

Battery Specification

电池说明书

MODEL

型号: 12.8V100Ah--4S1P

Nominal Capacity

标称容量: 100Ah

Project number

立项编号: _____

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Registered 编制	Checked 审核	Approved 批准

1.Initial Size 初始尺寸



Product Size产品尺寸: 332*176*214mm,

T (Total length) (长度)	332.0±2.0	W(Width) (宽度)	176.0±2.0	H(Height) (高度)	(214-220) ±2.0
L (lead wire length) 引出线长	/	terminal 端子	M8	Power 功率	1280Wh
PCM Protection Board PCM 保护板	JDB-DP04S007-L4S-100A JBD-DP04S007-L4S-100A-嘉百达			Electric cell 电芯	亿纬 100Ah 亿纬 100Ah
Appearance 外观	12V100Ah- Black lead acid shell 12V100Ah- 黑色铅酸壳				

2. Battery picture 电池图片



3. Product Specifications 产品规格参数

No. 序号	Catalog 目录	Specification Requirements 规格要求
3.1	Typical capacity 典型容量	100Ah (0.2C discharge) 100Ah (0.2C 放电)
	Minimum capacity 最小容量	100Ah (0.2C discharge) 100Ah (0.2C 放电)
3.2	Nominal voltage 标称电压	12.8V
3.3	Shipping Voltage 出货电压	13.1~13.5V
3.4	Standard charging voltage 标准充电电压	CC/CV,20A,14.6V (0.2Ccharging)
		CC/CV,20A,14.6V (0.2C 充电)
3.5	Standard discharge 标准放电	CC,20A,10V (0.2Cdischarge)
		CC,20A,10V (0.2C 放电)
3.6	Charge cutoff voltage 充电截止电压	14.6V

3.7	Charge cutoff current 充电截止电流	0.02C 2A (At CV mode)
3.8	Discharge cut-off voltage 放电截止电压	10V
3.9	Charge time 充电时间	5-6 hours (standard charge) 5-6 小时(0.2C)
3.10	Fast charge/discharge current 快速充放电电流	50A (0.5C)
3.11	Maximum continuous charge/discharge current 最大持续充放电电流	100A (1C)
3.12	Recommended charge current 建议充电电流	20A (0.2C)
3.13	Maximum load/inverter power 最大负载/逆变器功率	1280W
3.14	Initial internal resistance 初始内阻	Max: ≤50mΩ
3.15	Weight 重量	(约): 净重 10.4 Kg, 毛重 11 Kg
3.16	Operating temperature range 工作温度范围	1: Charging 0° C~50° C (32° F~122° F) 2: Discharge -20° C~60° C (-49° F~140° F) 3: Storage -10° C~50° C (-14° F~122° F) 4: Low temperature cut-off protection (charging) 0° C±4° C (32° F±39.2° F) 5: Low temperature cut-off protection (discharge) -20° C±4° C (-4° F±39.2° F) 1: 充电 0° C~50° C (32° F~122° F) 2: 放电 -20° C~60° C (-49° F~140° F) 3: 存储 -10° C~50° C (-14° F~122° F) 4: 低温切断保护(充电) 0° C±4° C (32° F±39.2° F) 5: 低温切断保护(放电) -20° C±4° C (-4° F±39.2° F)
3.17	Cycle life 循环寿命	>2000 cycles (100% DoD) 3000 cycles, 80% DoD >2000 个周期 (100%DoD) 3000 个周期, 80%DoD
3.18	Waterproof rating 防水等级	IP65
3.19	Appearance 外观	No scratches, deformation, oil, leakage, breakage 无划痕、变形、油污、漏液、破损
3.20	Terminal type 端子类型	M8

