

LPCG SERIES- Deep cycle GEL

LPCG12-100(12V97AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	97.0AH	
Dimension	Length	330±3mm (12.99 inches)
	Width	173±2mm (6.81 inches)
	Container Height	212±3mm (8.35 inches)
	Total Height (with Terminal)	218±3mm (8.58 inches)
Approx Weight	Approx 31.0 kg (68.4lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	97.0 AH/4.85A	(20hr ,1.80V/cell,25°C/77°F)
	89.4AH/8.94A	(10hr,1.80V/cell,25°C/77°F)
	81.0 AH/16.2A	(5hr,1.75V/cell,25°C/77°F)
	70.2 AH/23.4A	(3hr,1.75V/cell,25°C/77°F)
	59.0 AH/59.0A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	1000A (5s)	
Internal Resistance	Approx 5.9mΩ	
Operating Temp.Range	Discharge : -20~55°C (-4~131°F)	
	Charge : 0~40°C (32~104°F)	
	Storage : -20~50°C (-4~122°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 19.4A.Voltage	
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	LPCG series batteries may be stored for up to 9 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



Typical Applications

- ◆ Railway and marine systems
- ◆ Electric tools
- ◆ Vehicle in place of walking
- ◆ Lawn mowers
- ◆ Golf trolleys and golfcart
- ◆ Electric toys
- ◆ Portable power
- ◆ Wheelchairs
- ◆ Medical equipments.



Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	113.0	97.8	85.4	67.1	51.2	42.8	27.2	20.7	17.2	14.8	12.4	9.90	8.55	4.66
1.80V/cell	139.6	114.8	97.9	74.9	56.5	47.3	29.4	22.2	18.2	15.6	13.0	10.4	8.94	4.85
1.75V/cell	160.0	130.4	110.0	82.4	61.0	50.6	31.2	23.4	19.1	16.2	13.4	10.7	9.09	4.95
1.70V/cell	173.6	140.1	118.5	88.3	64.7	53.5	33.0	24.4	19.7	16.7	13.9	11.0	9.32	5.01
1.67V/cell	187.3	148.3	123.3	91.7	67.1	55.6	33.9	25.1	20.2	17.0	14.1	11.2	9.43	5.06
1.60V/cell	204.1	161.0	133.6	98.2	72.0	59.0	35.2	26.2	20.9	17.6	14.5	11.4	9.63	5.13

Constant Power Discharge (Watts/cell) at 25 °C (77°F)

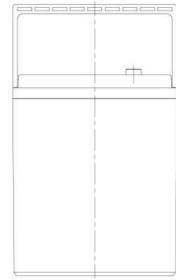
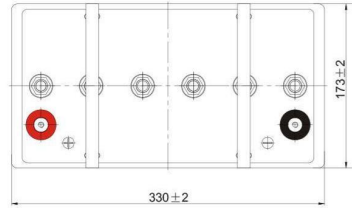
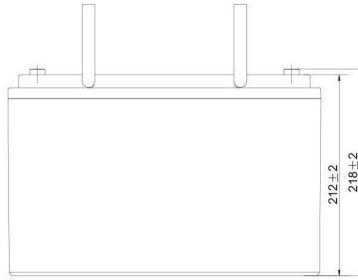
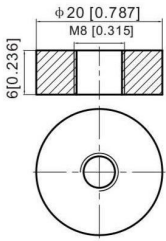
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	212.3	185.3	163.5	129.3	99.2	83.4	53.1	40.6	33.7	29.2	24.5	19.7	17.1	9.29
1.80V/cell	251.3	210.9	184.8	143.0	108.6	91.6	57.2	43.3	35.7	30.6	25.7	20.6	17.8	9.67
1.75V/cell	287.0	237.3	205.4	155.9	116.6	97.5	60.4	45.7	37.2	31.7	26.6	21.2	18.1	9.85
1.70V/cell	314.1	255.7	219.0	165.5	122.9	102.6	63.7	47.4	38.3	32.6	27.4	21.8	18.5	9.96
1.67V/cell	332.7	265.7	225.3	170.2	126.4	105.8	65.0	48.7	39.1	33.1	27.8	22.1	18.7	10.0
1.60V/cell	356.0	280.3	241.5	180.5	134.7	111.8	67.4	50.4	40.5	34.1	28.4	22.4	19.1	10.2



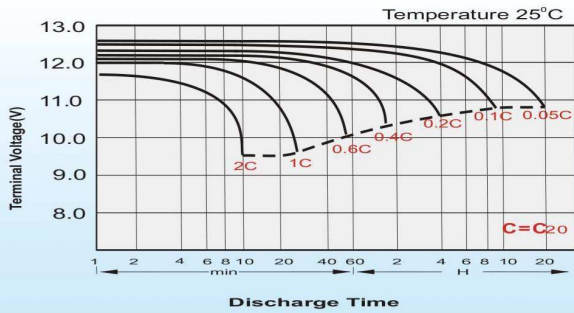
Dimensions

T11 Terminal

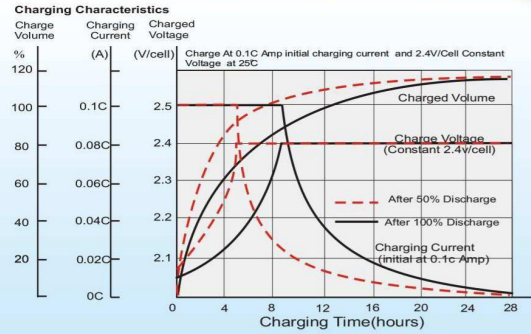
Unit: mm [inches]



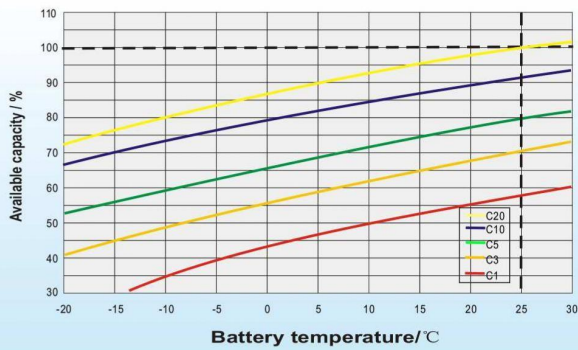
Discharge Characteristics



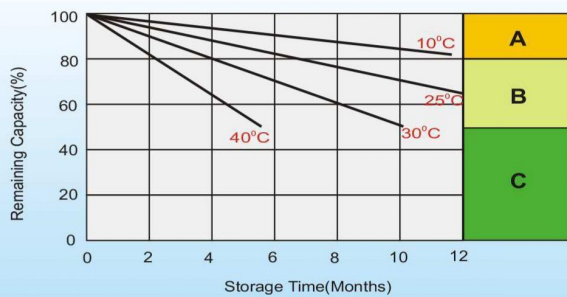
Charging Characteristics (cycle use)



Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics

- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
 3. Charged for 8~10hours at limited current 0.05CA .
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.