

DEEP CYCLE VRLA AGM BATTERY

Voltage: 12V
 Capacity: upto 12V300Ah
 Designed floating service life: 8-12 years @ 25 °C/77 °F.

SUMMARY

Shangyu Deep cycle series batteries are designed to have a large amount of stored current discharged between charging sessions, with very heavy non-porous battery plates to withstand repeated major discharging and charging cycle (deep cycle). The Shangyu deep cycle battery uses a different chemistry for the plates active paste material, and a slightly stronger electrolyte than normal battery electrolyte, thus the GFM range features 30% higher cyclic life with 10 years of float life when compared to the standard Duration range.

FEATURES AND BENEFITS

- 30% more cyclic life through innovation at the PAM additives
- Long life expectancy of 10 years in floating condition
- Thick flat plate with high Tin low Calcium alloy
- Wide operating temperature range from -20 °C to 50°C
- 3% Low self-discharge rate
- Very good deep cycle performance: up to 500 cycles @80% DOD
- Excellent deep discharge recovery capability

CONSTRUCTION

- Positive plate – Thick high Sn low Ca grid with special paste
- Negative plate – Balanced Pb-Ca grid for improved recombination efficiency
- Separator – Advanced AGM separator for high pressure cell design
- Electrolyte – Dilute high purity sulfuric acid
- Battery container and cover – Fire resistance ABS, water proof
- Pillar seal – Two layers epoxy resin seal
- Relief valve – Complete with integrated flame arrestor



CHARGING VOLTAGE AND SETTINGS

Constant voltage charging is recommended
 Recommended float charge voltage: 2.27V/cell @20~25°C
 Float voltage temperature compensation: -3mV/°C/cell
 Float voltage range: 2.27 to 2.30 V/cell @ 20~25°C
 Cyclic application charge voltage : 2.40 to 2.47 V/cell @ 20~25°C
 Max. charge current allowable : 0.25C

APPLICATIONS

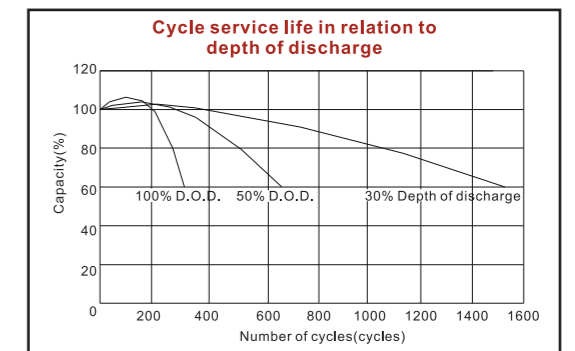
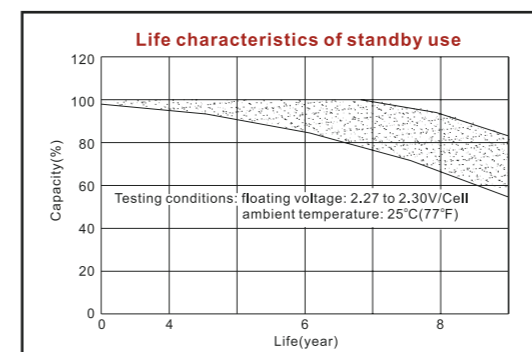
- Electric Powered Vehicles
- Wheel Chairs
- Electric Powered Toys
- Medical Equipments
- Solar and Wind
- Golf Cars and Buggies
- Power Tools
- Control System
- UPS systems
- Emergency systems

COMPLIED STANDARDS

- UL
- IEC 61427
- BS6290 part 4
- GB/T 22473
- ISO9001/14001/18001
- CE
- IEC 60896-21/22
- Eurobat guide, long life
- IATA and IMDG
- MSDS

