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## AMA12-LPZ



The AMA12-LPZ is a small industrial grade wall mount adapter offering a commercial input voltage range of 90-264VAC and a maximum output power of 12W. This adapter will offer many benefits to powering your system such as low power consumption, high efficiency, designed to meet IEC/EN/ETL62368-1, FCC, Class B, CISPR32, Class B.

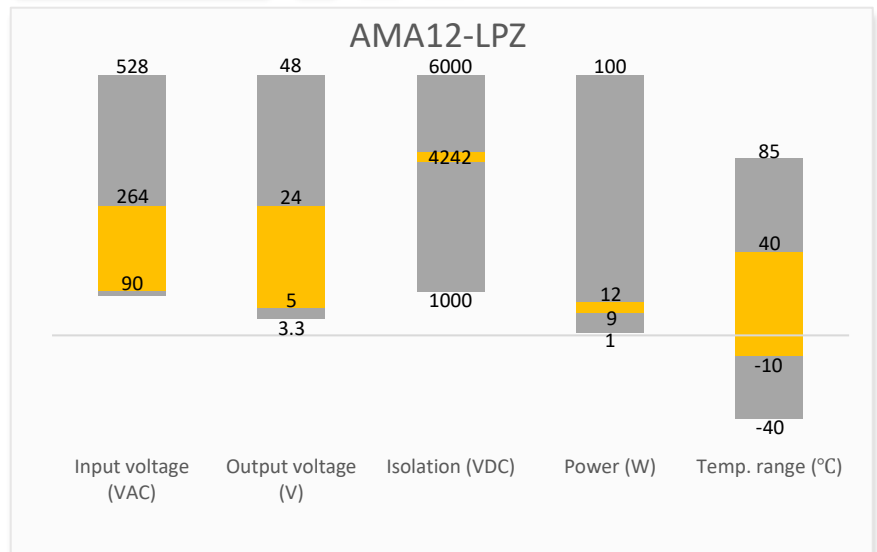
It also features an isolation of 4242VDC for improved reliability and system safety and comes standard with output over-voltage protection (OVP), over current protection (OCP) and short circuit protection (SCP).

## Features



- Wide Input: 90-264VAC
- Operating Temp: -10°C to +40 °C
- Isolation voltage: 4242VDC
- Low ripple & noise, 200mV(p-p), max
- Over current protection, over voltage protection and short circuit protection
- Leakage current: < 0.25mA

## Summary



## Training



Product Training Video  
(click to open)



Press Release

Coming Soon!

