



Power your life
LONG

LONG BATTERY

Product Catalog



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Backup Power

For UPS, Security, Fire Alarm System



Electric Vehicle Power

For Mobility Scooter, Electric Vehicle, Golf Trolley, Medical



Green Power

For Solar and Renewable Energy, Deep Cycle



Cyclic Power

For Multi-Purpose



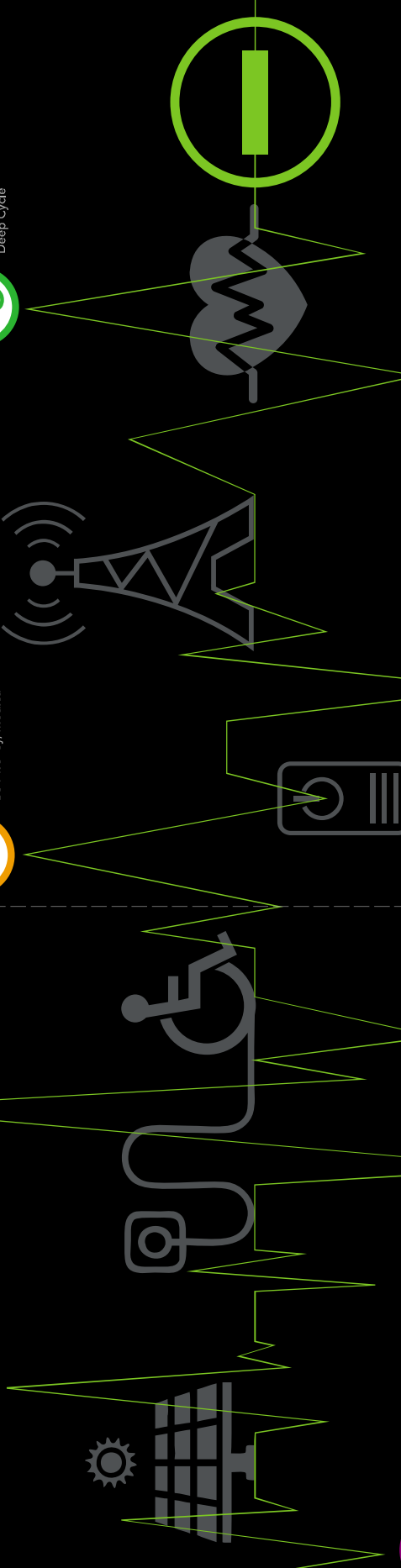
High Power

For Telecommunication, UPS System



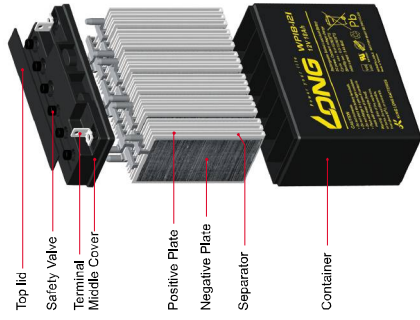
Long Life Power

For Telecommunication, UPS System



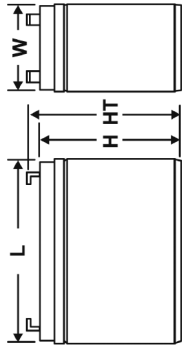
VRLA BATTERIES

CONSTRUCTION

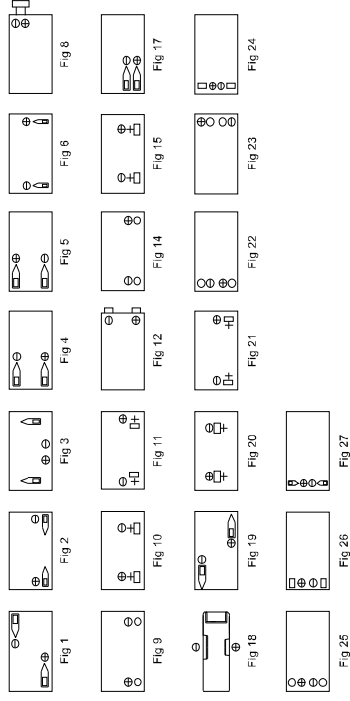


- Top Lid
- Safety Valve
- Terminal Middle Cover
- Positive Plate
- Negative Plate
- Separator
- Container

