



## Features:

- 2/8 stage charging
- Universal AC input / Full range
- Built-in active PFC function PF>0.95
- Protection: Reverse polarity / Short circuit / Over voltage / Over temperature
- Charger for lead-acid batteries
- 3 color LED loading indicator
- Built-in remote ON-OFF control
- Built-in temperature compensation function
- Built-in fan speed control (depends on charging current)
- 3 years warranty

# **SPECIFICATION**



MODEL		PB-600-12	PB-600-24	PB-600-48		
	BOOST CHARGE VOLTAGE	14.4V	28.8V	57.6V		
ОИТРИТ	FLOAT CHARGE VOLTAGE	13.8V	27.6V	55.2V		
	RECOMMENDED BATTERY	405 400411		05 405411		
	CAPACITY(AMP HOURS)(Note 3)	135 ~ 400AH	70 ~ 210AH	35 ~ 105AH		
	BATTERY TYPE	Open & Sealed Lead Acid				
	OUTPUT CURRENT	40A	21A	10.5A		
	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz				
	EFFICIENCY (Typ.)	86%	87%	89%		
NPUT	POWER FACTOR (Typ.)	0.95/230VAC 0.98/115VAC at full load				
	AC CURRENT (Typ.)	6.8A/115VAC 3.4A/230VAC				
	INRUSH CURRENT (Typ.)	25A/115VAC 50A/230VAC				
	LEAKAGE CURRENT	<3.5mA / 240VAC				
	OVERVOLTACE	16~18V	32 ~ 35V	64.5 ~ 69.5V		
PROTECTION	OVER VOLTAGE	Protection type : Shut down o/p voltage,	re-power on to recover			
	OVER TEMPERATURE	Protection type: Shut down o/p voltage, recovers automatically after temperature goes down				
	REMOTE CONTROL	Open: Normal work Short: Stop Charging				
	LEAKAGE CURRENT FROM BATTERY (Typ.)	) 1mA				
UNCTION	FAST CHARGE	2 / 8 stage selectable				
UNCTION	CHARGING OK	Relay contact (RY15)				
	OUTPUT OK	Relay contact (RY13)				
	TEMPERATURE SENSE	By NTC				
	WORKING TEMP.	-20 ~ +60°C (refer to output load derating curve)				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.05%/°C (0~50°C)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes				
	SAFETY STANDARDS	UL1012, TUV EN60335-1, EN60335-2-29 (except for 48V) approved				
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.8KVAC O/P-FG:0.5KVAC				
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 50	00VDC / 25°C / 70% RH			
(Note 2)	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22)				
(	HARMONIC CURRENT	Compliance to EN61000-3-2,-3				
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024; light industry level, criteria A				
	MTBF	135.6Khrs min. MIL-HDBK-217F (25°C)				
OTHERS	DIMENSION	230*158*67mm(L*W*H)				
	PACKING	2.2Kg; 6pcs/14.2Kg/1.76CUFT				
NOTE	<ol><li>The power supply is consid EMC directives.</li></ol>	isially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Sidered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets ested range. Please consult your battery manufacturer for their suggestions about maximum charging current limitation.				

