Style
Container & Cover Material	Light-Blue Polypropylene Plastic
Case to Cover Seal Method	Heat Sealing
Inner-Cell Connector Type	Through The Partion Weld
Plate Lug Weld Method	Automated Cast-On Process
Positive Grid Material	Antimony Lead Alloy
Negative Grid Material	Antimony Lead Alloy
Separator Type	Microporous Rubber With Glass Mat

LONGEST 8170 (GC8-875)

Recommended Charge Profile

Constant-current Constant-voltage Controlled Charge

Phase 1 (Constant-current)

constant current charge at 17~22.1 amperes until the battery voltage measures between 9.52~9.72 V/Battery(25°C) on charge voltage.

Phase 2 (Constant-voltage)

constant voltage charge at 9.52~9.72 V/Battery(25°C) until the current measures between 1.7~5.1 amperes.

Phase 3 (Constant-current)

constant current charge at 1.7~5.1 amperes until the battery voltage measures between 10~10.8 V/battery(25°C) or until dV/dt reaches to less than 0.035.

* END OF CHARGE at 110~120% of AH returned.

* Note : Charging condition(Voltage,Current, Time) will very depending on battery size, charger(Charging Type, output) depth of discharge and temperature.



Specification

Nominal Voltage	8V
Length(mm)	264
Width(mm)	183
Height(mm) (Embedded Terminal)	279
Weight(kg)(With Electrolyte)	29
Terminal Options	Embedded, Dual Fit, Standard

Capacity

20Hr	170Ah
5hr	145Ah
75A	75min
25A	295min

5Hr Capacity by Temperature

40°C	105%
30°C	100%
0°C	80%

Material Specifications

Cover Style	Individual Filling Structure
Cover Vent Style	Gang & Bayonet Style
Container & Cover Material	Light-Blue Polypropylene Plastic
Case to Cover Seal Method	Heat Sealing
Inner-Cell Connector Type	Through The Partion Weld
Plate Lug Weld Method	Automated Cast-On Process
Positive Grid Material	Antimony Lead Alloy
Negative Grid Material	Antimony Lead Alloy
Separator Type	Microporous Rubber With Glass Mat

LONGEST 8190 (GC8-890)

Recommended Charge Profile

Constant-current Constant-voltage Controlled Charge

Phase 1 (Constant-current)

constant current charge at 19~24.7 amperes until the battery voltage measures between 9.52~9.72 V/Battery(25°C) on charge voltage.

Phase 2 (Constant-voltage)

constant voltage charge at 9.52~9.72 V/Battery(25°C) until the current measures between 1.9~5.7 amperes.

Phase 3 (Constant-current)

constant current charge at 1.9~5.7 amperes until the battery voltage measures between 10~10.8 V/battery(25°C) or until dV/dt reaches to less than 0.035.

* END OF CHARGE at 110~120% of AH returned.

* Note : Charging condition(Voltage,Current, Time) will very depending on battery size, charger(Charging Type, output) depth of discharge and temperature.



Specification

Nominal Voltage	8V
Length(mm)	264
Width(mm)	183
Height(mm) (Embedded Terminal)	279
Weight(kg)(With Electrolyte)	32
Terminal Options	Embedded, Dual Fit, Standard

Capacity

20Hr	190Ah
5hr	155Ah
75A	90min
25A	340min

5Hr Capacity by Temperature

40°C	105%
30°C	100%
0°C	80%

Material Specifications

Cover Style	Individual Filling Structure
Cover Vent Style	Gang & Bayonet Style
Container & Cover Material	Light-Blue Polypropylene Plastic
Case to Cover Seal Method	Heat Sealing
Inner-Cell Connector Type	Through The Partion Weld
Plate Lug Weld Method	Automated Cast-On Process
Positive Grid Material	Antimony Lead Alloy
Negative Grid Material	Antimony Lead Alloy
Separator Type	Microporous Rubber With Glass Mat

LONGEST 8240 (GC8-8125)

Recommended Charge Profile

Constant-current Constant-voltage Controlled Charge

Phase 1 (Constant-current)
constant current charge at 24~31.2 amperes until the battery voltage measures between 9.52~9.72 V/Battery(25°C) on charge voltage.