Model NO.	Nominal Voltage (V)	Rated Capacity(AH) 10hrs/25°C	Dimensions(mm)								Terminal Type
			Length		Width		Height		Total Height		
			mm	inch	mm	inch	mm	inch	mm	inch	
GW127	12	7	151	5.94	65	2.56	94	3.70	100	3.94	T2
GW1212	12	12	151	5.94	98	3.86	94	3.70	100	3.94	T2
GW1218	12	18	181	7.13	77	3.03	167	6.57	167	6.57	T3
GW1224	12	24	166	6.54	126	4.96	174	6.5	181	7.13	T32
GW1233	12	33	196	7.7	131	5.16	155	6.10	180	7.09	T16
GW1245	12	45	197	7.73	166	6.54	174	6.85	181	7.13	T5
GW1255	12	55	230	9.06	138	5.43	211	8.30	229	9.01	T9/16
GW1265	12	65	350	13.8	166	6.54	179	7.05	179	7.05	T9
GW1275	12	75	260	10.2	169	6.65	211	8.3	215	8.46	T14
GW1280	12	80	260	10.2	169	6.65	211	8.30	229	8.46	T14
GW1290	12	90	307	12.1	169	6.65	211	8.30	215	8.46	T16
GW12100	12	100	331	13.03	173	6.81	213	8.39	233	9.17	T10
GW12120	12	120	407	16	174	6.85	209	8.23	233	9.17	T11
GW12134	12	134	341	13.43	173	6.81	283	11.14	287	11.3	T9/T20
GW12150	12	150	484	19.1	171	6.73	241	9.49	241	9.49	T11
GW12180	12	180	522	20.6	240	9.45	216	8.5	240	9.45	T9
GW12200	12	200	522	20.6	240	9.45	216	8.50	240	9.45	T11
GW12230	12	230	522	20.6	240	9.45	216	8.50	240	9.45	T11
GW12250	12	250	520	20.5	268	10.55	220	8.66	243	9.57	T11
GW12300	12	300	520	20.5	268	10.55	220	8.66	248	9.76	T11

Products will be improved without notice, please contact sales for specification in kind prevail.



DEEP CYCLE GEL BATTERY

Voltage: 12V

Capacity: upto 12V300Ah

Designed floating service life: 15~20 years @ 25 °C/77 °F.



SUMMARY

Shangyu deep cycle GEL battery is designed for frequent cyclic charge and discharge applications under extreme environments. By combining the newly developed Nano Silicone Gel electrolyte with high density paste, the Solar range offers high recharge efficiency at very low charge current. The acid stratification is highly reduced by adding Nano Gel.

FEATURES AND BENEFITS

1. This Energy storage battery utilizes gel electrolyte technology. The uniformly distributed gel electrolyte is made by mixing sulfuric acid with silica fume.
2. The electrolyte can hold the battery plates securely in an immobile gel.
3. Radial grid design offers this power storage device excellent discharge performance.
4. Due to 4BS lead paste technology, our deep cycle gel battery provides long lasting service life.
5. Employing unique grid alloy, special gel formulation and distinct positive and negative lead paste ratio, the maintenance free battery boasts outstanding deep cycle service performance and over discharge recovery ability.
6. Completely manufactured from high purity raw materials, Shangyu deep cycle gel battery has extremely low self discharge.
7. Gas recombination technology ensures excellent seal reaction efficiency, thus delivering no pollution such as acid mist to the environment.
8. The gel VRLA battery boasts reliable sealing technology which enables security seal performance.

CHARGING VOLTAGE AND SETTINGS

Constant voltage charging is recommended

Recommended float charge voltage: 2.27V/cell @20~25°C

Float voltage temperature compensation: -3mV/°C/cell

Float voltage range: 2.27 to 2.30 V/cell @ 20~25°C

Cyclic application charge voltage : 2.40 to 2.47 V/cell @ 20~25°C

Max. charge current allowable : 0.25C

CONSTRUCTION

- 1) Container/Cover: Made of UL94HB and UL 94-0ABS Plastic, fire resistance and water proof.
- 2) 99.997% pure new lead NEVER use recycle lead.
- 3) Negative Plates: Use the special PbCa alloy grids, optimize the recombination efficiency and less gassing.
- 4) High quality AGM separator: Absorb acid electrolyte, the best retainer mat for VRLA batteries.
- 5) Positive plates: PbCa grids minimize corrosion and prolong life.
- 6) Terminal post: Copper or lead material with maximum conductivity, enhance the high current rapidly..
- 7) Vent Valve: Allows the release of the excess gas automatically for safety.
- 8) Three steps of Seal procedures: Ensure battery completely sealed with safety, never leakage and volatile acid, longer life.
- 9) Silicone Nano GEL electrolyte: Import from Germany Degussy famous brand silicone.

