

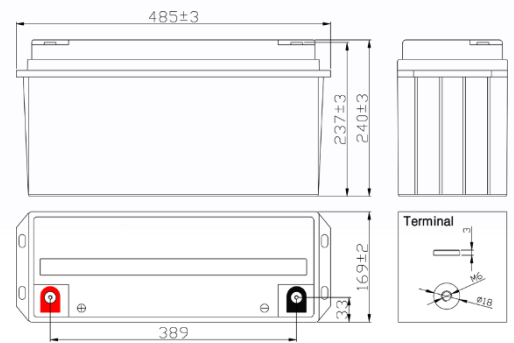
# PL150D-12

(12V 150Ah)



## SPECIFICATION

<b>Nominal Voltage</b>	12V (6 cells in series)	
<b>Rated Capacity</b>	150Ah	(C <sub>10</sub> , 1.80V/cell)
<b>Dimensions(mm)</b>	Length	485±3 mm
	Width	169±2 mm
	Height	240±3 mm
	Total Height	240±3 mm
<b>Nominal Capacity @25°C (Ah)</b>	20 Hour rate (8.175A to 10.8 volts)	163.5Ah
	10 Hour rate (15.30A to 10.8 volts)	153.0Ah
	5 Hour rate (26.25A to 10.8 volts)	131.2Ah
	1 Hour rate (94.95A to 10.5 volts)	94.9Ah
<b>Approx. Weight</b>	43.5 kg	
<b>Terminal</b>	T13	
<b>Max.Discharge Current</b>	1200A @25°C (5s)	
<b>Internal Resistance</b>	4mΩ @25°C (Full Charged Battery)	
<b>DOD 80%</b>	≥450 Cycles @25°C	
<b>Ambient Temperature</b>	Charge : -15°C~50°C	
	Discharge : -20°C~60°C	
	Storage : -20°C~50°C	
<b>Container Material</b>	A.B.S, UL94-HB, UL94-V0, Optional	



Deep Cycle Battery can be stored for more than 6 months at 25°C. Self-Discharge ratio less than 3% per month at 25°C. Please charge batteries before using.

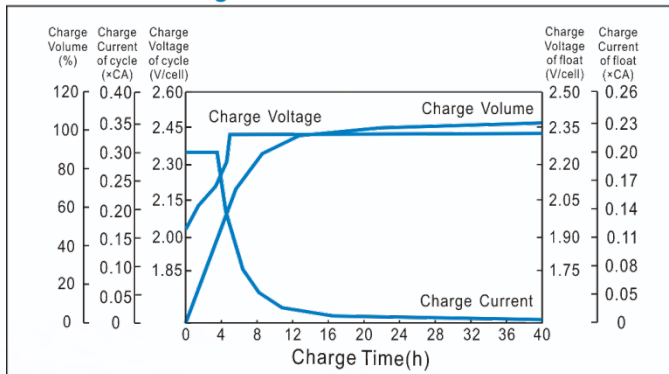
## CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A), (25°C)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	510.0	339.8	272.1	168.8	97.50	58.28	41.40	27.72	18.63	15.90	8.700
1.70V/cell	457.5	312.8	258.8	164.3	96.15	57.53	40.65	27.06	18.33	15.68	8.475
1.75V/cell	412.5	288.8	246.8	159.8	94.95	56.78	40.20	26.66	18.15	15.53	8.325
1.80V/cell	367.5	263.3	231.8	153.6	93.00	56.00	39.75	26.25	17.88	15.30	8.175

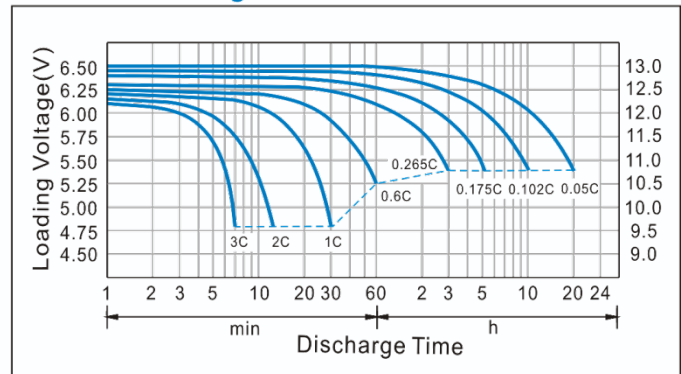
## CONSTANT WATTAGE DISCHARGE CHARACTERISTICS (WATT), (25°C)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	879.8	605.9	494.3	315.0	186.9	113.6	82.11	55.12	37.07	31.67	17.39
1.70V/cell	808.3	568.2	476.5	309.3	185.1	112.7	80.83	53.94	36.57	31.30	16.95
1.75V/cell	739.1	531.8	458.5	303.5	183.6	111.7	80.13	53.27	36.30	31.05	16.65
1.80V/cell	667.6	491.4	434.5	294.4	180.6	111.1	79.43	52.50	35.76	30.60	16.35

