



# 155W Single Output with Battery Charger(UPS Function)

# AD-155 series



## ■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Battery low and battery polarity protection
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at PFC 67KHz, PWM 134KHz
- 2 years warranty

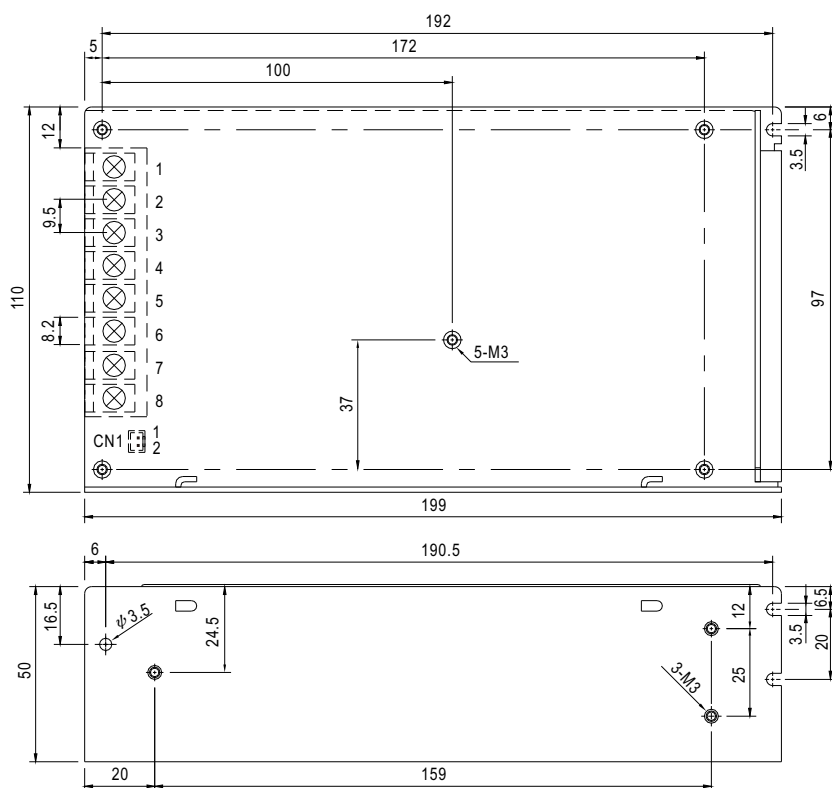


## SPECIFICATION

MODEL		AD-155A		AD-155B		AD-155C		
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2	CH1	CH2	
	DC VOLTAGE	13.8V	13.3V	27.6V	27.1V	54V	53.5V	
	RATED CURRENT	10.5A	0.5A	5A	0.5A	2.7A	0.2A	
	CURRENT RANGE	0 ~ 11.5A	0 ~ 0.5A	0 ~ 5.5A	0 ~ 0.5A	0 ~ 2.7A	0 ~ 0.5A	
	RATED POWER	151.55W		151.55W		156.5W		
	RIPPLE & NOISE (max.) Note.2	150mVp-p	-----	150mVp-p	-----	240mVp-p	-----	
	VOLTAGE ADJ. RANGE	CH1: 12 ~ 14.5V		CH1: 24 ~ 29V		CH1: 48 ~ 58V		
	VOLTAGE TOLERANCE Note.3	±2.0%	-----	±1.0%	-----	±1.0%	-----	
	LINE REGULATION	±0.5%	-----	±0.5%	-----	±0.5%	-----	
	LOAD REGULATION	±0.5%	-----	±0.5%	-----	±0.5%	-----	
SETUP, RISE TIME		1000ms, 90ms/230VAC      2000ms, 90ms/115VAC at full load						
HOLD UP TIME (Typ.)		24ms/230VAC      20ms/115VAC at full load						
INPUT	VOLTAGE RANGE	88 ~ 264VAC      124 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR (Typ.)	PF>0.92 at full load						
	EFFICIENCY (Typ.)	80%			84%		84%	
	AC CURRENT (Typ.)	2.5A/115VAC      1.5A/230VAC						
	INRUSH CURRENT (Typ.)	COLD START 23A/115VAC      45A/230VAC						
	LEAKAGE CURRENT	<1mA / 240VAC						
PROTECTION	OVERLOAD	CH1:105 ~ 135%      CH2:0.51 ~ 0.9A rated output power Protection type : AC Charging Mode : Constant current limiting, recovers automatically after fault condition is removed UPS Mode : Protected by internal fuse						
	OVER VOLTAGE	CH1:15.87 ~ 18.63V			CH1:31.74 ~ 37.26V		CH1:62.1 ~ 72.9V	
		Protection type : Shut down o/p voltage, re-power on to recover						
	BATTERY LOW	10V±0.8V			19.5V(+1.5V,-1V )		39V±2V	
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to "Derating Curve")						
	WORKING HUMIDITY	20 ~ 90% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH						
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)						
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes						
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 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°C/ 70% RH						
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3						
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A						
OTHERS	MTBF	183.3K hrs min.    MIL-HDBK-217F (25°C)						
	DIMENSION	199*110*50mm (L*W*H)						
	PACKING	0.88Kg; 16pcs/15Kg/0.95CUFT						
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C 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 on 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 to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )							