stage 2

stage 3

Orange

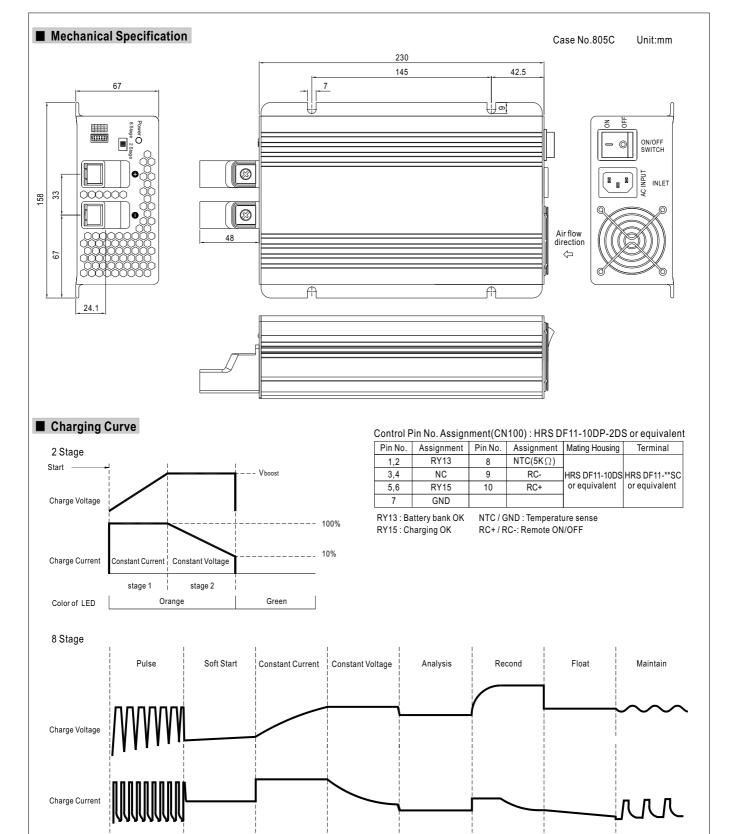
stage 4

stage 5

stage 1

Color of LED





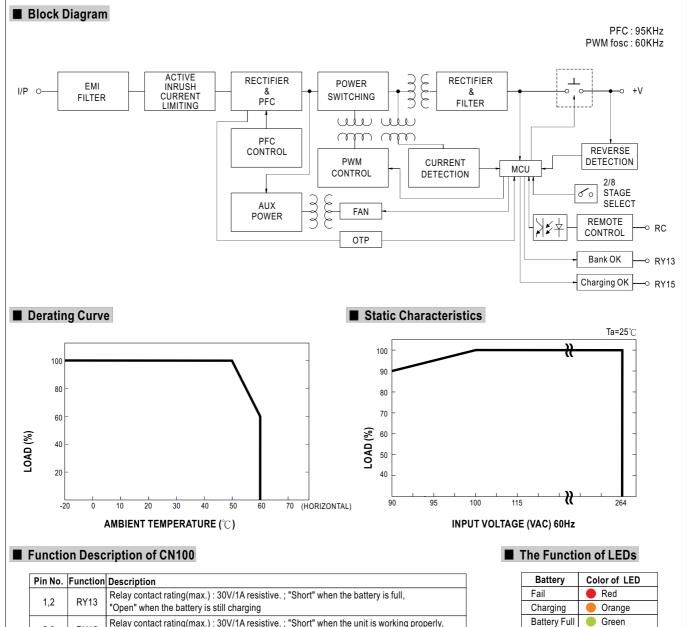
stage 8

Green

stage 6

stage 7





Pin No.	Function	Description
1,2	RY13	Relay contact rating(max.): 30V/1A resistive.; "Short" when the battery is full, "Open" when the battery is still charging
5,6	RY15	Relay contact rating(max.): 30V/1A resistive.; "Short" when the unit is working properly, "Open" when the unit stop charging
7,8	GND / RTH	Temperature sensor comes along with the charger can be connected to the unit to allow temperature compensation of the charging voltage
9,10	RC-/RC+	Turn the output on and off by electrical or dry contact between pin 10 (RC+) and pin 9(RC-) Open: Normal work, Short: Stop charging

Battery	Color of LED	
Fail	Red	
Charging	Orange	
Battery Full	Green	



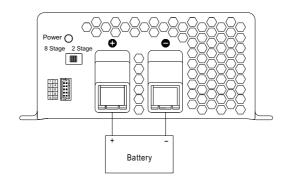
# **■** Function Manual

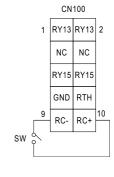
#### 1.Remote Control

The charger can be turned ON/OFF by using the

"Remote Control" function.

Between RC+(pin10) and RC-(pin9)	Charging
SW Open	ON
SW Short	OFF

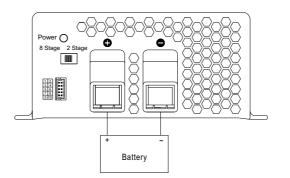




## 2. 2 or 8 stage charging select

The charger features user selectable 2 or 8 stage charging. The charging profile is selected by moving the slide switch on the back panel.

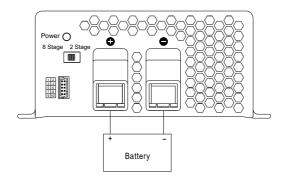
Switch	Charging mode	
Turn right	2 stage charging	
Turn left	8 stage charging	

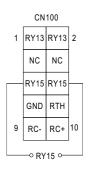


	CN100		
1	RY13	RY13	2
	NC	NC	
	RY15	RY15	
	GND	RTH	
9	RC-	RC+	10

## 3.Charger OK Relay(RY15)

Charger	Between pin5 and pin6(RY15)
Normal work	ON (Short)
Failure or the protection function is activating	OFF (Open)



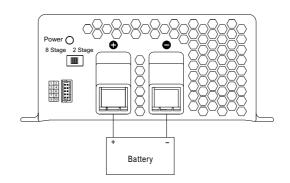


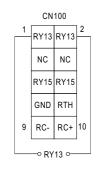


## 4.Output OK (RY13)

#### 1.Bank OK (RY13)

Bank Between pin1 and pin2(RY		Color of LED
Battery Full	ON (Short)	Green
Charging	OFF (Open)	Orange

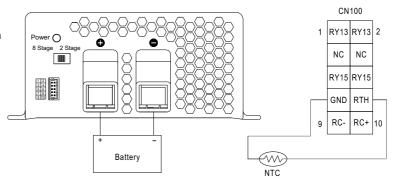




#### 5. Temperature compensation

Temperature sensor comes along with the charger can be connected to the unit to allow temperature compensation of the charging voltage.

If the sensor is not used, the charger still works normally.



The temperature sensor can either be attached to the battery or placed in its surrounding environment.