

### ■ Features :

- Universal AC input / Full range
- Protections: Short circuit/Over load/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

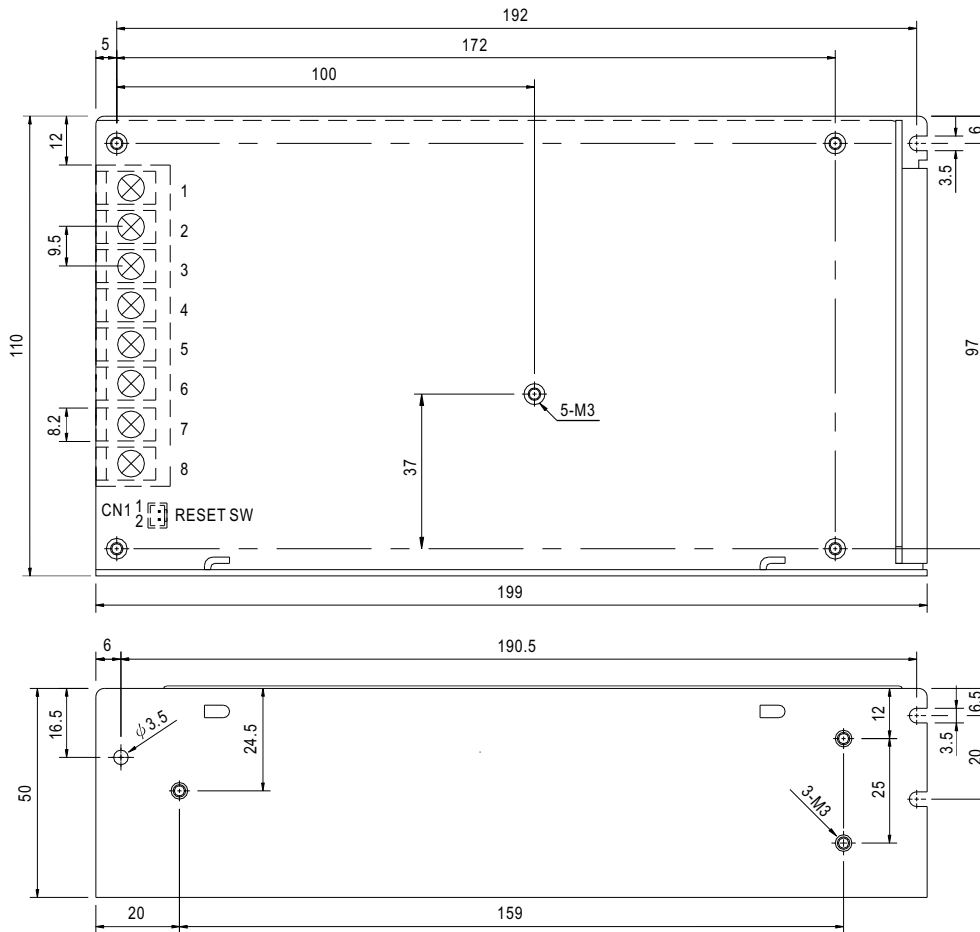


### SPECIFICATION

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 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 20A/115VAC		40A/230VAC			
	LEAKAGE CURRENT	<1mA / 240VAC					
PROTECTION	OVER LOAD	CH1:105 ~ 135%		CH2:0.51 ~ 0.9A rated output power			
		Protection type : Constant current limiting, recovers automatically after fault condition is reoved					
	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 output load 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:1.5KVAC		O/P-FG:0.5KVAC	
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC					
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B					
	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					
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	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> </ol>						

