



### **Features:**

- 1. Wide input range (90-264VAC, 100-370VDC)
- 2. Compact size 116\*57\*38mm
- 3. Safety class: CLASS II
- 4. Protection: short circuit/ over load/ over voltage/ over temperature
- 5. Battery protection: over-current/ over charging/
- 6. over-discharging/ over-voltage/ battery activation (optional)
- 7. Optional Bluetooth version
- 8. Operating temperature range: -40°C to +70°C
- 9. 3000V isolation voltage
- 10. Alarm: AC OK and BAT LOW
- 11. 100% high temperature burn-in and function test
- 12. 3 years warranty







# **Selection Guide**

		Dated	Output V1		Output V2		Dinula 9 Naisa	
Model	Input Voltage Power (W		Voltage (V)	Rated Current (A)	Voltage (V)	Current (A)	Ripple & Noise (mVp-p) I	Efficiency (%)
CME-100-A	90-264VAC 100-370VDC	100	13.8	4.75	13.8	0-2.5 ±10%	100	86
CME-100-B		100	27.6	2.4	27.6	0-1.25 ±10%	100	87





	Voltage Tolerance	V1: ±1.0%					
		CME-100-A: 11-15V CME-100-B: 22-30V					
OUTPUT	V1 Voltage Adjustment Range	Note: V1 follows the voltage of V2, V2 must be connected to the battery,					
		otherwise V1 is th	ne minimum volt	age and V2 has	no output.		
		Constant voltage a	and constant cu	rrent mode, thr	ee-stage chargir	ng. USB/TTL	
	V2 Charge Mode	connect special upper computer software, which can flexibly adjust voltage,					
		current and relevant settings. Bluetooth version is more convenient to adjust					
		WeChat programs					
	Line Regulation (V1)	±1.0% @100%load					
	Load Regulation (V1)	±1.0% @10-100%load					
	Setup, Rise Time (Typ.)	1000ms, 50ms/230VAC @100%load					
	Hold Up Time (Typ.)	16ms/230VAC @100%load					
	Voltage Range	90-264VAC 100-370VDC					
INPUT	Frequency Range	100-240VAC, 1.6A, 50/60Hz					
	Current (Typ.)	1.6A MAX/115VAC 0.9A MAX/230VAC					
	Inrush Current (Typ.)	Cold boot 40A/115VAC 60A/230VAC @100%load					
	Leakage Current (Typ.)	<0.75mA/230VAC	/230VAC/60Hz				
			CME-	100-A	CME-	100-B	
		Model	Limit value	Protection mode	Limit value	Protection mode	
		Discharge cutoff voltage	10.4V	cut off	20.8V	cut off	
	V2 Battery Protection (Factory	Charge cutoff voltage	14.6V	maintain	29V	maintain	
V2 CHARGE CHARACTERISTICS	Default)	Charge current limit	4A	constant current	2A	constant current	
		Discharge current protection	12A	cut off	6A	cut off	
		Note	Select the corresponding program according to the batte type, our factory default by lead acid type.			the battery	
			1	12V 24V			
		Battery type	tery type Minimum	Maximum	Minimum	Maximu	
			voltage	voltage	voltage	voltag	
	Battery Voltage Reference Table	Lead acid	9.6V	14.4V	19.2V	28.8V	
		Ternary lithium	12.8V	16.8V	25.6V	33.6V	
		Lithium iron	10.0V	14.6V	20.0V	29.2V	
		phosphate				,	

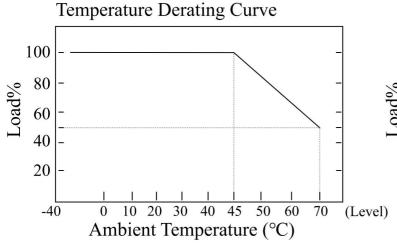


# **AC-DC Converter**

	V1 Over Load	≥110% load, recovers automatically after fault condition is removed				
PROTECTION	V1 Short Circuit	Hiccup mode, recovers automatically after fault condition is removed				
PROTECTION	V1 Over Temperature	Reduced power output or no output				
	V1 Over Voltage	Output is switched off and normal output can be restored after power restart				
		Model	CME-100-A	CME-100-B		
		Range	≤16VDC	≤30VDC		
		AC OK	Normal AC supply electricity			
FUNCTION	Alarm Function	BAT LOW	BAT LOW Battery supply electricity low			
	UPS Function	Switch AC OFF to BAT ON				
	Working Temp.	-40°C to +70°C (Refer to "Derating curve")				
ENVIRONMENT	Working Humidity	10-85%RH				
	Storage Temp., Humidity	-40°C to +105°C				
	Temp. Coefficient	0.03%/(0°C-50°C)				
	Vibration	10-500Hz, 2G, 10min./1cycle, 60min.each along X, Y, Z axes				
	Safety Standards	IEC60950, EN60950, UL60950				
	Isolation Voltage	I/P-O/P: 3000VAC I/P-FG(CASE): 1500VAC O/P-FG: 500VAC				
SAFETY & EMC (NOTE 3.)	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: >100M Ohms/500VDC 25°C 70% RH				
3.)	EMC Emission & Immunity	EN55011, EN55032 (CISPR32) CLASS B				
	ESD	IEC/EN 61000-4-2 level 4 Contact ±8kV/Air ±15kV				
	RF	IEC/EN 61000-4-3 level 4 lev3				
	EFT	IEC/EN 61000-4-4 level 4 4kV				
	Surge	IEC/EN 61000-4-5 level 4 2kV				
	MTBF	165K hrs min. MIL-HDBK-217F(25°C)				
OTHERS	Dimension	116*57*38mm (L*W*H)				
	Weight	242g/PCS				
	Package	58 PCS/Carton				
	Carton Size	360*300*250mm	360*300*250mm			
	All parameters not specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.					
NOTE	2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.					
	3. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives.					



