



PILOT ENERGY
百樂千翔能源股份有限公司

閥調式鉛酸蓄電池(VRLA) PL50-12FLHLM-CBB (12V50AH)

規格 Type

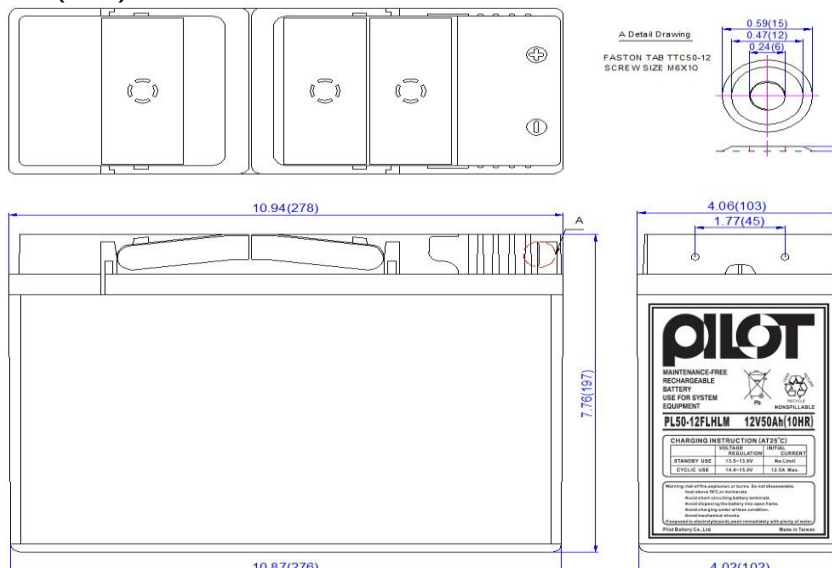
額定電壓 Rated Voltage	12V	
額定容量 Rated Capacity	50AH/10HR/10.8V	端子 Terminal:螺栓(M6 Bolt)
尺寸 Dimension	長度 Length	278±1mm(10.94in)
	寬度 Width	103±1mm(4.06in)
	高度 Height	197±1mm(7.76in)
	總高度 Total Height	197±1mm(7.76in)
重量 Weight		15kg(33Pounds)
電槽材質 Container Material	ABS,UL 94V-0 or UL 94-HB 抗酸、抗油、防震 Resist acid, resist oil, resist vibration	氧氣指數 Index of oxygen L.O.I>28%
電解液型式 Type of electrolyte		AGM 不外漏 Non-spillable



特性 Properties

容量 Capacity 25°C (77°F)	10 小時率 10HR of 5.00A to 10.8V	50.0AH
	5 小時率 5HR of 8.80A to 10.8V	44.0AH
	1 小時率 1HR of 33.00A to 10.8V	33.0AH
	0.5 小時率 0.5HR of 54.00A to 10.8V	27.0AH
內阻 Internal Resistance (at 1KHz)	完全充電 Full Charge at 25°C (77°F)	大約 Approx.5.0mΩ
容量受溫度影響 The capacity will be effected by temperature	40°C (104°F)	105%(10HR to 52.5AH)
	25°C (77°F)	100%(10HR to 50.0AH)
	0°C (32°F)	85%(10HR to 42.5AH)
	-20°C (-4°F)	60%(10HR to 30.0AH)
自我放電 Self-discharge	180 天後不到 15%，可以在 20°C (68°F) 下保存 8 個月；使用前需要完全充電。 Less than 15% after 180 days, it can be stored at 20°C (68°F) for 8 months; it needs to be fully charged before use.	
最大放電電流 5 秒 Maximum Discharge Current at 5 Sec		500A(10CA)
浮充 Float Charging	電壓 Voltage	13.65±0.15V 25°C (77°F)
	電流 Current	15.0A(0.3CA)
循環充電 Cyclic Charging	電壓 Voltage	14.70±0.30V 25°C (77°F)
	電流 Current	12.5A(0.25CA)
操作溫度 Operation Temperature Range	充電 Charge/放置 Storage:-15~40°C (5~104°F) , 放電 Discharge:-20~50°C (-4~122°F)	
期待壽命 Expected Life	25°C (77°F) 8~10 years	