### Mechanical Specification

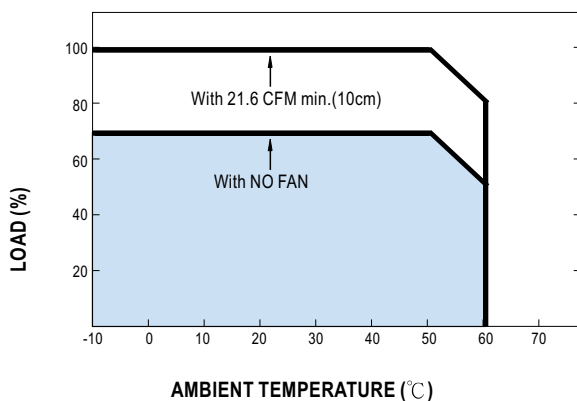
Case No. 906B Unit:mm



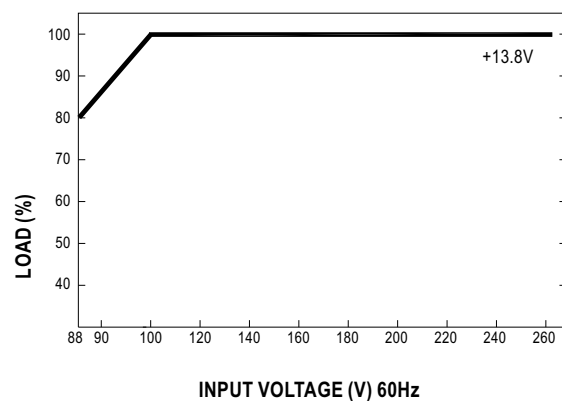
Terminal Pin. No Assignment

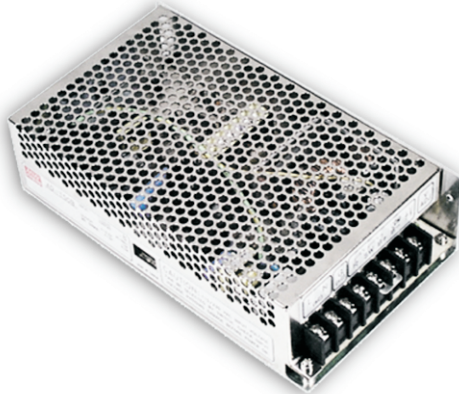
Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4	NC	7	DC OUTPUT COM
2	AC/N	5	BAT. +	8	DC OUTPUT +V
3	FG $\perp$	6	BAT. -/COM		

