The LONGWAY General Series middle batteries (more than 24Ah) are designed and developed using AGM technology and valve controlled sealing technology. They can meet conventional performance requirements, with a designed float charging life of over 8 years. The valve controlled non-spillable structure design allows safe use in any direction and is certified by sea and air freight. The battery performance also meets international standards. such as IEC60896-2012, UL1989.etc.



## **General Feature**

- High reliability, safe without leakage, can be used in any position
- Excellent recovery performance after deep discharge
- Environmentally friendly products.
   Meet EU battery directive RoHS and REACH standards
- · Maintenance free
- Widely applicable temperature range, can be used at -20 °C~60 °C
- Low self-discharge rate. The average monthly self-discharge rate of the battery is less than 2.5%

(It is recommended to recharge after storage for 6 months or before use)

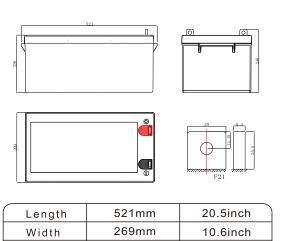
# **Applications**

- Emergency lights; Alarm system
- Electrical test equipment; communication Equipment
- Uninterruptible power supply; Fire & Security
- Electric toys; Control instruments
- · Portable Movie & Video lights
- · Electric tools; Solar system
- · Robots and control machines and other

#### Performance

Naminal Valtage	12V (6cells)					
Nominal Voltage	12V (ocens)					
Capacity	<b>@25</b> ℃					
10hr Rate (25.0A)	233 Ah @ to 1.75V/ceII					
5hr Rate (42.5A)	200 Ah @ to 1.70V/cell					
3hr Rate (62.5 A)	187 Ah @ to 1.60V/ceII					
Weight	Approx (71.0 $\pm$ 3%)kg ( 156.5lbs )					
Internal Resistance	Approx 3.50mΩfully charged @25℃					
Maximum Discharge Current	400A(3sec)					
Terminal	F21					
Operating Temperature Range	Discharge:-20℃~60℃;Charge:0℃~50℃ Storage:-20℃~40℃					
Container Material	ABS(UL94 HB)/UL94-V0 Optional					

#### **Dimensions**



Length	521mm	20.5inch
Width	269mm	10.6inch
Height	220mm	8.66inch
Total height	246mm	9.69inch
Total height	246mm	9.69inch

## Battery use

#### Cycle use

- 1. Limit the initial charging current to no more than 62.5A
- 2. Keep charging voltage at 14.4-15.0V/unit.and continue charging at least 3 hours after the charging current reduces to 5.0A to ensure full charge
- 3. The compensation coefficient of charging voltage and temperature is -5mv/cell/ $^{\circ}$

#### Float use

- 1. Limit the initial charging current to no more than 62.5A
- 2. Keep charging voltage at 13.5-13.8V/unit.When the voltage reaches the constant voltage, the current gradually decreases until the battery is fully charged and continues to charge
- 3. The compensation coefficient of charging voltage and temperature is -3mv/cell/  $\!\!\!\!\!\!^{\rm C}$





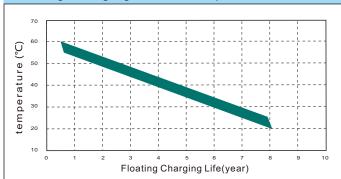


Kaiying Power Supply & Electrical Equip Co., Ltd Email: <a href="mailto:sales@longwaybattery.com">sales@longwaybattery.com</a>
Tel:0595-68782266 Fax:0595-68782222 Website: <a href="http://www.longwaybattery.com">http://www.longwaybattery.com</a>
Add: Kaiying Industrial Area, Chengxiang Town, Anxi, Quanzhou, Fujian Province, China KY-IOP-LW12-250 B0. May 2023

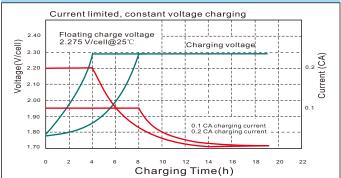


# General VRLA Battery 6FM250G (12V250Ah)

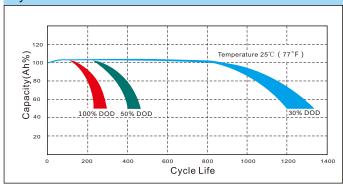
# Floating Charging Life VS Temperature



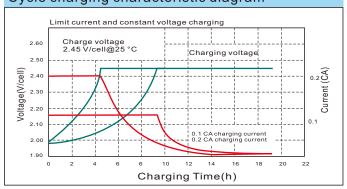
# Floating Charging Characteristics Diagram



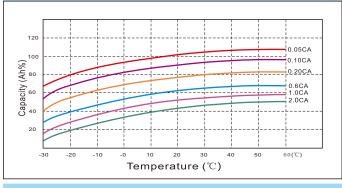
## Cycle Life



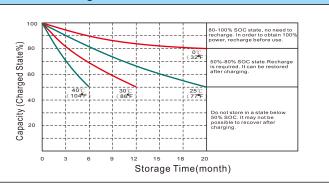
# Cycle charging characteristic diagram



## Temperature and capacity characteristics



## Self-discharge characteristic



## Constant current characteristics(A,25℃)

F.V/TIME	5min	10min	15min	30min	60min	90min	2h	3h	5h	10h	20h
9.6	925	600	425	250	150	115.0	91.4	64.7	43.1	23.3	12.7
9.9	897	582	412	243	146	112.7	90.5	64.1	42.7	23.2	12.6
10.2	879	570	408	240	144	110.4	90.0	63.8	42.5	23.1	12.6
10.5	851	552	391	230	138	108.1	89.1	63.1	42.1	23.0	12.5
10.8	826	536	388	228	137	105.8	88.2	62.5	41.7	23.0	12.5

# Constant power discharge characteristic (W,25℃)

F.V/TIME	5min	10min	15min	30min	60min	90min	2h	3h	5h	10h	20h
9.6	10323	6768	4845	2865	1737	1345.5	1068.8	768.7	515.1	280.1	152.3
9.9	10013	6565	4700	2779	1685	1318.6	1058.3	761.1	510.0	278.8	151.5
10.2	9807	6430	4651	2750	1668	1291.7	1053.0	757.4	507.5	277.7	150.9
10.5	9497	6227	4457	2636	1598	1264.8	1042.5	749.8	502.4	276.6	150.3
10.8	9218	6044	4419	2613	1584	1237.9	1031.9	742.2	497.3	276.0	150.0







Kaiying Power Supply & Electrical Equip Co., Ltd Email: <a href="mailto:sales@longwaybattery.com">sales@longwaybattery.com</a> Tel:0595-68782266 Fax:0595-68782222 Website: <a href="http://www.longwaybattery.com">http://www.longwaybattery.com</a> Add: Kaiying Industrial Area, Chengxiang Town, Anxi, Quanzhou, Fujian Province, China KY-IOP-LW12-250 B0. May 2023