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AMA12-Y



Wall Mount Adaptor

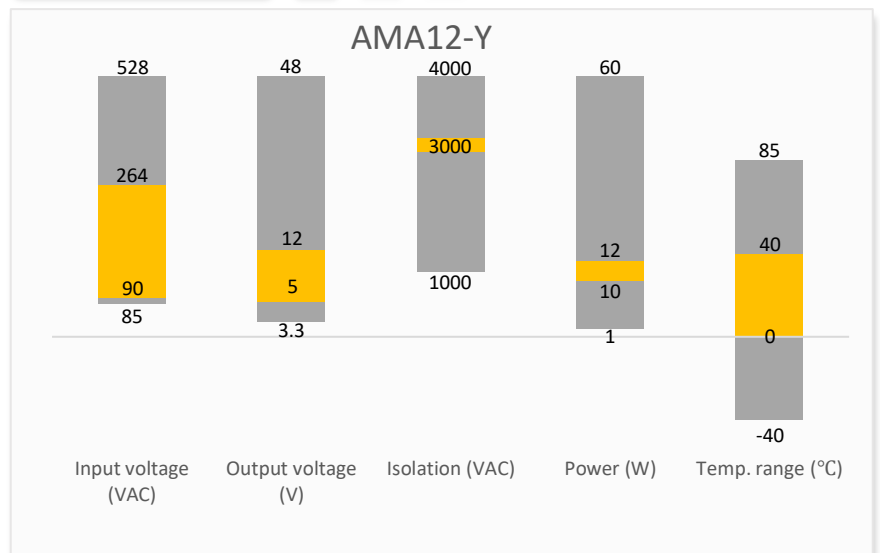
AMA12-Y is a small industrial grade wall mount adaptor. Offering a commercial input voltage range of 90-264VAC and an output power of 12W, this adaptor will offer many benefits to powering your system such as low power consumption, high efficiency (complies with DoE level VI) and meeting IEC/EN/UL 62368-1, FCC, Class B, CISPR22, Class B.

It also features an isolation of 3000VAC for improved reliability and system safety and comes standard with output short circuit protection (OSCP) and output over-current protection (OCP).

Features

- Universal Input: 90 - 264VAC/47 - 63Hz
- Operating Temp: 0 °C to +40 °C
- High isolation voltage: 3000VAC
- Low ripple & noise, 200mV(p-p), max
- Output short circuit, over-current protection
- Regulated Output

Summary



Training



Product Training Video
(click to open)



Press Release

Coming Soon!

Application Notes

Applications



Portable Equipment

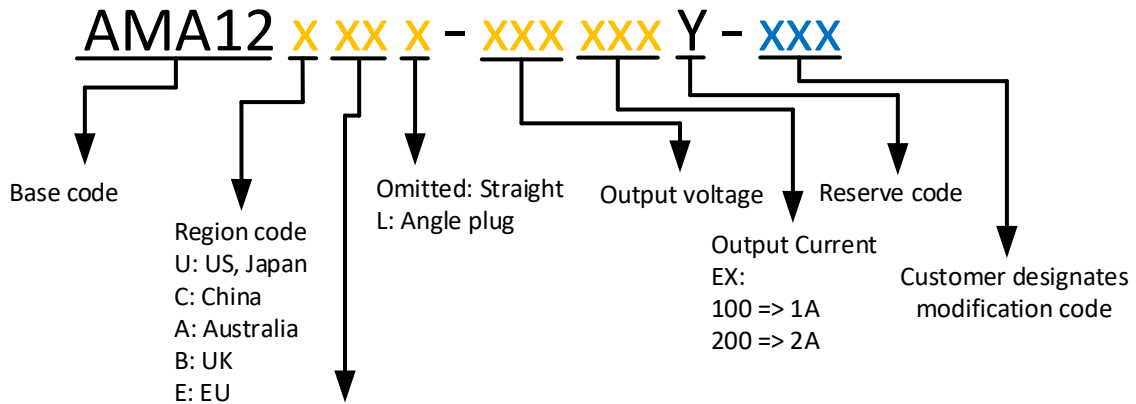


Industrial

Models & Specifications

General Feature					
Model	Input Voltage (VAC)	Output Voltage (VDC)	Output Current max (A)	Output Power max (W)	Efficiency (%)
AMA12U-050200Y	90 - 264	5	2	10	79
AMA12E-050200Y	90 - 264	5	2	10	79
AMA12U-120100Y	90 - 264	12	1	12	83
AMA12E-120100Y	90 - 264	12	1	12	83

Please refer to below coding rule for completed part numbers. Eg. AMA12UR5-120100Y for industrial grade US wall plug adaptor which comes with 5.5mm*2.5mm*9.5mm straight standard output plug.