Application Notes

## Applications



Portable Equipment



Industrial

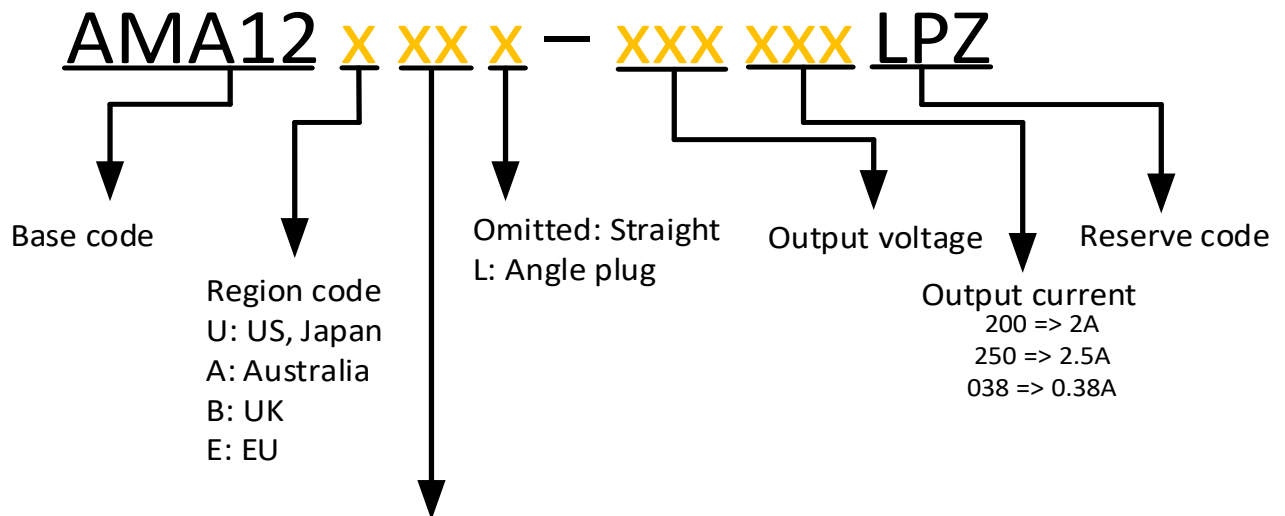
## Models & Specifications

### General Features

Model	Input Voltage (VAC/Hz)	Output Voltage (VDC)	Output Current max (A)	Output Power max (W)	Full Load Efficiency min. (%)	Average Efficiency min. (%)*
AMA12-050200LPZ	90~264/47~63	5	2	10	75	78.7
AMA12-050250LPZ	90~264/47~63	5	2.5	12.5	78	80.2
AMA12-060150LPZ	90~264/47~63	6	1.5	9	79	81.3
AMA12-090100LPZ	90~264/47~63	9	1	9	79	81.3
AMA12-120100LPZ	90~264/47~63	12	1	12	81.5	82.9
AMA12-240038LPZ	90~264/47~63	24	0.38	9.12	79	81.4
AMA12-240050LPZ	90~264/47~63	24	0.5	12	80	82.9

Please refer to below coding rule for completed part numbers. Eg. AMA12**US8**-240050LPZ for industrial grade adapter with US wall plug which comes with 5.5mm\*2.1mm\*12mm straight barrel style output plug.

\*: The average efficiency is tested at 25%, 50%, 75% and 100% rated load, after 30 minutes warm up.



Plug type	Code	O. D.	I. D.	Length
Standard	B8	5.50mm	2.10mm	12.00mm
	B9	5.50mm	2.50mm	12.00mm
	B10	3.50mm	1.35mm	12.00mm
	B11	3.80mm	1.35mm	12.00mm
	B12	3.80mm	1.05mm	12.00mm
Min. Pin	M4	2.35mm	0.70mm	12.00mm
	M5	4.00mm	1.70mm	12.00mm
	M6	4.75mm	1.70mm	12.00mm
USB	U1	Micro USB		
	U2	USB type C		
Wire	WI	Wire with stripped ends		

Input Specifications				
Parameters	Conditions	Typical	Maximum	Units
Voltage range		100 - 240	90 - 264	VAC
Frequency		50 - 60	47 - 63	Hz
Input Current	100VAC	0.35		A
Inrush Current	230VAC, cold start	40		A
Leakage Current	240VAC, 50Hz	<0.25		mA

Output Specifications				
Parameters	Conditions	Typical	Maximum	Units
Voltage regulation	Rated load		± 5	%
Ripple & Noise*	20MHz bandwidth	100	200	mV p-p
Start-up time	100VAC input, full load		3	s
Rise time	100VAC input, full load		100	ms

\* Ripple and Noise are measured at 20MHz bandwidth by using 0.1μF ceramic capacitor and 10μF electrolytic capacitor in parallel.

Isolation Specifications				
Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	Input to Output, 60 sec, leakage current < 5mA	4242		VDC
Insulation resistance	Input to Output, 500VDC	>10		MΩ

