

# POWER-WIN TECHNOLOGY CORP.

www.power-win.com

## AC/DC Switching Adapter - Single Output

**AD-A8 100Watts ES Series**  
US DOE level VI & EU ErP Efficiency Compliant

### FEATURES

- 62368-1 approved
- 3-prong IEC320-C14 AC inlet, Class I
- Output voltage range from +12V to +52V
- US DOE level VI & EU ErP Efficiency Compliant
- No load Power consumption < 150mW
- 3 year warranty

### ELECTRICAL SPECIFICATIONS

- Input range : 90 - 264VAC
- Frequency : 47 - 63Hz
- Power Factor : > 0.95 @115VAC; > 0.90 @230VAC @full load
- Inrush current : < 75A peak @115VAC; < 150A peak @230VAC cold start @25°C
- Input current (rms) : 2.5A @90VAC; 1.25A @264VAC max.
- Efficiency : > 89% @Average Efficiency, 115/230VAC
- Maximum output power (Po) : 100Watts
- Hold-up time : > 16ms typical @full load, 115VAC
- Short Circuit Protection: Auto-recovery
- Over Load Protection: Auto-recovery
- Over Voltage Protection: Latch off, AC recycle

### ENVIRONMENTAL

- Operating temperature : 0 to +60°C (Refer to derating curve)
- Storage temperature : -10°C to +85°C, non-condensing
- Humidity: 20% ~ 90%, non-condensing
- MTBF : > 140,000 hours at full load and 25°C ambient temperature

### DC OUTPUT & FEATURES

✧ Other DC output 100W for 12-26V, 33-39V and 44-52V.

Model	Output Rating		Po	O/P Regulation	Ripple & Noise(Vp-p)	Efficiency Level
PW-100A-1Y120H	12V	8.34A	100W	± 5%	120mV	VI
PW-100A-1Y160H	16V	6.25A	100W	± 5%	160mV	VI
PW-100A-1Y190H	19V	5.27A	100W	± 5%	190mV	VI
PW-100A-1Y240H	24V	4.17A	100W	± 3%	200mV	VI
PW-100A-1Y360H	36V	2.78A	100W	± 3%	200mV	VI
PW-100A-1Y480H	48V	2.09A	100W	± 3%	200mV	VI

- Note:**
1. Ripple and noise are measured at oscilloscope 20MHz bandwidth by a 47uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.
  2. The switching frequency of this series is set within 45 to 55KHz at full load.



### RoHS Compliant

Dimension : L170 x W85 x H44 mm ( 6.69" x 3.35" x 1.73")  
Weight : 0.78 kgs. ( 1.72 lbs. )

### SAFETY STANDARDS

UL 62368-1  
CSA C22.2-No.62368-1  
TUV EN62368-1  
CB IEC 62368-1

### EMC STANDARDS

FCC Class B  
EN 55032 Class B  
EN 55035  
CE



### POWER-WIN TECHNOLOGY CORP.

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Tel : 886-2-26983989(Rep) Fax : 886-2-26983978

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E-Mail : sales@power-win.com

REV. 1.5

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**SAFETY AGENCY CERTIFICATIONS**

**Safety and EMC Performance**

Description	Safety	EMC
Audio / Video, ITE equipment	IEC 62368-1 : 2014 (Second Edition) EN 62368-1 : 2014 + A11 UL 62368-1, 2nd Edition, 2014-12-01 CAN / CSA C22.2 No. 62368-1-14, 2nd Edition	EN 55032 & EN 55035 & FCC Part 15 (*) and ICES-003

Tests for conformance to this requirement will be performed with final system

(\*) FCC PART 15 compliance information and warnings :

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions :

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

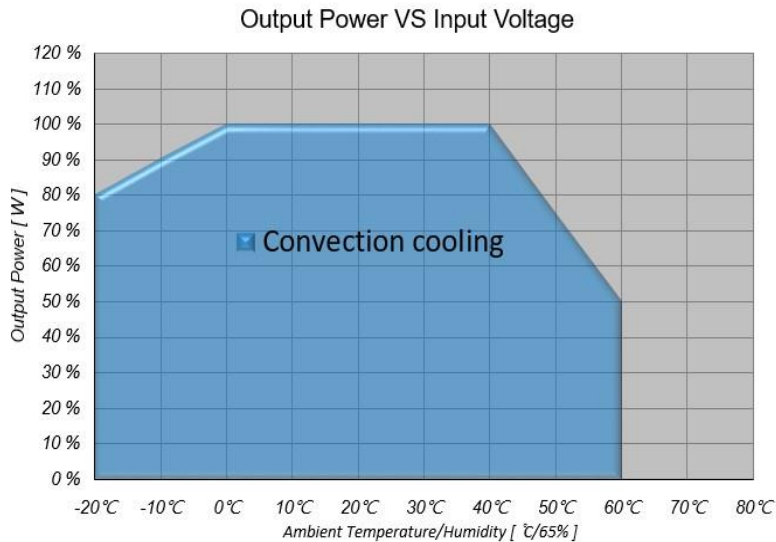
**Insulation level and dielectric withstand (HI-POT)**

Audio / video, ITE equipment	Isolation voltage	Grade insulation
Primary to Secondary	4242Vdc (3000Vac)	Reinforced
Primary to Ground (Mounting holes or Frame GND)	2121Vdc (1500Vac)	Basic
Secondary circuits to earth ground	2121Vdc (1500Vac)	Basic

Note : Production testing use dc voltage test 4 Sec.