Plug type	Code	O. D.	I. D.	Length
Standard	R1	3.5mm	1.35mm	9.5mm
	R2	3.8mm	1.05mm	9.5mm
	R3	3.8mm	1.35mm	9.5mm
	R4	5.5mm	2.1mm	9.5mm
	R5	5.5mm	2.5mm	9.5mm
	R6	3.8mm	1.1mm	9.5mm
Locking	K1	5.5mm	2.1mm	9.5mm
	K2	5.5mm	2.5mm	9.5mm
USB	U1	Micro USB (5V output model only)		
	U2	* USB type C (For 5V, 12V output models only)		

* NOTE: The USB type C connector option is only a physical USB type-C connector which does not support PD and programmable power supply.

Input Specification

Parameters	Conditions	Minimum	Typical	Maximum	Units
Voltage range		90	100 - 240	264	VAC
Frequency		47	50 - 60	63	Hz

Input current	Vin at 100 -240VAC			0.5	A
Inrush current	Vin at 240VAC			50	A
Leakage current	240VAC/50Hz			0.25	mA
Output Specification					
Parameters	Conditions	Minimum	Typical	Maximum	Units
Output voltage	5VDC output		5		VDC
	12VDC output		12		
Output current	5VDC output	0		2	A
	12VDC output	0		1	
Voltage regulation				±5	%
Ripple and Noise	20 MHz bandwidth			200	mVp-p
Start-up time	Full load, Vin at 100VAC/60Hz			3	S
Hold-up time	90% load, Vin at 100VAC/60Hz	10			mS
Ripple and Noise are measured at 20MHz bandwidth by using a 0.1uF (M/C) and 10uF (E/C) parallel capacitor.					

Isolation Specifications				
Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec, leakage current < 10mA		3000	VAC