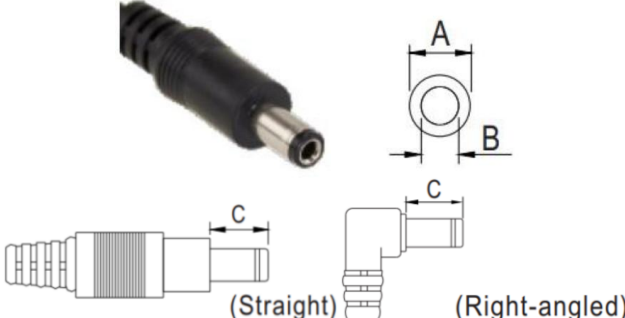
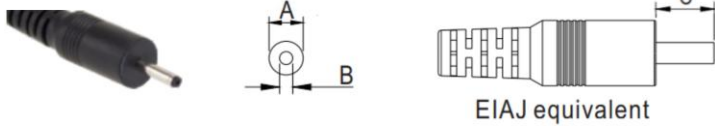
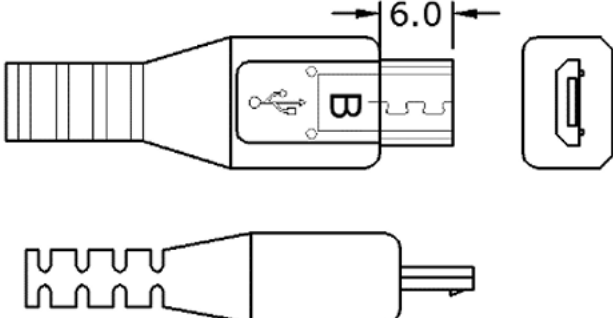
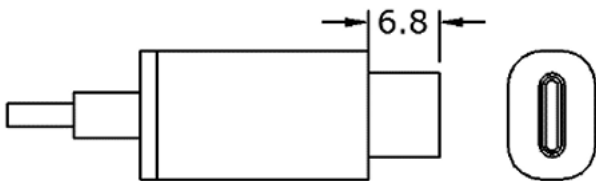

General Specifications				
Parameters	Conditions	Typical	Maximum	Units
Over current protection	5Vout/2A, Hiccup mode, auto recovery		2.2~3.5	A
	5Vout/2.5A, Hiccup mode, auto recovery		2.6~3.5	A
	6Vout/1.5A, Hiccup mode, auto recovery		1.7~2.5	A
	9Vout/1A, Hiccup mode, auto recovery		1.2~1.8	A
	12Vout/1A, Hiccup mode, auto recovery		1.2~2.0	A
	24Vout/0.38A, Hiccup mode, auto recovery		0.5~0.8	A
	24Vout/0.5A, Hiccup mode, auto recovery		0.6~1.2	A
Over voltage protection	Hiccup mode, recovers automatically after fault condition is removed			
Short circuit protection	Hiccup mode, recovers automatically after fault condition is removed			
Operating temperature	10 ~ 90% RH	-10 to +40		°C
Storage temperature	10 ~ 95% RH	-25 to +85		°C
No load power consumption	115 - 230VAC		0.1	W
Vibration	10~30Hz, 1G, 3.5mm offset, 60 minutes along each X, Y, Z			
DOE Level	VI			
Weight	US	77.5		g
	EU	87.5		
	UK	87.5		
	AU	77.5		
Dimensions (L x W x H)	US	2.28 x 1.46 x 1.95 inches (58.00 x 37.10 x 49.50 mm)		
	EU	2.28 x 1.46 x 2.48 inches (58.00 x 37.10 x 63.00 mm)		
	UK	2.28 x 1.46 x 2.18 inches (58.00 x 37.10 x 55.23 mm)		

	AU	2.28 x 1.46 x 2.03 inches (58.00 x 37.10 x 51.56 mm)
Output cable length		59.06 inches (1500mm)
MTBF		> 50 000 hrs min. MIL-HDBK-217F(25°C)
NOTE: 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		
Standards	Information technology Equipment	Designed to meet IEC/EN/ETL62368-1
	EMC - Conducted and radiated emission	EN55032, CISPR32, EN61000-3-2, EN61000-3-3, EN55035, FCC Part 15B class B