APPLICATIONS

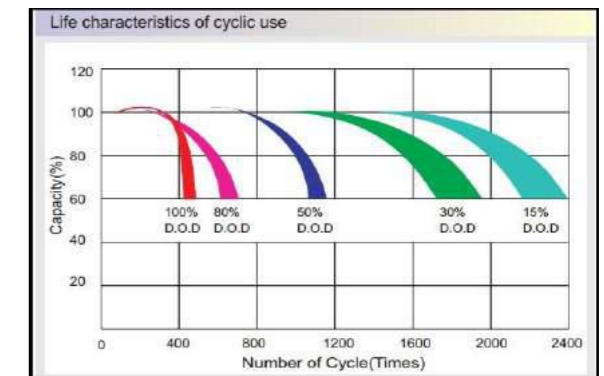
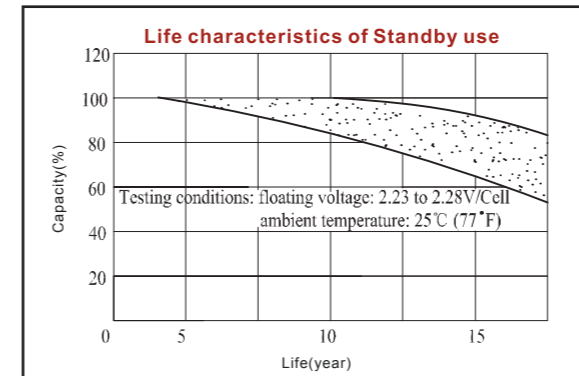
- Electric Powered Vehicles
- Golf Cars and Buggies
- Wheel Chairs
- Power Tools
- Electric Powered Toys
- Control System
- Medical Equipments
- UPS systems
- Solar and Wind
- Emergency systems

COMPLIED STANDARDS

- UL
- CE
- IEC 61427
- IEC 60896-21/22
- BS6290 part 4
- Eurobat guide, long life
- GB/T 22473
- IATA and IMDG
- ISO9001/14001/18001
- MSDS

Model NO.	Nominal Voltage (V)	Rated Capacity(AH) 10hrs/25°C	Dimensions(mm)								Terminal Type
			Length		Width		Height		Total Height		
			mm	inch	mm	inch	mm	inch	mm	inch	
GWJ1233	12	33	196	7.70	131	5.16	155	6.10	170	6.69	T9/T16
GWJ1238	12	38	197	7.73	166	6.54	174	6.85	181	7.13	T12
GWJ1250	12	50	230	9.06	138	5.43	211	8.30	229	9.01	T9/T16
GWJ1255	12	55	230	9.06	138	5.43	211	8.30	229	9.01	T9/T16
GWJ1265	12	65	350	13.8	166	6.54	179	7.05	179	7.05	T9
GWJ1270	12	70	260	10.2	169	6.65	211	8.30	215	8.46	T16
GWJ1280	12	80	260	10.2	169	6.65	211	8.3	229	9.02	T14
GWJ1285	12	85	307	12.08	169	6.65	211	8.3	234	9.21	T16A/T8
GWJ12100	12	100	331	13.0	173	6.81	213	8.39	233	9.17	T10
GWJ12120	12	120	407	16.0	174	6.85	209	8.23	233	9.17	T11
GWJ12134	12	134	341	13.43	173	6.81	283	11.14	283	11.14	T9/T20
GWJ12150	12	150	484	19.1	171	6.73	241	9.49	241	9.49	T11
GWJ12180	12	180	530	20.9	209	8.23	214	8.43	240	9.45	T9
GWJ12200	12	200	522	20.57	240	9.45	216	8.50	240	9.45	T11
GWJ12230	12	230	522	20.6	240	9.45	216	8.50	240	9.45	T9
GWJ12250	12	250	520	20.5	268	10.55	220	8.66	243	9.57	T11
GWJ12300	12	300	520	20.5	268	10.55	220	8.66	248	9.76	T11

Products will be improved without notice, please contact sales for specification in kind prevail.