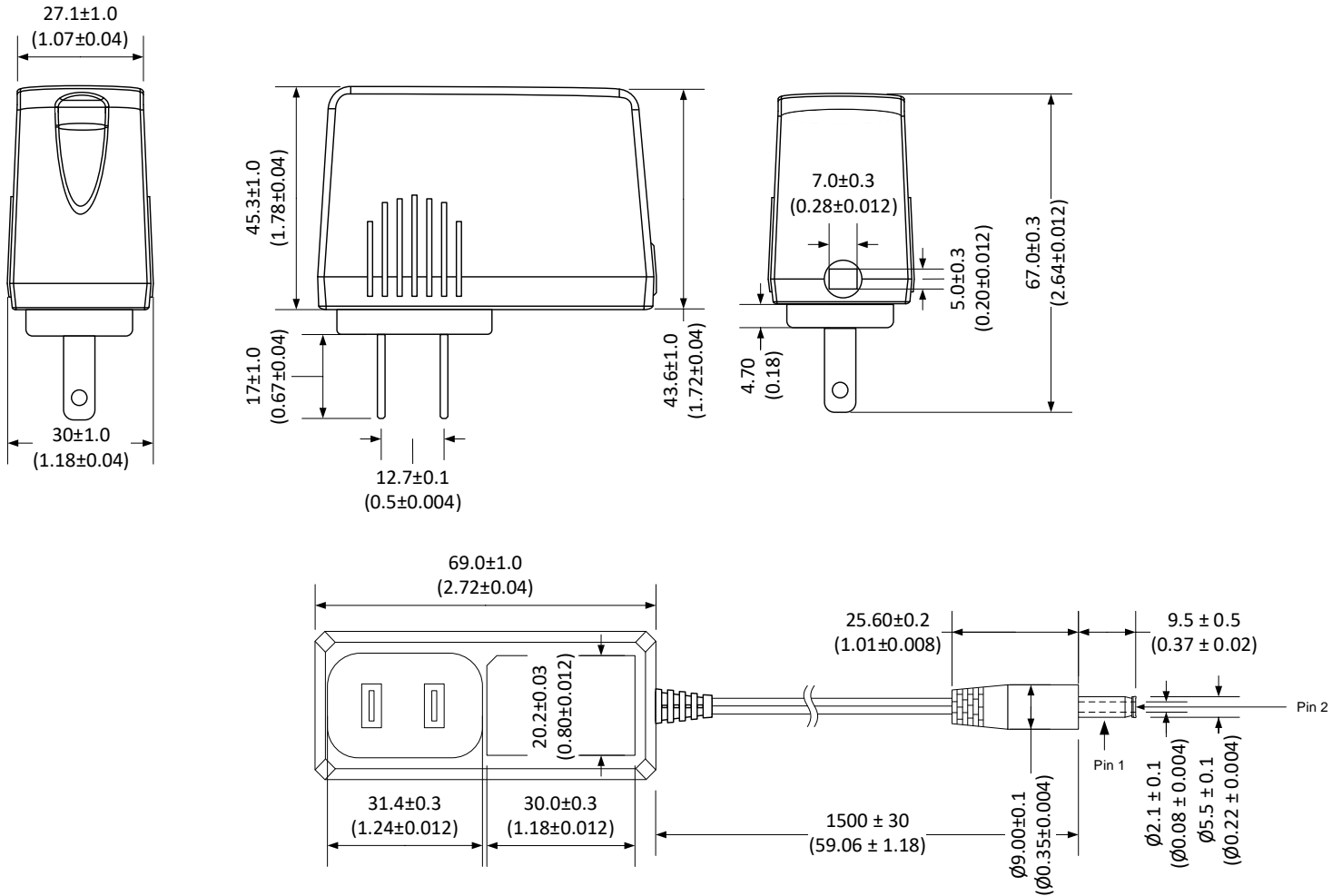
General Specification					
Parameters	Conditions	Minimum	Typical	Maximum	Units
Operating temperature		0		40	°C
Storage temperature		-20		70	°C
Power consumption	Vin at 100 -240VAC, no load			75	mW
Humidity		10		95	% RH
Altitude		0		2000	m
DOE LEVEL	VI				
Short circuit protection	Continuous, Auto recovery				
Over current protection	Continuous, Auto recovery				
Dimensions (L x W x H)	US	2.76 x 1.22 x 2.65 inches (70.00 x 31.00 x 67.30mm)			
	EU	2.74 x 1.20 x 3.33 inches (69.50 x 30.50 x 84.50mm)			
Output cable length	59.06 inches (1500mm)				
MTBF	> 175 000 hrs (Telcordia SR332, t=+25°C)/Full Load				
All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.					

Safety Specifications		
Parameters		
Agency approvals	cULus UL62368-1, CE EN62368-1	
Standards	Information technology Equipment	Design to meet IEC62368-1
	EMC - Radiated & Conducted emission	FCC, Class B