DC output plug

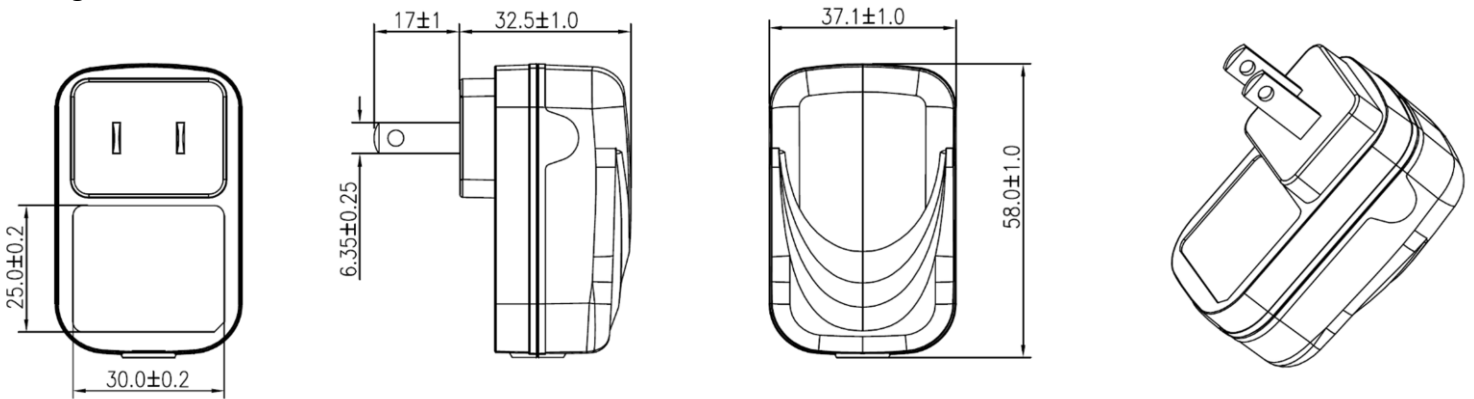


Barrel Style (Straight or Right-angled)				Min. Pin Style			
 <p>(Straight) (Right-angled)</p>				 <p>EIAJ equivalent</p>			
Type Number and Dimensions (mm)				Type No.	A Outer Diameter	B Inner Diameter	C Length
Code No.	A Outer Diameter	B Inner Diameter	C Length	M4	2.35	0.7	12.0
B8	5.5	2.1	12	M5	4.00	1.7	12.0
B9	5.5	2.5	12	M6	4.75	1.7	12.0
B10	3.5	1.35	12				
B11	3.8	1.35	12				
B12	3.8	1.05	12				
Micro USB Connector				USB TYPE-C Connector			
							