Shangyu (Shenzhen) Technology Co., Ltd

Tel: +86 0755-29426070

Fax: +86 0755-23282881

Email: phyllis@cpsypower.com

Phone/Whatsapp/Wecha:+86 13924625460

Skype: cpsy_phyllis@163.com

QQ: 2851792754

Address: 1F, Building B3, Shangyu Science and Technology

Park,26 Lougang Avenue, Baoan District, Shenzhen,China

LONG LIFE DEEP CYCLE AGM BATTERY

Voltage: 2V

Capacity: upto 2V3000Ah

Designed floating service life: 12~15 years @ 25°C/77 °F.



Advantages for Industry Battery 2V

CPSY POWER GW02 series of 2V VRLA AGM batteries upto 2V3000Ah are recognized as the most reliable and high quality battery system in the industry. They are designed with advanced AGM (Absorbent Glass Mat) technology, Long service life designed with 10-15 years, the batteries comply to the most popular international standards, such as IEC60896-21/22, CE, ISO and Eurobat Guide long life.

Long Service Life, Float or Cyclic

The CPSY POWER VRLA battery has a long life in float or cyclic service. The expected life of float service is 18 years@25°C

Low Pressure Venting System

CPSY POWER batteries are equipped with a safe low pressure venting system, which operates from 1 psi to 6 psi. The venting system is designed to release excess gas in the event that the gas pressure rises to a level above the normal rate. Afterwards, the venting system automatically re-seals itself when the gas pressure level returns its normal rate. This feature prevents excessive build up of gas in the batteries. This low pressure venting system, coupled with the extraordinarily high recombination efficiency, ensure CPSYPOWER batteries be the safest VRLA batteries available.

Heavy Duty Grids

The heavy-duty lead calcium-alloy grids in CSPOWER batteries provide an extra margin of performance and service life in both float and cyclic applications, even in conditions of deep discharge.

APPLICATIONS

Industry use, Communication equipment, Telecommunication control equipment; Emergency lighting systems; Electric power systems; Power station; Nuclear power station; Solar powered and wind powered systems; Load leveling and storage equipment; Marine equipment; Power generation plants; Alarm systems; Uninterruptible power supplies and stand-by power for computers; Medical equipment; Fire and security systems; Control equipment; Stand-by electric power.

Model NO.	Nominal Voltage (V)	Rated Capacity(AH) 10hrs/25°C	Dimensions(mm)				Terminal Type	Bolt
			Length	Width	Height	Total Height		
			mm	mm	mm	mm		
GW02200	2	200	170	106	330	367	T5	M8x16
GW02300	2	300	171	151	330	365	T5	M8x16
GW02400	2	400	211	176	329	367	T5	M8x16
GW02500	2	500	241	172	330	364	T5	M8x16
GW02600	2	600	301	175	331	366	T5	M8x16
GW02800	2	800	410	176	330	365	T5	M8x16
GW021000	2	1000	475	175	328	365	T5	M8x16
GW021200	2	1200	472	172	338	355	T5	M8x16
GW021500	2	1500	401	351	342	378	T5	M8x16
GW022000	2	2000	491	351	343	383	T5	M8x16
GW022500	2	2500	712	353	341	382	T5	M8x16
GW023000	2	3000	712	353	341	382	T5	M8x16

LONG LIFE DEEP CYCLE GEL BATTERY

Voltage: 2V

Capacity: upto 2V3000Ah

Designed floating service life: 15~20 years@25°C/77°F.



SUMMARY

GWJ02 Series pure GEL Battery is with 15-20years float design life.

CPSY POWER deep cycle GEL battery is designed for frequent cyclic charge and discharge applications under extreme environments. By combining the newly developed Nano Silicone Gel electrolyte with high density paste, the Solar range offers high recharge efficiency at very low charge current. The acid stratification is highly reduced by adding Nano Silicone Gel.

Advantages for Industry Gel Battery

1. This Energy storage battery utilizes gel electrolyte technology. The uniformly distributed gel electrolyte is made by mixing sulfuric acid with silica fume.
2. The electrolyte can hold the battery plates securely in an immobile gel.
3. Radial grid design offers this power storage device excellent discharge performance.
4. Due to 4BS lead paste technology, our deep cycle gel battery provides long lasting service life.
5. Employing unique grid alloy, special gel formulation and distinct positive and negative lead paste ratio, the maintenance free battery boasts outstanding deep cycle service performance and over discharge recovery ability.
6. Completely manufactured from high purity raw materials, CSPOWER deep cycle gel battery has extremely low self discharge.
7. Gas recombination technology ensures excellent seal reaction efficiency, thus delivering no pollution such as acid mist to the environment.
8. The gel VRLA battery boasts reliable sealing technology which enables security seal performance.