CISPR22, Class B

Dimensions

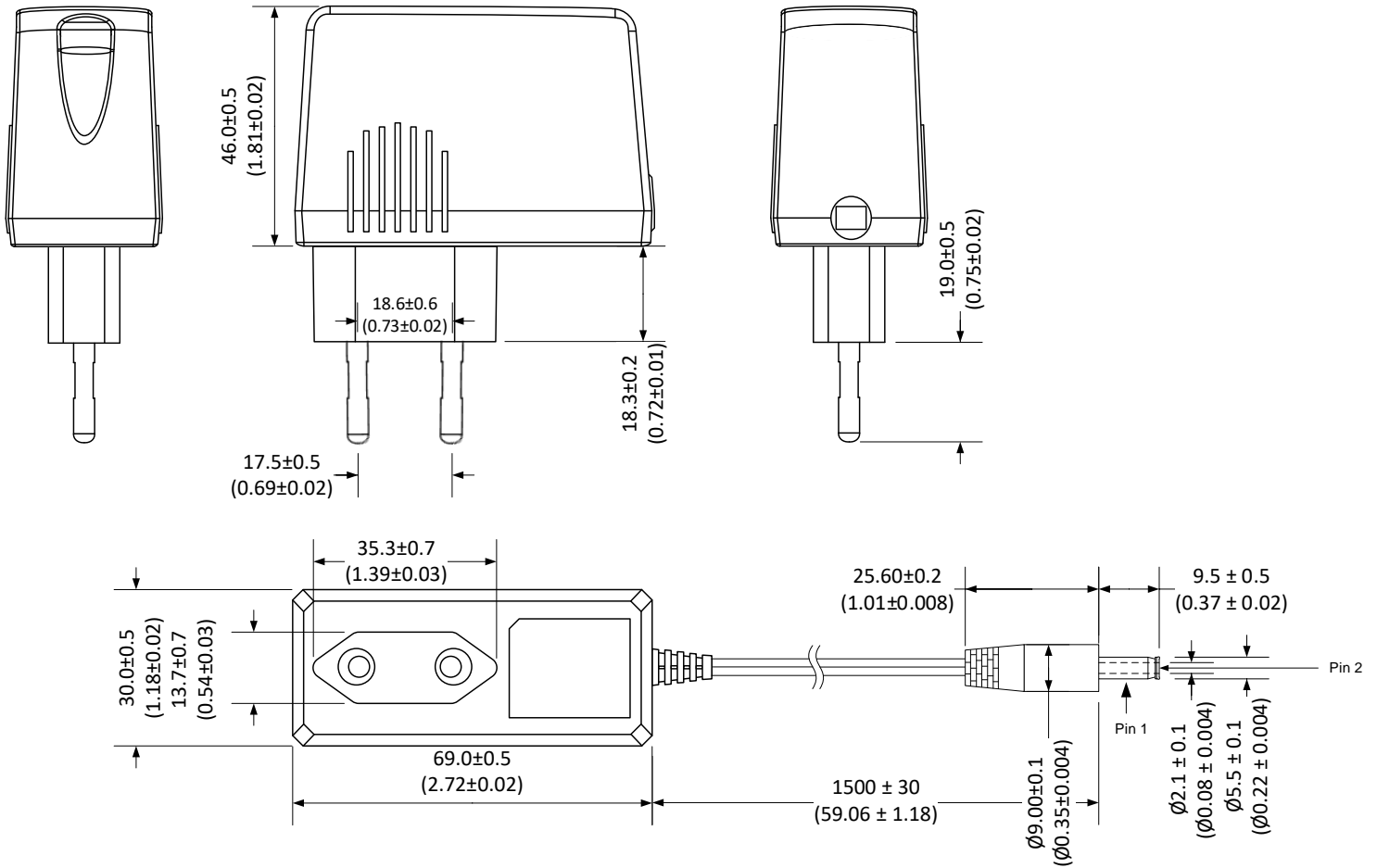
US Plug:



Dimensions mm(inch).

Pin Out Configurations	
Pin No.	Description
1	RTN(-)
2	+Vout

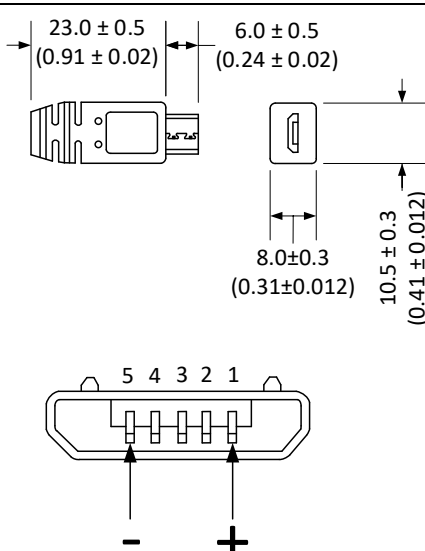
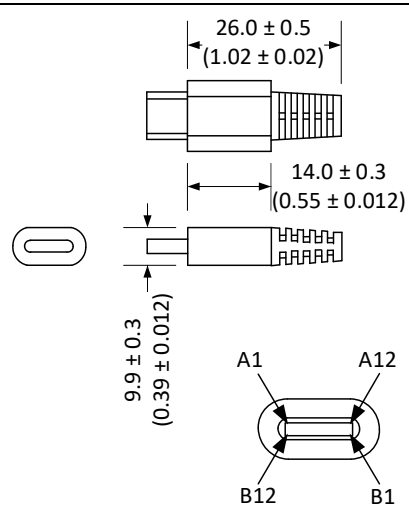
European Plug:



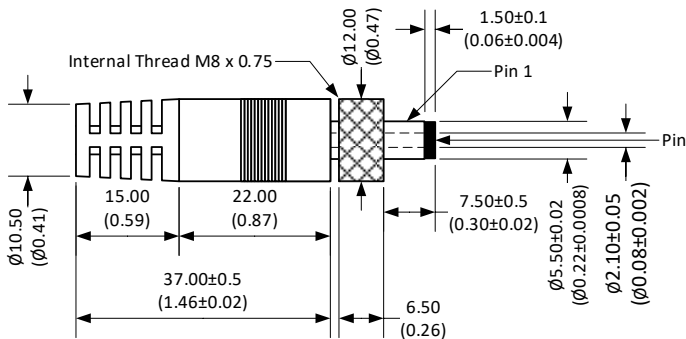
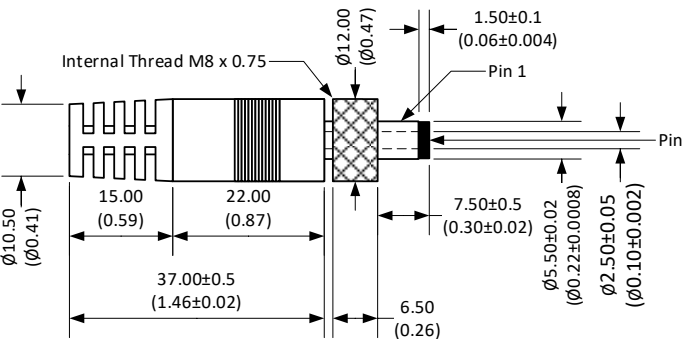
Dimensions mm(inch).

Pin Out Configurations	
Pin No.	Description
1	RTN(-)
2	+Vout

Optional USB Connector:

Micro USB Connector	USB TYPE-C Connector																								
 <p>Dimensions: 23.0 ± 0.5 (0.91 ± 0.02), 6.0 ± 0.5 (0.24 ± 0.02), 8.0 ± 0.3 (0.31 ± 0.012), 10.5 ± 0.3 (0.41 ± 0.012).</p> <p>Pinout: 5, 4, 3, 2, 1. Pins 1 and 5 are labeled - and +.</p>	 <p>Dimensions: 26.0 ± 0.5 (1.02 ± 0.02), 14.0 ± 0.3 (0.55 ± 0.012), 9.9 ± 0.3 (0.39 ± 0.012).</p> <p>Pinout: A1, A12, B12, B1.</p>																								
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Optional Barrel Locking Type Connector:

