

Charge Management Module Specifications For 14.8V Li-ion/Li-po Battery Pack				
Model: CMB-S4A3				
Items	Specifications			
Battery pack	14.8V (4S)		Li-ion	
Input power	DC: 18 ~ 24V		Power supply	
Input current	≥2A		Power supply	
Charging Voltage	16.8V±0.1V		4.20V / 1Cell	
Charging Method	CC/CV		Constant-current and -Voltage with Limited current	
Standard Charging Current	charging current	3A±0.5A		
Current consumption	Charge Management Circuit	≤3mA	Power supply	
	Protection Circuit	≤100uA	Battery pack	
Standard Charging Time	Hour		Battery Capacity÷Charging Current×1.5	
Low voltage alarm	≤12V		3.0V / 1section	
Short circuit protection	Detection condition	Exterior short	P+,P-	
	Release condition	Charge Release	Input	
LED condition	Charge	Red	LED1	
	Charge full	All bright	LED1/LED2/LED3/LED4/LED5	
	Voltage range	LED2 (12~13V)		
		LED3 (13~14V)		
		LED4 (14~15V)		
Low voltage	Flashing	LED1 lamp		
Short circuit protection	Flashing	LED1 lamp		
Protection Circuit				
Discharge	Maximal continuous discharging current		10A	
Balance	Balance voltage for single cell		4.2V±0.03V	
	Balance current for single cell		68mA±5mA	
Over-charge	Overcharge detection voltage		4.350 ± 0.025 V	
	Overcharge release voltage		4.150 ± 0.050 V	
	Overcharge delay time		0.5S—2S	
Over-discharge	Overdischarge detection voltage		2.40 ± 0.080 V	
	Overdischarge release voltage		3.00 ± 0.100 V	
	Overdischarge delay time ( CDT=1u)		300—2000ms	
Discharge overcurrent	Discharge overcurrent detection voltage		0.15 ± 0.025 V	
	Discharge overcurrent delay time ( CDT=1u)		30ms—200ms	
	Discharge overcurrent protection		25±3A	
	Release condition		charge release	
Internal resistance	Static Drain-Source On-Resistance		<50mΩ (B+ to P+)	
Short-circuiting protection	Load short-circuiting detection voltage			
	Detection condition		Exterior short circuit	
	Load short-circuiting detection delay time		100 ~ 600μs	
	Release condition		charge release	
Operating temperature	-40~+85℃			
Storage temperature	-40~+125℃			
Outline dimension	L80*W80mm			

P+ = Discharge+  
P- = Discharge-