### Derating Curve



### Output Derating VS Input Voltage (A)





### ■ Features :

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

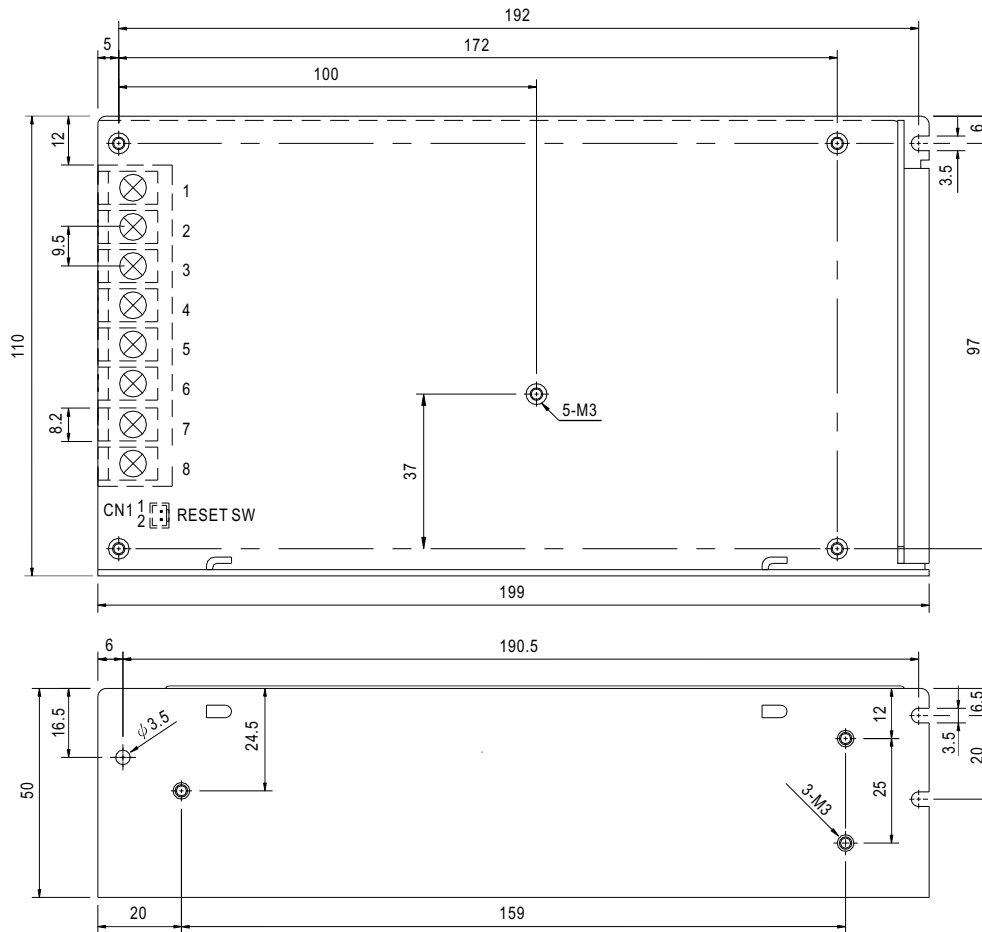


### SPECIFICATION

MODEL		ADD-155A			ADD-155B			ADD-155C		
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3
	DC VOLTAGE	13.8V	5V	13.3V	27.6V	5V	27.1V	54V	5V	53.5V
	RATED CURRENT	9.5A	3A	0.5A	4.5A	3A	0.5A	2.3A	3A	0.2A
	CURRENT RANGE	0 ~ 10.5A	0 ~ 3A	-----	0 ~ 5A	0 ~ 3A	-----	0 ~ 2.5A	0 ~ 3A	-----
	RATED POWER	152.75W			152.75W			149.9W		
	RIPPLE & NOISE (max.) Note.2	150mVp-p	100mVp-p	-----	200mVp-p	100mVp-p	-----	240mVp-p	100mVp-p	-----
	VOLTAGE ADJ. RANGE	CH1: 12 ~ 14.5V			CH1: 24 ~ 29V			CH1: 48 ~ 58V		
	VOLTAGE TOLERANCE Note.3	±2.0%	±3.0%	-----	±1.0%	±3.0%	-----	±1.0%	±5.0%	-----
	LINE REGULATION	±1.0%	±0.5%	-----	±1.0%	±0.5%	-----	±1.0%	±0.5%	-----
	LOAD REGULATION	±1.0%	±2.0%	-----	±1.0%	±2.0%	-----	±1.0%	±2.0%	-----
	SETUP, RISE TIME	1000ms, 90ms/230VAC			2000ms, 90ms/115VAC at full load					
HOLD 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.)	78%			81%			81%		
	AC CURRENT (Typ.)	2.5A/115VAC		1.5A/230VAC						
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC		40A/230VAC						
	LEAKAGE CURRENT	<1mA / 240VAC								
PROTECTION	OVER LOAD	CH1,CH2:105 ~ 135%			CH3:0.51 ~ 0.9A rated output power			Protection type : Constant current limiting, recovers automatically after fault condition is reoved		
	OVER VOLTAGE	CH1:15.87 ~ 18.63V			CH1:31.74 ~ 37.26V			CH1:62.1 ~ 72.9V		
	BATTERY LOW	10V±0.8V			19.5V(+1.5V,-1V)			39V±2V		
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load 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) on +5V ouput								
	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:1.5KVAC		O/P-FG:0.5KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC								
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B								
	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								
OTHERS	MTBF	164.2K hrs min.			MIL-HDBK-217F (25°C)					
	DIMENSION	199*110*50mm (L*W*H)								
	PACKING	1Kg; 16pcs/16Kg/0.95CUFT								
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> </ol>									

**Mechanical Specification**

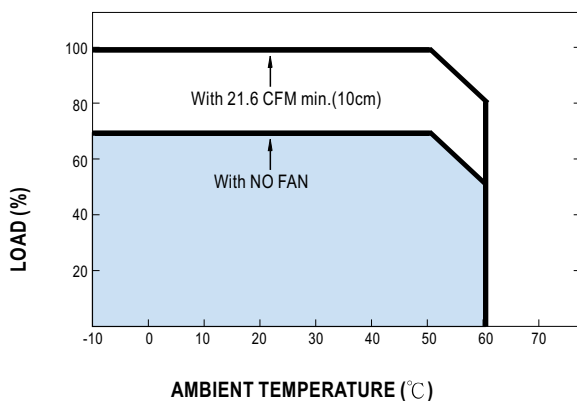
Case No. 906B Unit:mm



Terminal Pin. No Assignment

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

**Derating Curve**



**Output Derating VS Input Voltage (A)**