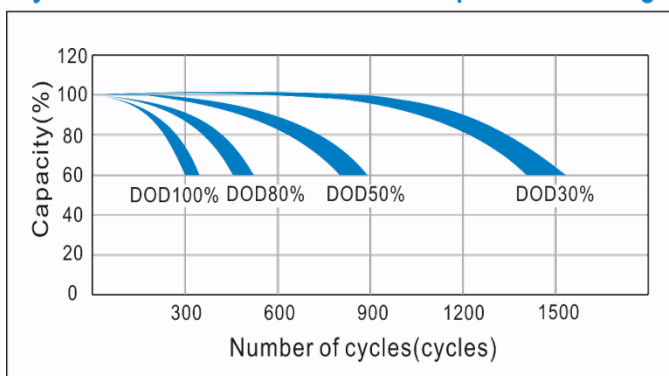
### Charge Characteristics Curve



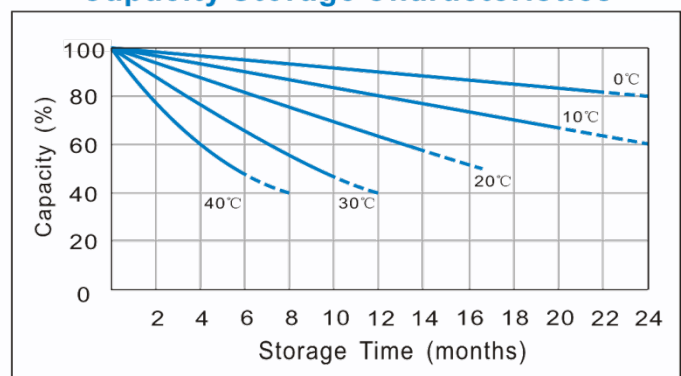
### Discharge Characteristics Curve



### Cycle service life in relation to depth of discharge



### Capacity Storage Characteristics



### CAPACITY FACTORS WITH DIFFERENT TEMPERATURE

Battery type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V & 12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V & 12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

### MAINTENANCE & CAUTIONS

Charging Procedure:

Application	Charging method	Charge voltage at 25°C	Temperature compensation coefficient of charging voltage	Max. charging current	Temperature
For standby power source	Constant voltage charging (With current restriction)	2.25~2.30 V/cell	-3mV/°C/cell	0.2CA	-15~50°C
For cycle service		2.40~2.45 V/cell	-4mV/°C/cell		

Float service:

Every month, recommend inspection every battery voltage.

Every three months, recommend equalization charge for one time. Equalization charge method: Step 1: Discharge: 100% rate capacity discharge. Step 2: Charge: Max. Current 0.3CA, constant voltage 2.40-2.45V/Cell charge 24h.

Cycle service:

Avoid battery over discharge, especially battery series connection use.

Charged with recommend voltage, ensure battery can be full recharged.

In general, recharge capacity should be 1.1~1.15 times discharge capacity.

Length of service life will be directly affected by the number of discharge cycles, depth of discharge, Ambient temperature and charging voltage.

Charge the batteries at least once every six months, if they are stored at 25°C. Charging Method:

Constant Voltage :  $-0.2C \times 2h + 2.40 \sim 2.45V/cell \times 24h$ , Max. Current 0.25CA

Constant Current :  $-0.2C \times 2h + 0.1C \times 12h$

Fast :  $-0.2C \times 2h + 0.3C \times 4h$

Terminal of torque:

Bolt	M5	M6	M8
Terminal	T3, T10	T4, T7, T11, T12, T13	T5, T6, T8, T9, T14
Torque	6~7N.m	8~10N.m	10~12N.m

**Note:** The manufacturer reserves the right to change and modify the design and specifications without prior notice