

Pure Lead Carbon SLA Battery

Capacity (25°C)	20HR (9.05A, 10.5V) =181AH 10HR (17.1A, 10.5V) = 171AH 5HR (31.3A, 10.5V) = 156.5AH 1HR 115.5A, 10.5V) = 115.5AH
Operating Temperature Range	Charge = -20°C to +54°C Discharge = -40°C to +60°C Storage = -20°C to +50°C
Approx. Weight	57.6kg
Max. Discharge [A]	3400
Self Discharge	4% per month at (25°C)
Capacity Affected by Temp. (20HR)	40°C = 103% 25°C = 100% 0°C = 86% -15°C = 65%
Charge Voltage (25°C)	Cycle Use = 14.1- 14.4V (-30/mV/°C) Max Current = 180A Float Use = 13.6V (-20mV/°C)
Dimensions (Nominal)	Length: 559mm (22.0 in) Width: 125mm (4.9 in) Height: 320mm (12.6 in) Total Height: 320mm (12.6 in)



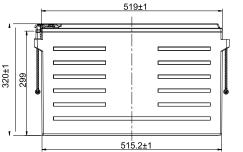
APPLICATIONS

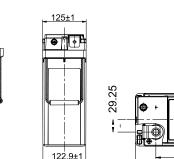
Multipurpose Telecommunications UPS Medical Equipment Electric Vehicle Comm. Power Supply Elec. Power System (EPS) Emergency Backup Power DC Power Supply Auto Control System Traffic Control Signaling Emergency Lighting

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559±1

Terminal Type M6



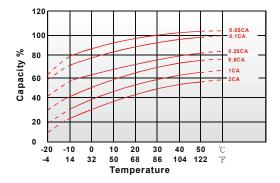


- Completely sealed, maintenance-free, low self-discharge
- State of the art Pure Lead Carbon technology PLC
- Non-spillable, stable quality and high reliability with excellent re-charging performance 90% SoC in 1 hour.
- Floating and standby use up to: 20 years
- Cycle use: Up to 600 cycles at 100% DoD
- Cycle use: Up to 3000 Cycles at 50% DoD
- Container and Cover Material ABS UL94-HB (optional UL94-V0)
- Transportation D.O.T., I.A.T.A. & F.A.A.

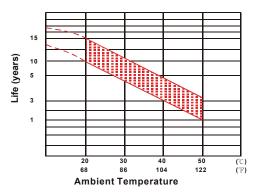


PCPLC180-12FT 12V 180AH

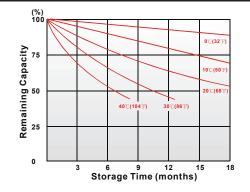
Effect of Temperature on Capacity 25°C (77°F)



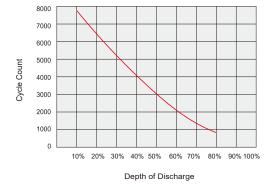
Trickle (or Float) Service Life



Capacity Retention Characteristic



Cycle Service Life



Regular Charge / Float Charge / Storage

- Charging voltage temperature compensation needs to be applied when temperature is below 0°C and above +45°C.
- Charging in temperatures below 0°C, the charge current should not exceed 0.1C as the core battery temperature can increase rapidly and damage the battery.
- During floating charge or when in storage, the life of the battery is cut in half for every 8°C temperature rise over 25°C.

Discharge

- · Discharging at elevated temperatures improves performance of the battery yet shortens its life due to accelerated aging.
- Low temperature affects the battery internal resistance and lowers its capacity.
- The battery will operate in temperature lower than -20°C when fully charged.
- The battery provides 100% specified capacity at 25°C. At -40°C the battery will deliver 35% of its stated capacity @10HR discharge rate and 10% of its stated capacity @1HR discharge rate.

Constant Current Discharge (A) at 25°C (77°F)												
F.V/Time	30min	1h	2h	3h	4h	5h	8h	10h	20h	24h	48h	100h
1.85V/cell	170.1	110.0	65.5	46.9	36.8	30.5	20.5	16.9	8.81	7.76	4.08	1.93
1.80V/cell	176.6	112.9	66.5	47.6	37.4	31.1	20.8	17.0	9.00	7.92	4.17	1.97
1.75V/cell	184.3	115.5	67.2	48.2	37.9	31.3	20.9	17.1	9.05	8.04	4.23	2.00
1.70V/cell	190.0	117.5	68.0	48.7	38.1	31.5	21.0	17.2	9.08	/	/	/
1.67V/cell	196.1	119.7	68.8	49.0	38.5	31.7	21.1	17.3	9.13	/	/	/
1.60V/cell	202.1	121.6	69.8	49.5	38.8	32.0	21.2	17.5	9.16	/	/	/

Constant Power Discharge (W) at 25°C (77°F)												
F.V/Time	30min	1h	2h	3h	4h	5h	8h	10h	20h	24h	48h	100h
1.85V/cell	334.1	218.1	130.8	93.9	74.1	61.6	41.6	35.6	18.0	15.9	8.4	3.97
1.80V/cell	344.3	222.6	132.1	95.1	75.0	62.4	42.0	35.7	18.3	16.1	8.5	4.02
1.75V/cell	356.2	226.3	133.1	95.9	75.5	62.7	42.1	35.8	18.3	16.3	8.6	4.05
1.70V/cell	363.9	229.1	133.9	96.3	75.9	63.0	42.2	35.4	18.3	/	/	/
1.67V/cell	372.9	232.3	135.1	96.7	76.2	63.2	42.3	36.0	18.4	/	/	/
1.60V/cell	380.6	233.8	135.6	97.0	76.4	63.5	42.6	36.2	18.4	/	/	/

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