Model NO.	Nominal Voltage (V)	Rated Capacity(AH) 10hrs/25°C	Dimensions(mm)				Terminal Type	Bolt
			Length	Width	Height	Total Height		
			mm	mm	mm	mm		
GWJ02200	2	200	170	106	330	367	T5	M8x16
GWJ02300	2	300	171	151	330	365	T5	M8x16
GWJ02400	2	400	211	176	329	367	T5	M8x16
GWJ02500	2	500	241	172	330	364	T5	M8x16
GWJ02600	2	600	301	175	331	366	T5	M8x16
GWJ02800	2	800	410	176	330	365	T5	M8x16
GWJ021000	2	1000	475	175	328	365	T5	M8x16
GWJ021200	2	1200	472	172	338	355	T5	M8x16
GWJ021500	2	1500	401	351	342	378	T5	M8x16
GWJ022000	2	2000	491	351	343	383	T5	M8x16
GWJ022500	2	2500	712	353	341	382	T5	M8x16
GWJ023000	2	3000	712	353	341	382	T5	M8x16

FRONT TERMINAL AGM BATTERY

Voltage: 12V

Capacity: 12V55Ah~12V200Ah

Designed floating service life: 8-10 years @ 25 °C/77 °F.

Application

1. Suitable for 19inch and 23inch power cabinet.
2. Used in telecom system including exchange board,microwave station, mobile base station, data center,radio and broadcast station.
3. Great for power supply system of private network or LAN.
4. Used as signal system battery and emergency lighting system battery.
5. Perfect for EPS and UPS system.
6. Solar and wind system.

CPSY POWER Front Terminal lead acid battery is mainly used in the area of communication,which is novel in design, reasonable in structure and occupying the leading position in the same industry of the world.

As with previous INTELEC (International Telecommunications Energy) conferences, many people were concerned about the life and durability of VRLA (Valve Regulated Lead Acid) batteries. It can be employed in numerous applications in the fields of communication.In order to ensure that the power supply is guaranteed at all times, essential facilities are backed up with high performances battery systems.Sudden breaks in the power supply are then no longer a problem. If the power suddenly fails, battery systems take over the emergency supply of power.

Features

1. This AGM battery for telecom industry comes with slim shape design and front terminal connection. Thus, easy installation and maintenance can be ensured and space can be saved.
2. Radial grid design plus tight assembly technology assures this rechargeable battery prominent high rate discharge performance.
3. Our front access battery features unique design which makes it sure that the electrolyte volume can be hardly reduced during use and additional of water is not necessary in its service life.
4. Due to unique corrosion resistant grid alloy, the power storage cell can serve for more than 8-10years in standby current at a temperature of 25 degree.
5. Fully made from high purity materials, the front access AGM battery comes with extremely low self discharge.
6. Gas recombination technology makes this power supply device environment friendly and pollution free. To be specific, due to this technology,the battery can have super high seal reaction efficiency, thus generating no acid mist.
7. The use of best-in-class sealing technology ensures that this UPS battery is perfectly sealed,providing high security and reliability.



FRONT TERMINAL GEL BATTERY

Voltage: 12V

Capacity: 12V55Ah~12V200Ah

Designed floating service life: 12-15 years @ 25 °C/77 °F.

Application

1. Suitable for 19inch and 23inch power cabinet.
2. Used in telecom system including exchange board,microwave station, mobile base station,data center, radio and broadcast station.
3. Great for power supply system of private network or LAN.
4. Used as signal system battery and emergency lighting system battery.
5. Perfect for EPS and UPS, Inverter system.
6. Solar and wind system.

As a well renowned front access lead acid battery manufacturer in China, CPSYPOWER offers the widest selection of front access AGM batteries and GEL VRLA batteries. The gel technology has numerous superiorities over the equivalent AGM battery range, especially for telecommunication applications.

The FL type front terminal battery comes with long lasting design life and front access connections for fast, easy installation and maintenance, and is ideally suitable for telecom outdoor equipment, renewable energy systems and other severe environments.