Wire with Stripped Ends							
							
Wire Out Configurations							
Wire No.	Description						
1	+Vout						
2	-Vout						

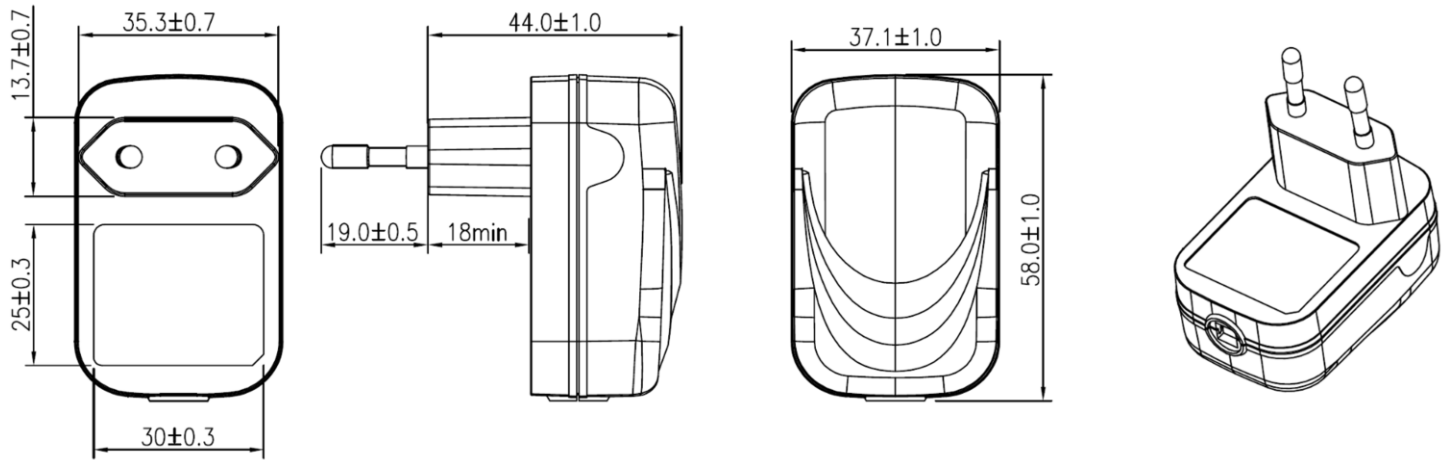
Dimensions



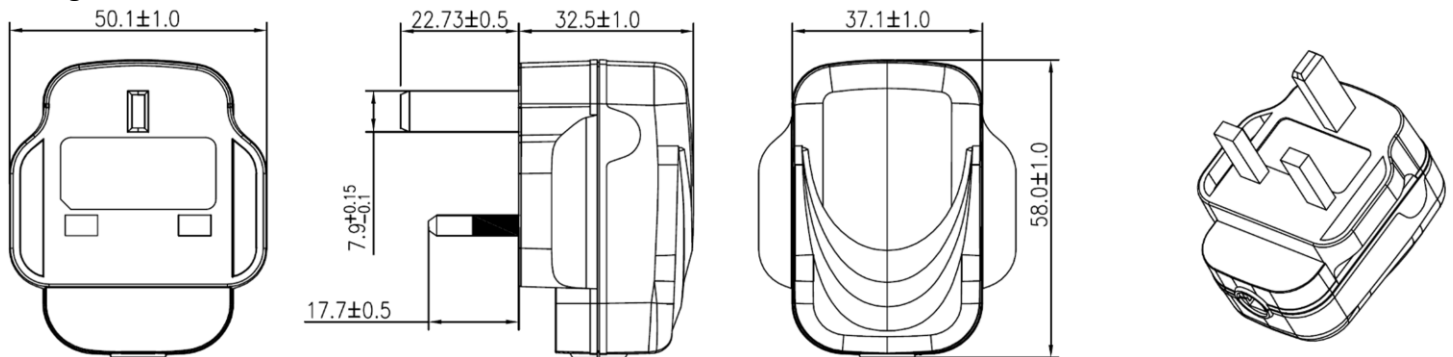
US Plug:



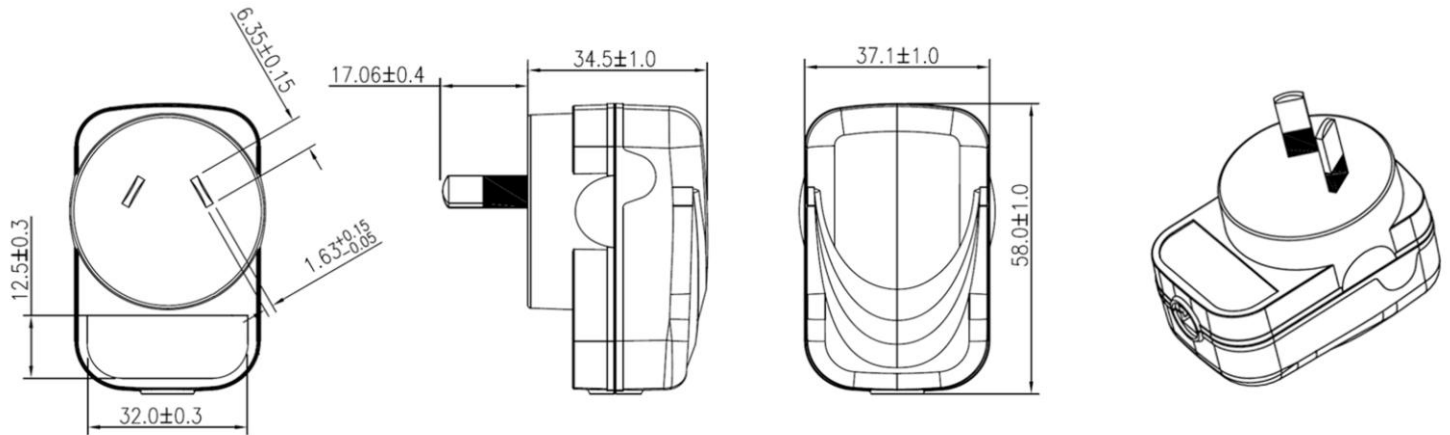
EU Plug:



UK Plug:



AU Plug:



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