← AMF24 Series



24W EXTERNAL WALL PLUG

The AMF24 series of wall plug adaptors comply with medical and home-healthcare approvals along with the latest energy efficiency level VI standards with high active mode efficiency and extremely low no load power consumption.

Available with a range of interchangeable AC connectors these adaptors suit a wide variety of cost sensitive industrial and medical applications while maintaining industry leading performance.

Features

- IP22 ingress protection
- IEC/EN60601-1-11 for home healthcare applications
- Energy efficiency level VI & EU2019/1782
- Medical and home healthcare approvals
- Interchangeable mains connectors
- Input voltage range 80 to 264VAC
- Output voltages from 9V to 48VDC
- Optional white versions
- Class II construction
- 3 Years warranty

AC-DC POWER SUPPLIES



Applications







althcare

Home Healthcare

Diagnostic

Dimensions

3.56" x 1.32" x 2.3" (90.5 x 33.5 x 58.5mm)

Models & Ratings

Model Number (1,2,5)	Output Power	Output Voltage	Output Current	Total Regulation(3)	Efficiency ⁽⁴⁾
AMF24US09		9.0V	2330mA		86.4%
AMF24US12		12.0V	2000mA		87.9%
AMF24US15	0.4147	15.0V	1600mA	5%	87.3%
AMF24US18	24W	18.0V	1330mA	3%	88.6%
AMF24US24		24.0V	1000mA		88.8%
AMF24US48		48.0V	500mA		88.3%

Notes:

- 1. Model number is for body only. AC input plugs must be ordered separately, see AC input plug section.
- $2.\ Other\ output\ voltages\ available,\ contact\ sales\ for\ details.$
- 3. Total regulation includes initial set accuracy, line and load regulation.
- 4. