

SPECIFICATION

High Efficiency Switching Power Adapter

Universal AC Input
12W 6VDC Output



P/N: W060020DN-US

**** Specification Approval****

This specification (total 8 pages including cover page) is approved in it's entirety by:

Company Name

Print Name

Signature

Date

Specification subject to change without prior notice.



Santa Clara CA 95054
Tel: 1-408-980-9813
Fax: 1-408-980-8626
Email: infor@topmicro.com
Web: www.topmicro.com

1. Scope

This specification defines the input, output, performance, environmental, noise and safety requirements for a 12 watts switching type power adapter.

The adapter has full range AC input and +6VDC 2A maximum output.

2. Input

2.1 AC Input Voltage

Min.	Nominal	Max.
90VAC	100-240VAC	264VAC

2.2 AC Input Frequency

Min.	Nominal	Max.
47Hz	50/60Hz	63Hz

2.3 AC Input Current

100-240VAC	0.5A Max.
------------	-----------

2.4 AC Inrush Current

Full load, 25C, cold-start

100-240VAC	No damage shall be sustained and the input fuse shall not blow.
------------	---

2.5 Input Connector Configuration

Wallmount type, US-pin, 2 conductors <Live, Neutral>

2.6 No-load Power Consumption

115VAC Input, 0.5W Max.

3. Output

3.1	DC Output Voltage	+6V
3.2	Min. Load Current	0A
3.3	Nominal Load Current	2A
3.4	Nominal Output Power	12W
3.5	Output Regulation	+/-5%
3.6	Line Regulation	+/-2%
3.7	Ripple and Noise	300mVp-p Max.
		At 20 MHz, and output parallel with 0.1uF & 10uF capacitors to ground
3.8	Efficiency	77.76% Min.
	CEC	Adapter meets CEC efficiency level V.
3.9	Rise Time	100mS maximum at nominal input voltage
3.10	Turn-on Delay	2 Seconds maximum at nominal input voltage
3.11	Over-Current Protection	4A maximum with auto-recovery function
	Over-Voltage Protection	10VDC maximum
	Short-Circuit Protection	Short circuit protection is included with the adapter. The adapter is designed to withstand continuous short.

4. Mechanical

4.1 Dimensions

69(L) * 28.8(W) * 62(H)mm Max.

4.2 Weight

140g Max.

4.3 Input Plug Type

Wallmount type, US-pin, 2 Conductors, < Live, Neutral >

4.4 Output Cable

Wire: 18AWG/2C 2468, 1500mm

Connector: 5.5*2.1*11mm

5. Environmental

5.1 Cooling

Natural convection cooling

5.2 Operating Temperature

0 °C TO 40 °C

5.3 Storage Temperature

-20 °C TO +60 °C

5.4 Operating Humidity

20 ~ 85 % RH. Non-condensing

5.5 Storage Humidity

5 ~ 95 % RH. Non-condensing

5.6 Vibration Test

(Non-operating, with packing) Referencing IEC 68-2-6

Test conditions		Acceptance criteria
1.Frequency	5 ~ 500 Hz	All functions shall remain within specification and there shall be no abnormalities after test.
2.Sweep	2hour. For each axis (X, Y, Z)	
3.Acceleration	0.6G (5~50 Hz, peak - peak), 1.5G (50~500 Hz, peak - peak)	
4.Displacement	0.4 mm (5~50 Hz)	

6. Safety

6.1 Dielectric Withstand Test (Hi-pot)

Primary to Secondary: 3000VAC, 10mA, 1 minute or 4242VDC, 10mA, 1 minute

6.2 Leakage Current

0.25mA Max., nominal AC input voltage and frequency

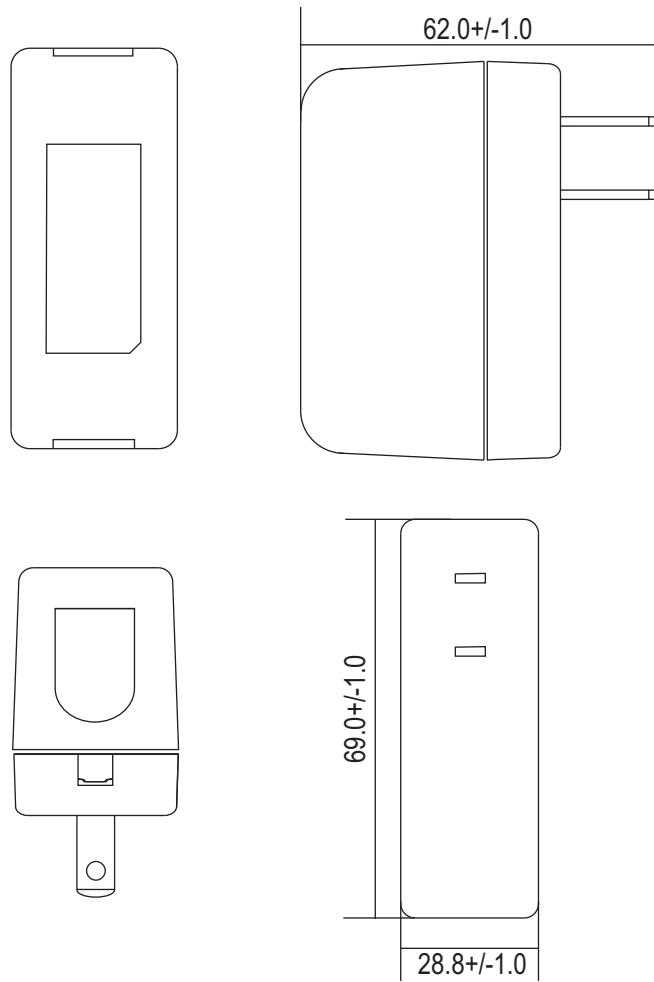
6.3 Safety

Designed to meet UL/CUL (UL60950-1)

6.4 EMI

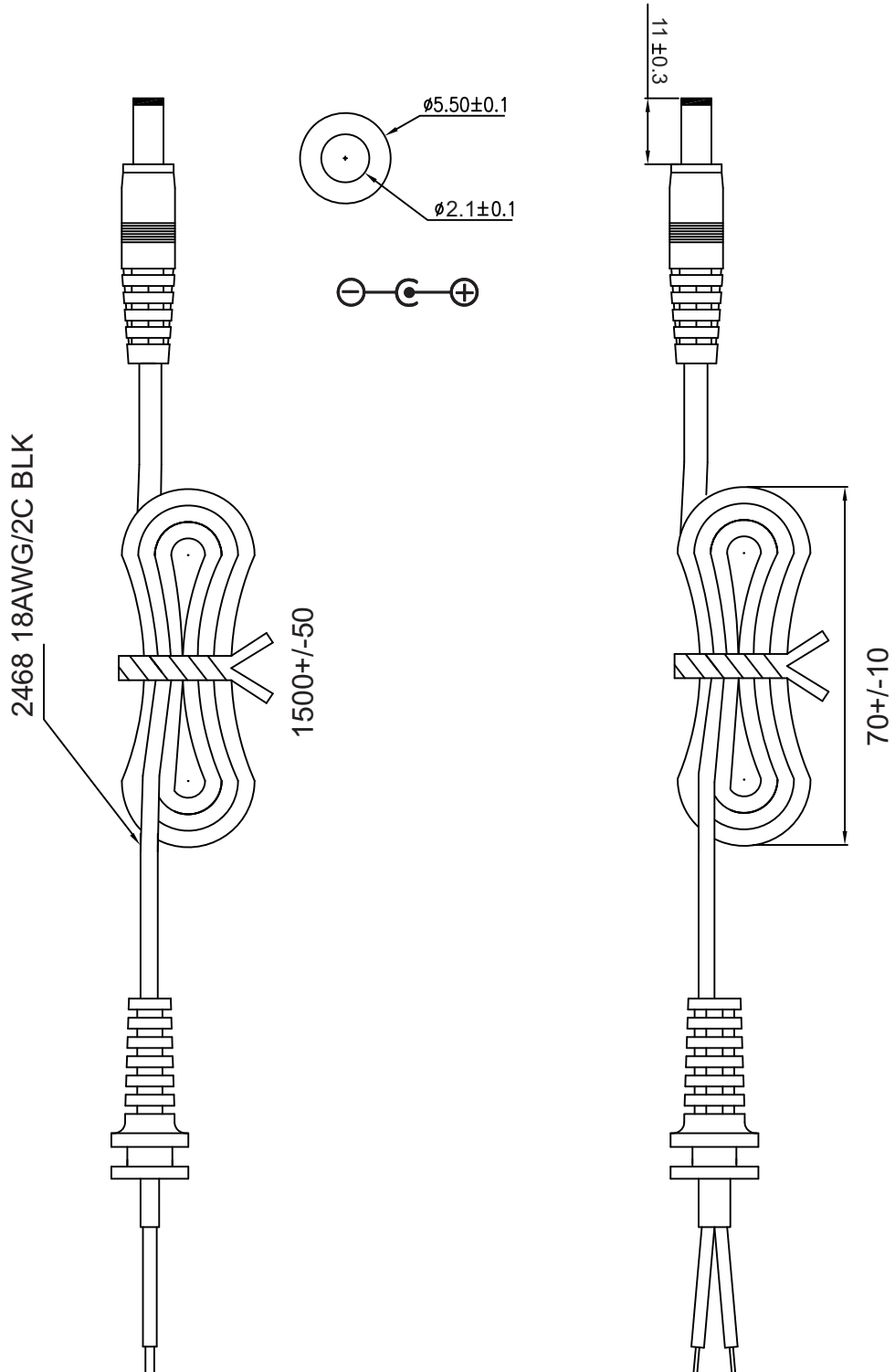
Designed to meet FCC (Part 15 Class B)

7. Mechanical



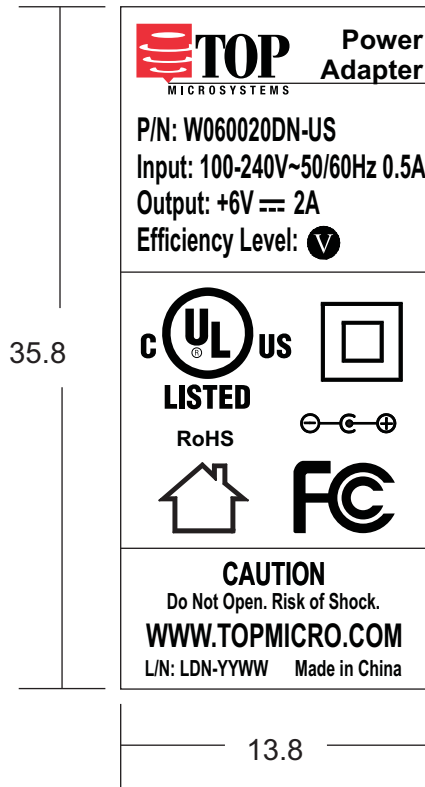
8. Cable

Unit: mm



9. Label

Unit: mm



Drawing not to scale.

10. Packing

Unit: mm