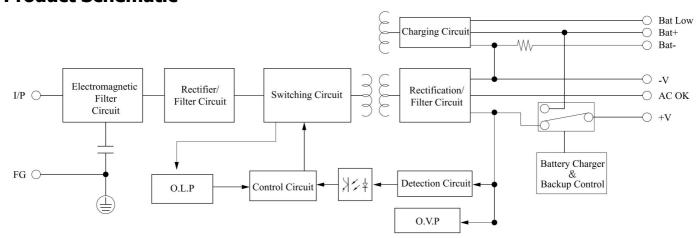
# **Derating Curve**



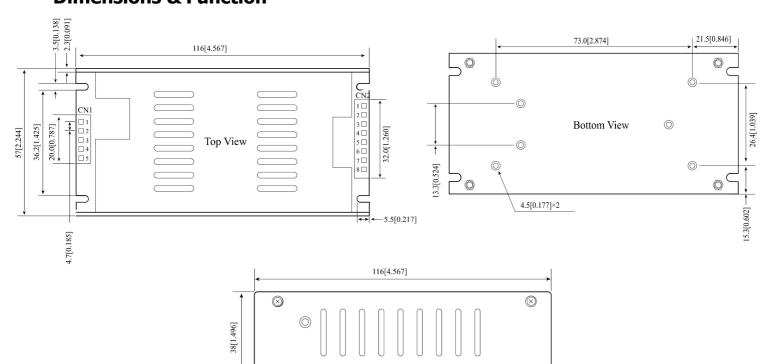
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Input Voltage (V) 60Hz

## **Product Schematic**



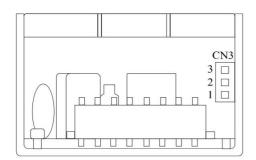
## **Dimensions & Function**



Side View

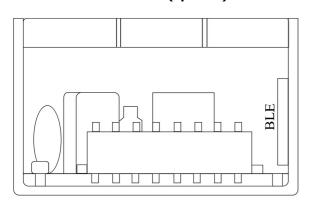






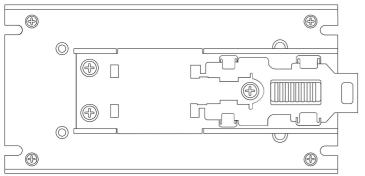
Pin Method				
Connector	Pin	Function	Customer Connection End	
	1	AC(L)		
	2	No Pin	Coinector:JSTVHR	
CN1	3	AC(N)	Connector Terminals:JST SVH-21T-P1.1	
	4	No Pin	Or Equivalent Products	
	5	FG		
	1	BLow		
	2	AC OK		
CN2	3	Battery+	Connector: JST VHR Connector Terminals: JST SVH-21T-	
CIVZ	4	Battery -	P1.10r Equivalent Products	
	5-6	+Vo		
	7-8	0V		
CN3	1	GND	Connector:JST XH	
	2	RX	Connector Tenminals:JST-XH2.54-3P	
	3	TX	Or Equivalent Products	

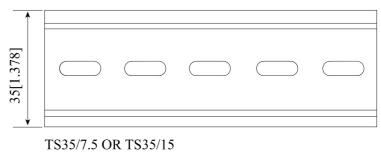
### **Bluetooth version - BLE (optional)**



Pin Mode				
Position	Function Customer Connection End			
BLE Bluetooth Program				

### Rail base (optional)

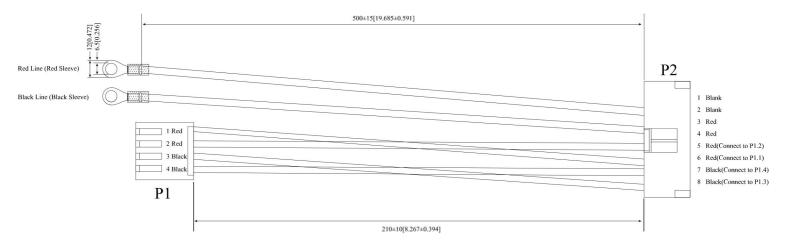






#### **AC-DC Converter**

#### **Connect wire specification (optional)**



Pin	P2
1	
2	
3	Battery+
4	Battery-
5	+Vo
6	+Vo
7	0V
8	oV

NOTE: Unit size: mm[inch] Unmarked tolerances: ±0.5mm

#### **Notes:**

- 1. If the product works under the minimum required load, it cannot guarantee that the performance of the product complies with all the performance indicators in this manual;
- 2. The maximum capacitive load is tested under the input voltage range and full load condition;
- 3. Unless otherwise stated, all indexes in this manual are measured at Ta=25°C, humidity <75%RH, nominal input voltage and rated output load;
- 4. All index testing methods in this manual are based on the enterprise standards of the company;
- 5. Our company can provide product customization, specific needs can directly contact our technical staff;
- 6.AMCHARD reserves the right to make changes to the product at any time without notice.

## DONGGUAN AMCHARD-POWER TECHNOLOGY CO., LTD.