Features

1. This stationary battery comes with a superior gel electrolyte where sulfuric acid is evenly mixed with silica fume and acid layering does not exist.
2. The electrolyte is gel like and immobile, which enables no leakage and uniform reaction of battery plates.
3. Serving as perfect power supply equipment, the front access lead acid battery is designed with slim shape. Front access terminal connection is convenient for installation and maintenance, and space serving.
4. Radial type grid design and tight assembly technology enable prominent high rate discharge performance for our GEL VRLA battery.
5. Due to a unique design, the electrolyte volume of this battery can not reduce in use, and it requires no watering during service life.
6. Special anti-corrosion grid alloy is utilized so that the energy storage device comes with more than 12years of design life at 25degree.
7. High purity raw materials ensure super low battery self discharge.
8. Thanks to the use of gas recombination technology, our industrial battery boasts extremely high seal reaction efficiency and yields no acid mist, thus friendly and pollution-free to the environment.
9. By means of special design and high reliable sealing technology, the battery is well sealed, thus ensuring definite safety.



Model NO.	Nominal Voltage (V)	Rated Capacity(AH) 10hrs/25°C	Dimensions(mm)				Terminal Type	Bolt
			Length mm	Width mm	Height mm	Total Height mm		
FCT12-55	12	55	277	106	223	223	T2	M6x16
FCT12-80	12	80	562	114	188	188	T3	M6x16
FCT12-100	12	100	507	110	223	223	T4	M8x16
FCT12-105/110	12	110	394	110	286	286	T4	M8x16
FCT12-125	12	125	552	110	239	239	T4	M8x16
FCT12-150	12	150	551	110	288	288	T4	M8x16
FCT12-160	12	160	551	110	288	288	T4	M8x16
FCT12-175	12	175	546	125	316	323.5	T5	M8x16
FCT12-180	12	180	560	125	316	316	T5	M8x16
FCT12-200	12	200	560	125	316	316	T5	M8x16

Model NO.	Nominal Voltage (V)	Rated Capacity(AH) 10hrs/25°C	Dimensions(mm)				Terminal Type	Bolt
			Length mm	Width mm	Height mm	Total Height mm		
FCL12-55	12	55	277	106	223	223	T2	M6x16
FCL12-80	12	80	562	114	188	188	T3	M6x16
FCL12-100	12	100	507	110	223	223	T4	M8x16
FCL12-105/110	12	110	394	110	286	286	T4	M8x16
FCL12-125	12	125	552	110	239	239	T4	M8x16
FCL12-150	12	150	551	110	288	288	T4	M8x16
FCL12-160	12	160	551	110	288	288	T4	M8x16
FCL12-175	12	175	546	125	316	323.5	T5	M8x16
FCL12-180	12	180	560	125	316	316	T5	M8x16
FCL12-200	12	200	560	125	316	316	T5	M8x16

Lithium Iron Phosphate (LiFePO4) Battery, the longest life among battery field.

Voltage: 12V, 24V, 48V

Capacity: upto 12V200Ah, 24V100Ah, 48V100Ah.

Designed floating service life: over 20years @25

Cyclic usage: 100%DOD, >2000 cycles

80%DOD, >3000 cycles

Features

Due to the demand for energy saving strategies, CPSY POWER delivers a full range of battery power systems with multiple nominal voltages (12V/24V/48V/240V/etc.).

It is smaller in size and lighter in weight, but it has longer cycle life, temperature durability is stronger, and energy storage is more efficient. With the accurate and reliable battery management system (BMS), our lithium battery power system is a better solution for achieving highest efficiency and reliability. After years of practice, we have the most extensive experience in backup power supply in the industry, and we will continue to provide the best battery products.

Advantages for LiFePO4 Battery

1. Energy density is high. The volume and weight of lithium battery is 1/3 to 1/4 of the traditional lead acid battery with the same capacity.
2. Energy conversion rate is 15% higher than that of a traditional lead acid battery, the advantage of energy saving is obvious. Self-discharge rate < 2% per month.
3. Broad temperature adaptability. Products perform well at a temperature of -20°C to 60°C, without air conditioning system.
4. Cycle durability for a single cell is 2000 cycles, which is 3 to 4 times more than the cycle durability of a traditional lead acid battery.
5. Higher discharge rate, faster charging and discharging. When there is a need for backup power supply for a period of 10 hours or less, we could reduce up to 50% of the capacity configuration, comparing to lead acid battery.
6. High security. Our lithium battery is safe, electrochemical materials are stable, no fire or explosion under extreme conditions such as high temperature, short circuit, drop impact, piercing, etc
7. Optional LCD digital display. Optional LCD digital display can install in the front panel of battery and show battery voltage, capacity, current information, etc.