4.Basic parameters of protection board 保护板基本参数

	项目 (Project)	规格(Specification)			单位 (Unit)
		最小值 MIN	典型值 TYP	最大值 MAX	
过压和欠压保护 (Over-voltage and Under-voltage protection)	过充保护电压(Over-voltage)	3.700	3.750	3.800	V
	过充保护延时(Over-voltage delay)	1000	2000	3000	mS
	过充保护释放(Over-voltage release)	3.550	3.600	3.650	V
	过放保护电压(Under-voltage)	2.100	2.200	2.300	V
	过放保护延时(Under-voltage delay)	1000	2000	3000	mS
	过放保护释放(Under-voltage release)	2.500	2.600	2.700	V
	过放保护释放条件 (Under-voltage release conditions)	电压自恢复或充电恢复 (Self-recovery by increasing voltage or charging)			
	充电过流保护值 (Over-current Charge protection value)	见下面过流保护值配置表 (Refer to configuration table of over-current protection value below)			
	充电过流延时 (Over-current Charge delay)	7	10	13	S
	充电过流释放条件 (Over-current Charge release conditions)	延时 32S 后自动恢复 (Automatic recover after a delay of 32S)			
	一级放电过流保护值 (1th Over-current Discharge value)	见下面过流保护值配置表 (Refer to configuration table of over-current protection value below)			
	一级放电过流保护延迟 (1th Over-current Discharge delay)	7	10	13	S
	二级放电过流保护电流值 (2th Over-current Discharge value)	见下面过流保护值配置表 (Refer to configuration table of over-current protection value below)			
	二级放电过流 2 保护延迟 (2th Over-current Discharge delay)	100	300	500	mS
放电过流保护恢复条件 (Over-current Discharge release)	延时 32S 后自动恢复 (Automatic recover after a delay of 32S)				
短路保护 (Short Circuit Protection)	短路保护电流 (Short circuit protection current value)	见下面过流保护值配置表 (Refer to configuration table of over-current protection value below)			
	短路保护延迟时间 (Short circuit protection delay time)	-	560	900	uS
	短路保护恢复 (Short circuit protection recovery)	断开负载后约 5 秒自动释放 Recover by releasing load after approximately 5s			
短路说明: 短路电流小于最小值或高于最大值可能会造成短路保护失效, 短路电流超过2000A, 不保证有短路保护, 也不建议做短路保护测试。 (Short-circuit description: The short-circuit current is less than the minimum value or higher than the maximum value, which may cause the short-circuit protection to fail, and the short-circuit current exceeds 2000A, short-circuit protection is not guaranteed, and short-circuit protection testing is not recommended.)					

温度保护 (Short Circuit Discharge)	充电 CHG	充电高温保护值 (Temperature protection value)		62	65	68	°C	
		充电高温保护释放值 (Temperature protection release value)		52	55	58	°C	
		不带加热 (Without heating)	充电低温保护值 (Temperature protection value)		-13	-10	-7	°C
			充电低温保护释放值 (Temperature protection release value)		-8	-5	-2	°C
		带加热 (With heating)	充电低温保护值 (Temperature protection value)		-3	0	3	°C
			充电低温保护释放值 (Temperature protection release value)		2	5	8	°C
	放电 DSG	放电高温保护值 (Temperature protection value)		72	75	78	°C	
		放电高温保护释放值 (Temperature protection release value)		62	65	68	°C	
		放电低温保护值 (Temperature protection value)		-23	-20	-17	°C	
		放电低温保护释放值 (Temperature protection release value)		-13	-10	-7	°C	
FET	FET 高温保护值 (Temperature protection value)		85	90	95	°C		
	FET 高温保护释放值 (Temperature protection release value)		50	65	80	°C		

均衡功能 (Balance Function)	均衡开启电压 (Balance function turn-on voltage)		3.27	3.30	3.33	V
	开启压差 (Difference opening voltage value)			15		mV
	均衡电流 (Balance current)		150	200	250	mA
	均衡模式 (Balance model)		静态均衡 (Idle equalization)			
	均衡类型 (Balance type)		脉冲模式 (Pulsed model)			

持续电流 (Continuous current)		充电过流保护值 (Charge Over-current value)	一级放电过流保护值 (1 st discharge Over-current value)	二级放电过流保护值 (The second discharge Over-current value)	短路保护值 (Short circuit protection value)
Charge	Discharge				
60A	60A	70±5A	70±5A	220±50A	750±150A
80A	80A	90±5A	90±5A	290±60A	1000±200A
100A	100A	110±5A	110±5A	350±80A	1350±300A
150A	150A	160±5A	160±5A	570±120A	1800±400A