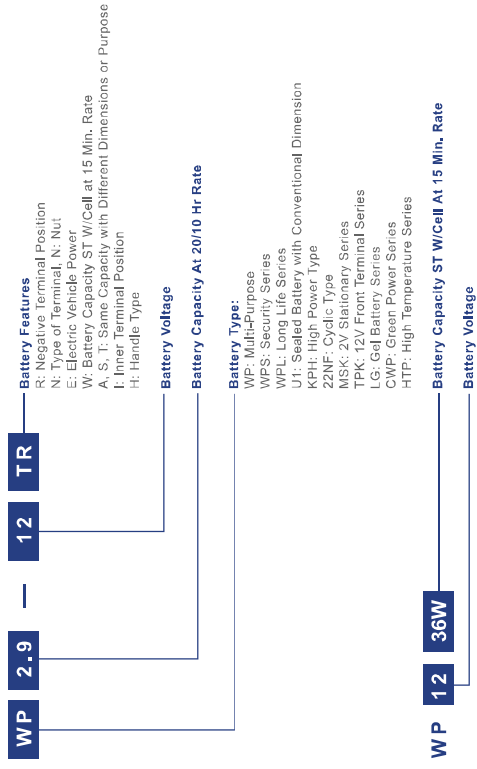
CASE DIMENSION



TERMINAL POSITION



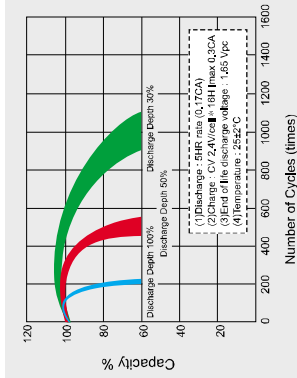
BATTERY NUMBERING SYSTEM



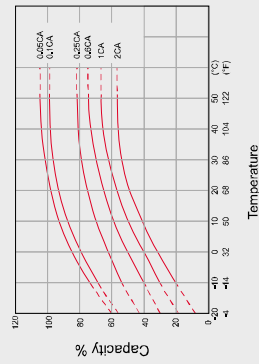
CHARACTERISTIC

Discharge current (A)	Final discharge Voltage (V/cell)
(A) ≤ 0.2C	1.75
0.2C < (A) ≤ 0.5C	1.70
0.5C < (A) ≤ 3.0C	1.60
(A) > 3.0C	1.40

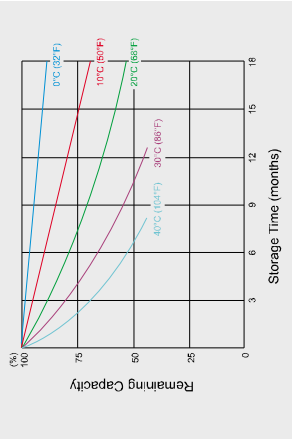
Discharge current and final discharge voltage



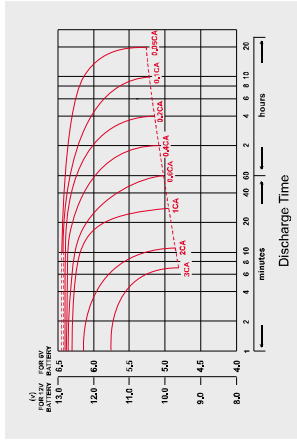
Cycle Service Life



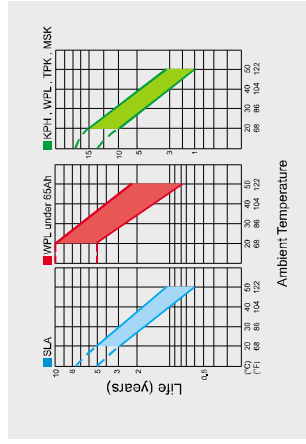
Effect of Temperature on Capacity 25°C (77°F)



Capacity Retention Characteristic



Discharge Time VS. Discharge Current (25°C (77°F))



Trickle (or float) Service Life

CHARGING METHOD

APPLICATION	STANDBY USE	CYCLE USE
Charging method	Constant voltage	
Setting voltage (V/cell)	2.25~2.30	2.40~2.50
Temperature factor	-3.0mV/°C/cell	-5.0mV/°C/cell
Max. charge current (CA)	0.3	0.3
Charge Time	Discharge 100%	16h
	Discharge 50%	10h
Temperature (°C)	-15°C~40°C	

CHARGING METHOD

High performance and long service life of LONG battery depend upon correct charging. Improper charging modes or inadequate charging equipment result in decreased battery life and/or unsatisfactory performance.

Any of the conventional charging techniques may be used, but to obtain maximum service life and capacity, along with acceptable recharge time, constant current/constant voltage charging is recommended.