尺寸 Dimension: inch (mm)



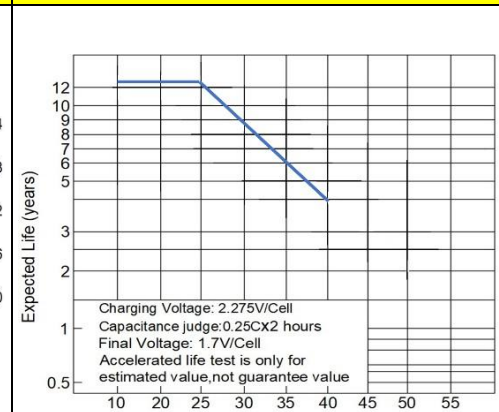
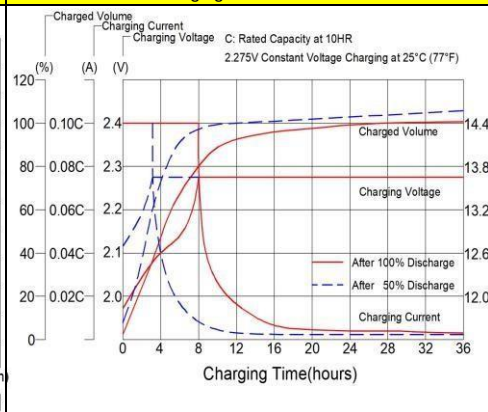
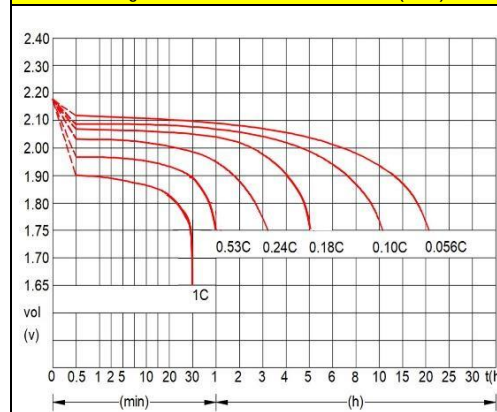
PL50-12FLHLM-CBB PROPERTIES

Amperes and watts per battery at 25°C (77°F)