Phase 2 (Constant-voltage)
constant voltage charge at 9.52~9.72 V/Battery(25°C) until the current measures between 2.4~7.2 amperes.

Phase 3 (Constant-current)
constant current charge at 2.4~7.2 amperes until the battery voltage measures between 10~10.8 V/battery(25°C) or until dV/dt reaches to less than 0.035.

* END OF CHARGE at 110~120% of AH returned.

* Note : Charging condition(Voltage, Current, Time) will very depending on battery size, charger(Charging Type, output) depth of discharge and temperchure.



Specification

Nominal Voltage	8V
Length(mm)	264
Width(mm)	183
Height(mm) (Embedded Terminal)	319
Weight(kg)(With Electrolyte)	37
Terminal Options	Embedded, Dual Fit, Standard

Capacity

20Hr	240Ah
5hr	190Ah
75A	110min
25A	415min

5Hr Capacity by Temperature

40°C	105%
30°C	100%
0°C	80%

Material Specifications

Cover Style	Individual Filling Structure
Cover Vent Style	Gang & Bayonet Style
Container & Cover Material	Light-Blue Polypropylene Plastic
Case to Cover Seal Method	Heat Sealing
Inner-Cell Connector Type	Through The Partion Weld
Plate Lug Weld Method	Automated Cast-On Process
Positive Grid Material	Antimony Lead Alloy
Negative Grid Material	Antimony Lead Alloy
Separator Type	Microporous Rubber With Glass Mat

LONGEST 12150 (GC2-1275)

Recommended Charge Profile

Constant-current Constant-voltage Controlled Charge

Phase 1 (Constant-current)
constant current charge at 15~19.5 amperes until the battery voltage measures between 14.28~14.58 V/Battery(25°C) on charge voltage.

Phase 2 (Constant-voltage)
constant voltage charge at 14.28~14.58 V/Battery(25°C) until the current measures between 1.5~4.5 amperes.

Phase 3 (Constant-current)
constant current charge at 1.5~4.5 amperes until the battery voltage measures between 15~16.2 V/battery(25°C) or until dV/dt reaches to less than 0.035.

* END OF CHARGE at 110~120% of AH returned.

* Note : Charging condition(Voltage, Current, Time) will very depending on battery size, charger(Charging Type, output) depth of discharge and temperchure.



Specification

Nominal Voltage	12V
Length(mm)	331
Width(mm)	183
Height(mm) (Embedded Terminal)	281
Weight(kg)(With Electrolyte)	38
Terminal Options	Embedded

Capacity

20Hr	150Ah
5hr	120Ah
75A	70min
25A	280min

5Hr Capacity by Temperature

40°C	105%
30°C	100%
0°C	80%

Material Specifications

Cover Style	Individual Filling Structure
Cover Vent Style	Gang & Bayonet Style
Container & Cover Material	Light-Blue Polypropylene Plastic
Case to Cover Seal Method	Heat Sealing
Inner-Cell Connector Type	Through The Partion Weld
Plate Lug Weld Method	Automated Cast-On Process
Positive Grid Material	Antimony Lead Alloy
Negative Grid Material	Antimony Lead Alloy
Separator Type	Microporous Rubber With Glass Mat

Global Leader of Battery Industry

Sebang Global Battery Co., Ltd is the company representing Korean battery industry.

Now, Sebang Global Battery Co., Ltd is concentrating the efforts in order to jump to the top battery manufacturer in the world.

Sebang Global Battery Co., Ltd has led the battery industry in Korea for over half century since its establishment in 1952.

Sebang Global Battery has put forth its strength to the continuous management innovation corresponding to the rapid changing market environment, and has concentrated ceaseless efforts to the technology development in order to produce the best quality product.



SEBANG

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