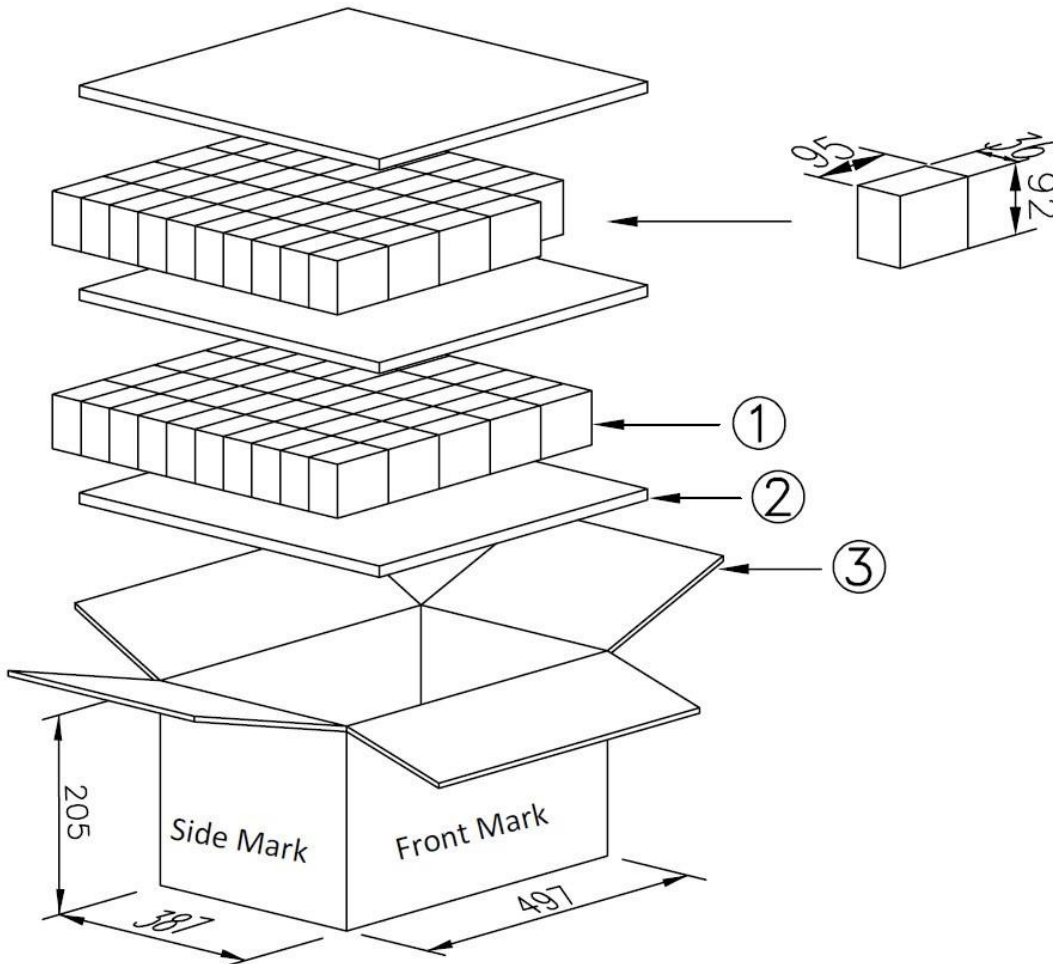
K1 Connector	K2 Connector																
 <p>Dimensions: 15.00 (0.59), 22.00 (0.87), 37.00 ± 0.5 (1.46 ± 0.02), 6.50 (0.26), 1.50 ± 0.1 (0.06 ± 0.004), 7.50 ± 0.5 (0.30 ± 0.02), $\phi 5.50 \pm 0.02$ ($\phi 0.22 \pm 0.0008$), $\phi 2.10 \pm 0.05$ ($\phi 0.08 \pm 0.002$), $\phi 12.00$ ($\phi 0.47$), $\phi 10.50$ ($\phi 0.41$).</p> <p>Internal Thread M8 x 0.75.</p> <p>Pin 1, Pin 2.</p>	 <p>Dimensions: 15.00 (0.59), 22.00 (0.87), 37.00 ± 0.5 (1.46 ± 0.02), 6.50 (0.26), 1.50 ± 0.1 (0.06 ± 0.004), 7.50 ± 0.5 (0.30 ± 0.02), $\phi 5.50 \pm 0.02$ ($\phi 0.22 \pm 0.0008$), $\phi 2.50 \pm 0.05$ ($\phi 0.10 \pm 0.002$), $\phi 12.00$ ($\phi 0.47$), $\phi 10.50$ ($\phi 0.41$).</p> <p>Internal Thread M8 x 0.75.</p> <p>Pin 1, Pin 2.</p>																
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NOTE:

1. Micro USB connector: For 5V output model only, limited max output current of 3A.
2. USB TYPE-C connector: Limited maximum output voltage of 20V, and maximum output current of 5A.

Packing

For US and European Plug:



Packing information:

- CARTON : L*W*H=(497*387*205) +/-5mm K=K
- CLAPBOARD : (475*360) +/-3mm B33 3PCS
- WHITE BOX : 95*36*92 450P
- Q'TY : 50*2=100PCS
- NET WEIGHT : (g)(ref)
- UNIT : mm

NOTE: 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to www.aimtec.com for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at www.aimtec.com. 8. Adaptors are intended for industrial use only.