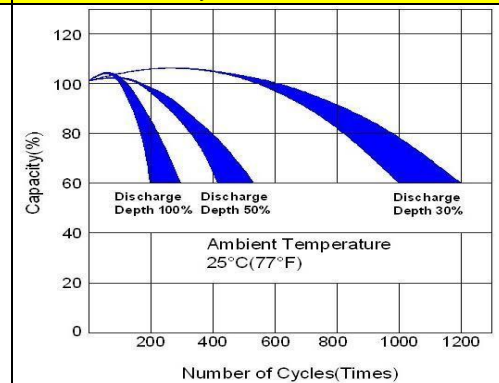
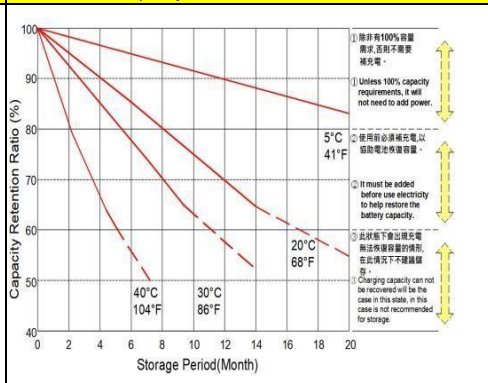
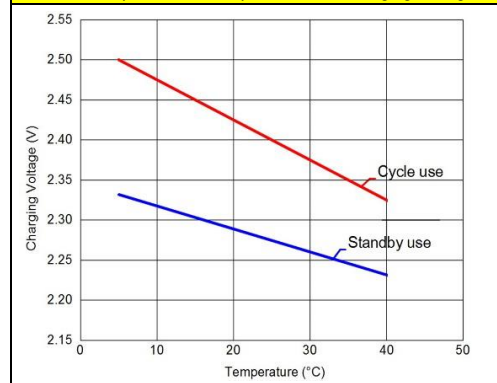
F.V.	Time	Minutes										Hours							
	Item	1	5	10	15	20	25	30	35	40	45	1	2	3	4	5	8	10	20
1.60	A	322.1	204.4	150.7	122.0	107.4	89.7	66.0	59.5	55.5	50.5	37.0	22.2	16.6	11.1	9.9	6.5	5.7	3.1
(9.60)	W	3382	2146	1582	1342	1181	1031	759	684	638	581	425	260	194	130	119	77	68	37
1.65	A	283.7	187.3	139.1	114.7	100.0	84.8	62.0	56.5	52.0	47.5	36.0	21.9	15.4	10.9	9.8	6.3	5.6	3.1
(9.90)	W	2978	1966	1460	1261	1100	975	713	650	598	546	414	256	180	127	117	76	67	37
1.70	A	256.8	180.0	134.8	108.0	93.9	81.1	59.5	54.0	49.0	46.5	35.0	21.4	15.0	10.5	9.6	6.2	5.2	2.9
(10.20)	W	2697	1889	1416	1188	1033	933	684	621	564	535	403	250	176	122	115	74	62	35
1.75	A	225.1	170.2	118.3	100.7	89.1	77.5	58.0	52.0	47.5	44.0	34.6	20.3	14.1	10.0	9.0	6.1	5.1	2.8
(10.50)	W	2363	1787	1243	1107	980	891	667	598	546	506	397	237	164	117	108	73	60	34
1.80	A	199.5	154.3	107.4	92.1	81.7	73.8	54.0	49.5	45.5	43.0	33.0	19.5	13.9	9.7	8.8	5.9	5.0	2.7
(10.80)	W	2094	1620	1127	1013	899	849	621	569	523	495	381	228	163	114	105	70	59	32
1.83	A	186.1	142.1	84.8	78.7	68.3	62.8	48.0	43.0	38.5	37.0	31.7	19.2	13.2	9.2	8.2	5.7	4.6	2.6
(10.98)	W	1954	1492	890	866	752	723	552	495	443	426	364	224	154	108	98	68	55	31

用途 Application	密封結構 Seal construction	穩定性 Stabilities
☆通信系統 Communication back-up systems ☆UPS 交換式直流供電設備 UPS switched dc-powered devices ☆無人機房之電源設備 UAV room for power supplies	☆沒有漏酸的危險，氣體釋放率超低，不需加水，能防止電解液乾枯或產生層化現象(於放電時)再組合率大於98% Non-spillable, no leaking danger, the gas consumption rate is low, no need to replenish water, can avoid acid lack or crystallization problem during discharge, the recombination rate is higher than 98% ☆端子採用合金銅鍍錫材質 Terminals are tin-plated copper alloy material.	☆正負極板是鉛鈣合金 Positive, negative's plates are all Calcium-Lead alloy. ☆塑殼是防火ABS 或等級是 UL 94V-0 L.O.I>28 % The plastic material is fire-resistance ABS or same grade of UL 94V-0 L.O.I>28% ☆組立用螺絲採用 M6 螺絲，扭力從 5N-m 至 8N-m(最大)採用不銹鋼材質，堅固耐用。 Assembling screws using M6 screws, torque from 5N-m to 8N-m (maximum) made of stainless steel, durable.

放電特性(25°C) Discharge characteristic at different rates(25°C)	定電壓充電(25°C) Charging Characteristics	壽命與溫度關係 Ccelerated Life Characteristic
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溫度與充電電壓關係 Relationship Between Temperature And Charging Voltage	容量保持特性 Capacity Retention Characteristics	壽命循環關係 Cycle Service Life
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