YINGJIAO®

YEC155 SERIES 155W



YEC series is designed for uninterruptible DC power supply (UPS), in addition to the main power supply circuit also provides one floating charge output, connected to the battery when there is mains power supply,the load uses AC power supply, while the charging circuit charges the battery float, and automatically switches to the battery power supply after power failure.
The YEC series is a classic metal mesh shell model, which provides one battery voltage supply output, but also provides one charging output.This series of power supply is widely used in emergency lighting, security monitoring and alarm system.

Features

- Universal AC input / Full range
- Cooling by free air convection
- Battery low protections
- 100% full load burn-in test
- Protection:Short circuit/Overload/ Over voltage
- Two Years Warranty

Model Information

Yingjiao Part Number	DC Voltage CH1/CH2	Rated Current CH1/CH2	Rated Power	CURRENT RANGE CH1/CH2	VOLTAGE ADJ.RANGE
YEC155-13.8	13.8V/13.4V	10.5A/0.5A	151.55W	0~11.5/0~0.5A	CH1:12~14.5V
YEC155-27.6	27.6V/26.5V	5A/0.5A	151.55W	0~5.5A/0~0.5A	CH1:24~29V

Input

VOLTAGE RANGE	90-264VAC/127-370VDC	
FREQUENCY RANGE	47-63Hz	
POWER FACTOR (Typ.)	PF>0.92 at full load	
EFFICIENCY(Typ.)	80%	YEC155-13.8
	84%	YEC155-27.6
AC CURRENT(Typ.)	2.5A/115VAC	
	1.5A/230VAC	
INRUSH CURRENT(Typ.)	COLD START 23A/115VAC 45A/230VAC	
LEAKAGE CURRENT	<1mA/240VAC	

Output

RIPPLE & NOSE(max.)	150mVp-p	YEC155-13.8
	150mVp-p	YEC155-27.6
VOLTAGE TOLERANCE	±2.0%	YEC155-13.8
	±1.0%	YEC155-27.6
LINE REGULATION	±0.5%	
LOAD REGULATION	±0.5%	
SETUP,RISE TIME	1000ms, 90ms/230VAC at full load	
	2000ms, 90ms/115VAC at full load	
HOLD UP TIME (Typ.)	24ms/230VAC at full load	
	20ms/115VAC at full load	

Protection

OVER LOAD	CH1:105~135%,CH2:0.51~0.9A rated output power	
	AC Charging Mode: Hiccup mode, recovers automatically after	
	fault condition is removed,UPS Mode: Protected by internal fuse	
OVER VOLTAGE	CH1:15.87~18.63V	YEC155-13.8
	CH1:31.74~37.26V	YEC155-27.6
	Protection type: Hiccup mode, recovers automatically after	
	fault condition is removed	
BATTERY LOW	10V±0.8V	YEC55-13.8
	19.5V(+1.5V,-1V)	YEC55-27.6

Environment

WORKING TEMP.	-10 ℃ to +60 ℃ (Refer to "Derating Curve")
Working Humidity	20 ~ 90% RH Non-Condensing
STORAGE TEMP, HUMIDITY	-20℃ ~+85℃,10 ~ 95% RH
TEMP. COEFFICIENT	± 0.03%/℃(0~50℃) on CH1 output
VIBRATION	10~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y,Z axes
MTBF	1818.3K hrs min. Telcordia SR-332 (Bellcore)

SAFETY & EMC

SAFETY STANDARDS	UL62368-1, TUV BS EN/EN62368-1,
	EAC TP TC 004, AS/NZS 60950.1 approved
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/ 500VDC/25 ℃/70% RH
EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2
EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11,BS EN/EN55035

Note

1.All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.

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.Tolerance : includes set up tolerance, line regulation and load regulation.

4.The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit onl a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how toperform these EMC tests, please refer to "EMI testing of component power supplies."

5.The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).

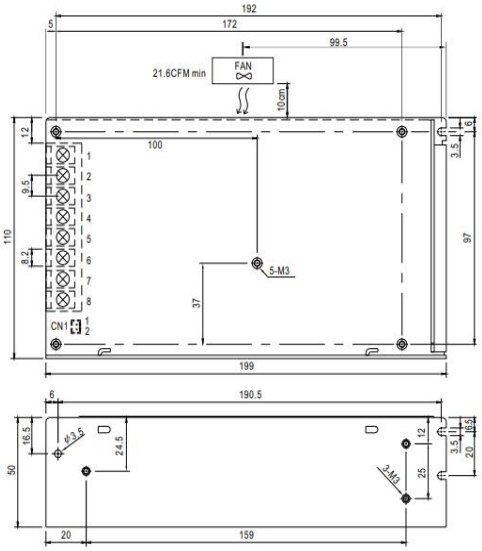
Dimensions & Weight

Length:	199mm/7.83in
Width:	110mm/4.33in
Height:	50mm/1.97n
Weight:	880g

Packing

Carton Size:	38 × 19.5 x 26 CM
	14.96 x 7.68 x10.24 in
Master Carton Quantities:	15pcs/Carton

Dimensions and Installation



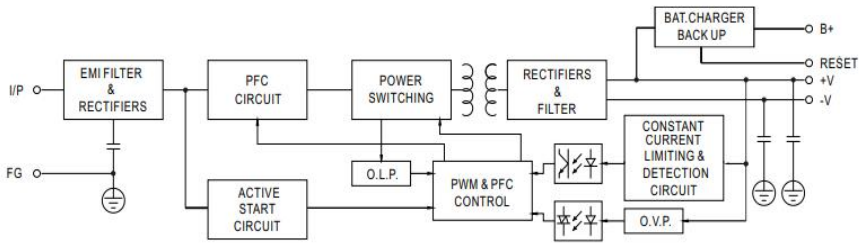
Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	BAT. +
2	AC/N	6	BAT. -/COM
3	FG ⏚	7	DC OUTPUT COM
4	NC	8	DC OUTPUT +V

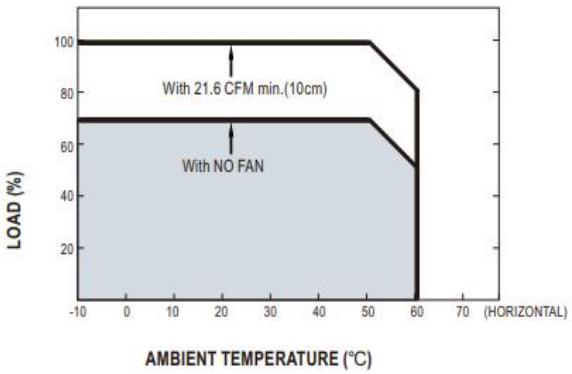
CN1 Pin No. Assignment : JST B2B-XH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	RESET SW	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
2			

Block Diagram



Deduction curve and temperature



Minus output and input voltage curves

