



SWITCHING POWER SUPPLY

**PRODUCT SPECIFICATION**Model: SSA-0901-19 Rev.: A2  
+19V 4.74A

File:SSA-0901-19

Date: Jul. 8 ,2011

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## 1.0 INTRODUCTIONS:

1.1 This document specifies the product model number [SSA-0901-19](#) a [90](#) watt [adapter single](#) output switching mode power supply, this unit is designed to meet the relevant specification and regulation as following.

The specification is typical at nominal line and 25°C ambient.

1.2 Compliant with CEC Level V and EPA Energy Efficiency Level V requirements.

1.3 This product is complied with RoHS request for 6 hazarded substances.

## 2.0 INPUT CHARACTERISTICS:

- 2.1 Input Voltage rating: [100Vac](#) to [240Vac](#).
- 2.2 Input Voltage range: [90Vac](#) to [264Vac](#).
- 2.3 Input Frequency: [47](#) Hz to [63](#) Hz.
- 2.4 Inrush current: [It shall be limited to a level below the I<sup>2</sup>t of the fuse and the bridge diode.](#)
- 2.5 Input current: [2A](#) max. for 110~240Vac at max. load.
- 2.6 Leakage current: [3.5mA](#) max at 240Vac 50Hz.
- 2.7 Power Factor: The power factor should be over 90% at 110~240Vac at max. load.
- 2.8 No load power consumption: < [0.5W](#) at 115Vac/60Hz or 230Vac/50HZ

## 3.0 OUTPUT CHARACTERISTICS:


3.1 Output specifications table:

Output Voltage	Minimum Load	Maximum Load	Peak Load	Regulation	Ripple & Noise
V1: <a href="#">+19V</a>	<a href="#">0A</a>	<a href="#">4.74A</a>	<a href="#">N/A</a>	<a href="#">±5%</a>	<a href="#">190mVp-p</a>

3.2 Line regulation: The line regulation is less than [+/-1%](#) while measuring at max. load and [+/-10%](#) of input voltage change.

3.3 Output Dynamic Response: [+/-8%](#) Max, Excursion for output load [20%](#) to [100%](#) max. load. changes with a [0.1~2.5A/us](#) slew-rate And 1ms / 10ms /20ms.

3.4 Ripple & noise: [190mV](#) at max. load, nominal line. Measuring is done by 20 MHz bandwidth oscilloscope and dc output with a 10uF electrolytic cap parallel 0.1 uF ceramic capacitor.

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#### 4.0 GENERAL SPECIFICATION:

- 4.1 Efficiency: [87%](#) (Average) at 25%, 50%, 75%, 100% load;  
at 115Vac/60Hz or 230Vac/50HZ,25°C.
- 4.2 Hold up time: Minimum [12](#)mS at max load ; 115Vac/60Hz,25°C.
- 4.3 Turn-ON delay Time: [2](#) Sec max; 90Vac with Full Load
- 4.4 Rise time: [25](#)mS typical at max. load ; 115Vac/60Hz,25°C
- 4.5 Overshoot: Any overshoot at turn on or turn off shall be less than [10%](#) of the nominal output voltage.
- 4.6 MTBF: MIL-HDBK-217F [80,000](#) hours at max. load ;  
115V/60HZ & 230V/50HZ, 25°C.

#### 5.0 PROTECTION:

- 5.1 Over voltage protection: [+19V](#) : 25V Max can be protected at No-Load.
- 5.2 Short circuit protection: DC Output to Gnd. shut-down and latch off protection
- 5.3 Over current protection: 150% max with shut-down and latch off protection.
- 5.4 Over thermal protection: With shut-down and latch off protection.
- 5.5 Over & undershooting:  $\pm 10\%$  of DC output.

#### 6.0 Dielectric Withstand Voltage:

- 6.1 primary to secondary: [3000](#)Vdc [10](#)mA for 1 Sec.
- 6.2 primary to ground: [1772](#)Vac [10](#)mA for 1 Sec.

#### 7.0 SAFETY STANDARD:

Designed to meet:


- (CUL)UL 60950-1 2<sup>nd</sup> Edition
- CSA C22.2 NO.60950-1-07 2<sup>nd</sup> Edition
- (CB) IEC 60950-1:2005
- (TUV) EN60950-1/A11: 2009
- CCC
- PSE

#### 8.0 EMI STANDARD (Conducted & Radiation):

Designed to meet:

- FCC class B.
- CE (CISPR 22 class B).

#### 9.0 EMS STANDARD:

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Designed to meet:

- (CE) EN55022: 2006 CLASS B
- EN55024:1998/A1: 2001/A2: 2003
- EN 61000-3-3:1995/A1: 2001/A2: 2005
- EN 61000-3-2:2006 CLASS D
- FCC) FCC Part 15 & Part 2 (CISPR 22 CLASS B)
- (C-TICK) AS/NZS CISPR 22:2006 CLASS B

## 10.0 ENVIRONMENTAL:

- 10.1 Temperature: [0°C](#) to [40°C](#) (operating).  
[-25°C](#) to [75°C](#) (storage).
- 10.2 Temperature coefficient: [0.04%](#) per °C.
- 10.3 Relative humidity: Non-condensing [10%](#) to [85%](#) (operating).  
Non-condensing [0%](#) to [90%](#) (storage).
- 10.4 Vibration: Non-operating: [5~500Hz, Acceleration:1G](#).  
Sweep rate: [1 oct/min.](#)  
Axis: X, Y, Z (10 minutes for each axis).

**11.0 Mechanical Specifications :**

139(L)x58(W)x33.3(H) mm