## ■ Mechanical Specification

Case No. 906B    Unit:mm



### Terminal Pin No. Assignment

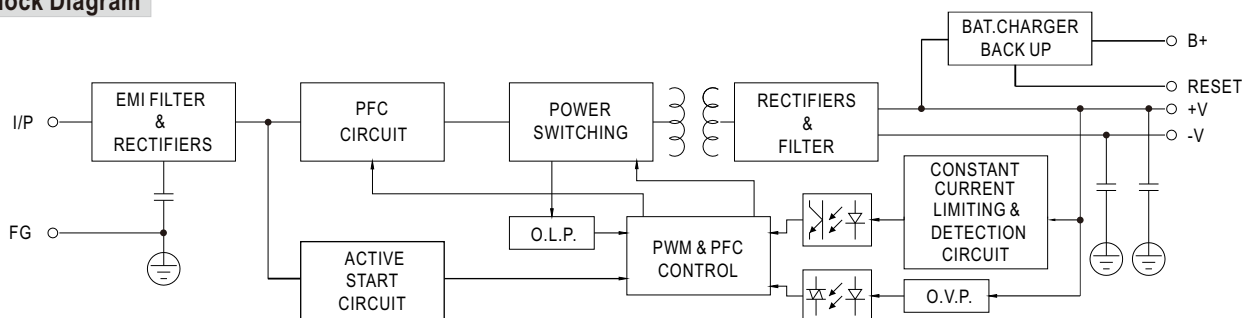
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	BAT. +
2	AC/N	6	BAT. -/COM
3	FG $\perp$	7	DC OUTPUT COM
4	NC	8	DC OUTPUT +V

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

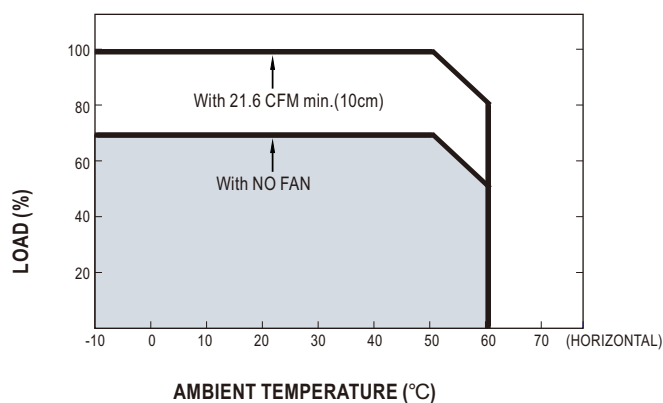
Pin No.	Assignment	Mating Housing	Terminal
1	RESET SW	JST XHP	JST SXH-001T-P0.6
2		or equivalent	or equivalent

PFC fosc : 67KHz  
PWM fosc : 134KHz

### ■ Block Diagram



### Derating Curve



### ■ Output Derating VS Input Voltage (A)