BMS of LiFePO4 Battery

- Overcharge detection function
- Over discharge detection function
- Over current detection function
- Short detection function
- Balance function
- Temperature protection

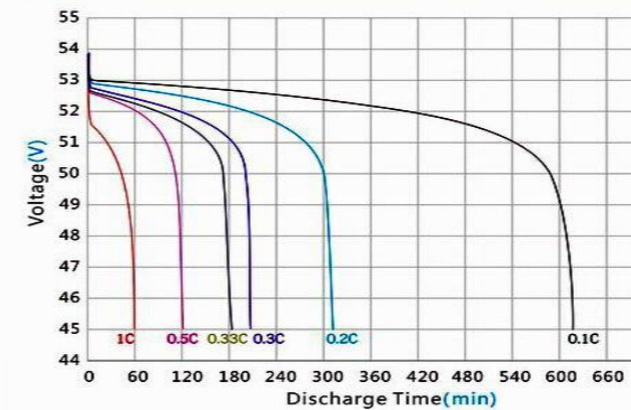
Application

- Electric Vehicles, electric mobility
- Solar/wind energy storage system
- UPS, backup power
- Telecommunication
- Medical equipment
- Lighting and so on

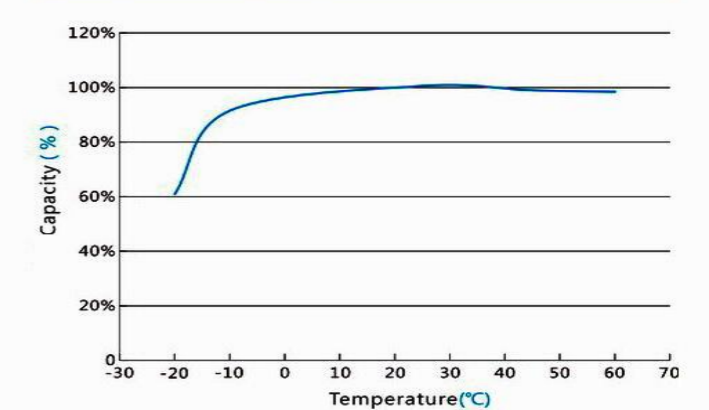
Model NO.	Nominal Voltage (V)	Rated Capacity(AH) 43.2V/25°C	Dimensions(mm)			Weight
			Length mm	Width mm	Height mm	
GWLi4810	48	10	442	420	86	9
GWLi4820	48	20	442	420	86	14.5
GWLi4830	48	30	442	420	86	19
GWLi4840	48	40	442	420	86	21.5
GWLi4850	48	50	442	500	131	29
GWLi4875	48	75	442	500	131	32
GWLi48100	48	100	442	500	131	43
GWLi48200	48	200	442	500	262	86



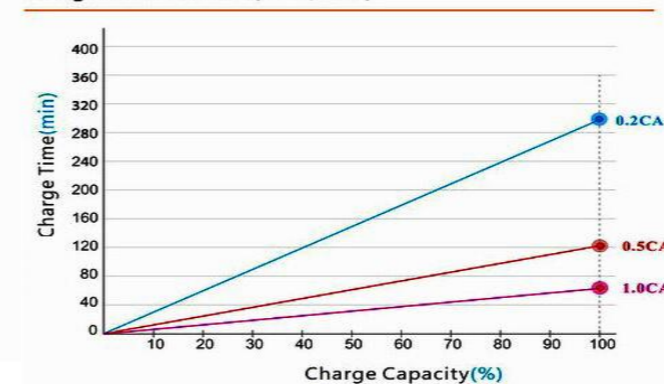
Discharge Characteristic of 48V Battery Group(25°C)



Capacity Effected by Temperature Characteristic



Charge Characteristic(25°C/77°F)



Cycle life with Depth of Discharge Characteristic