**ENVIRONMENTAL**

**DERATING CURVE**



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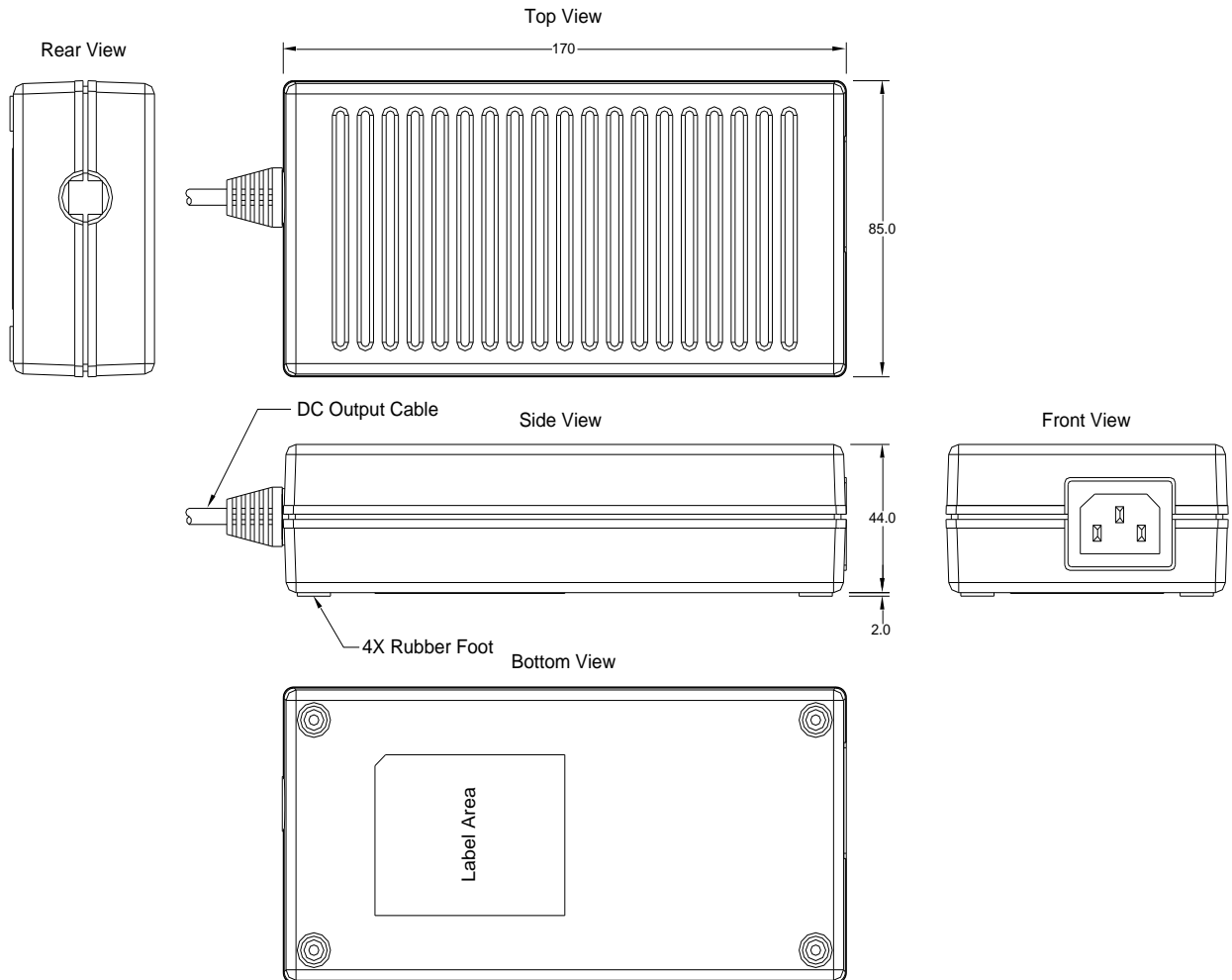
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**MECHANICAL SPECIFICATION**



- Note:
1. AC Inlet : IEC320-C14
  2. Plastic Case Color : Black
  3. Tolerance :  $\pm 0.5\text{mm}$
  4. Unit : mm

**STANDARD OUTPUT CABLE**

1. AWM 2464 #16AWG / 3C + SHIELDING, UL 80°C 300V VW-1, 1050 mm. (12-24V)
2. AWM 2464 #18AWG / 3C + SHIELDING, UL 80°C 300V VW-1, 1050 mm. (36-48V)
3. Depends on customers requirements.



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