A charge quantity of 105~120% of the previous discharged quantity is needed for fully charging the battery. The charging voltage of battery decreases with increasing temperature and increases with decreasing temperature. At a temperature below 5°C (41°F) or above 35°C (95°F), the temperature compensation for charging voltage is necessary. At ambient temperature the compensation will not be necessary. Overcharging should be avoided: As a result of too high a charge voltage, excessive current will flow after reaching full charge, causing decomposition of water in the electrolyte and, hence, premature aging.

Undercharging should also be avoided: If too low a charge voltage is applied, the charger current output will essentially stop before the battery is fully charged. This allows some of the lead sulfate to remain on the plates which will eventually reduce capacity.

RECOMMENDED RECHARGING INTERVAL & METHOD

STORAGE TEMPERATURE	RECHARGE INTERVAL & METHOD
Below 20°C (68°F)	9 months, charge for 16~20 hrs at 2.4V/cell
20°C~30°C (68°F~86°F)	6 months, charge for 16~20 hrs at 2.4V/cell
above 30°C (86°F) (avoid this storage condition)	3 months, charge for 16~20 hrs at 2.4V/cell

HANDLING INSTRUCTION

- Do not short the terminals.
- Do not place the battery near or in fires.
- Do not use the battery in a container or bag without proper ventilation.
- Operate at a temperature between -15°C. To 50°C. But for cycle use, the 5°C to 35°C temperature range is recommended.
- To properly store the battery, remove battery from equipment or charge and store in a dry and cool place.
- Immediately recharge after discharging.
- If sulfuric acid from the battery is spilled on skin or clothing, wash immediately with water. If acid comes in contact with eyes, flush with large amounts of water and immediately see a doctor.
- To obtain maximum life, the ripple current at the RMS forward current of the charger should be regulated to 10% less than its output value.
- Avoid mixed use of batteries. Different capacities, histories, or manufacturers of batteries may cause damage to the batteries or other equipment's.

COMPANY INTRODUCTION

ABOUT KUNG LONG



Established 27 years ago, Kung Long Batteries Industrial Co., Ltd. is the only professional lead-acid battery manufacturer in Taiwan that owns a bonded factory and is also listed on the Taiwan Stock Exchange and company sales achieved NT\$ 7 billion in 2016. We have adopted the manufacturing and sales policy of international labor distribution as spreading manufacturing risks while expanding the market for potential sales. Since 1996, we established a factory in the Ben Luc District in Vietnam, which made us to become a first completely foreign-owned corporation to construct a battery production base in the locality. Thereafter, we passed ISO9001 and ISO14001 accreditation in 1999 and 2000, respectively. We passed OHSAS18001 accreditation, and also became a listed company in Taiwan in 2002. Construction of our 200,000m² Duc Hoa factory in Vietnam was finished in 2007. Then we passed TL9000 communications/telecommunications electronics industry quality system certification in 2008. In 2015 the Phase-6 production construction in Duc Hoa factory was finished.



In terms of product manufacturing, Kung Long possesses strict standards for each step of the manufacturing process, along with revolutionary innovations and implementations in the technology system, management methods and administrative procedures. Under precise manufacturing standards and insurance of product compliance of quality management systems, our entire collection of sealed battery products have passed UL safety standards. In addition, we have also passed German VdS certification to meet quality demands of the security system market in the European region. Renowned international corporations both domestic and overseas have voiced support and affirmation of our products' quality. We believe that customer satisfaction is not only from the product itself, but is also built from immediate service and establishment of a friendly working relationship with clients those are measures to provide extra value and enhance customer satisfaction. Thus, Kung Long earned the Gold Award for Customer Satisfaction, and also earned the honor of the Taiwan Excellence Award from the Ministry of Economic Affairs.



Our innovative developments stem from abundant experience and energy. With our competitive advantage of a broad, complete product line and flexible manufacturing technologies, Kung Long has developed more than 400 types of batteries for various usages. We continue developing batteries for renewable energy applications, such as electric vehicles, solar power and wind power. Because of our uniring efforts of product innovation and development and proactive attitude, since 1993 Kung Long has cooperated with the Industrial Technology Research Institute's Material & Chemical Research Laboratories on the development of deep-cycle sealed batteries, electric scooter batteries, and high-power surface modified batteries. We have also introduced new technologies from many sources and invested in a multitude of advanced facilities, demonstrating our mission and promise to provide state-of-the-art services to customers while we are pursuing sustainable development.

Taiwanese Origins, Vietnamese Roots, and World Vision are Kung Long's main concern. Kung Long's goal is to provide clean energy for global consumers while upholding social and environmental responsibilities to promote continual growth, sustained development and untiring efforts within the company.



HISTORY

Our expertise comes from our ample experiences

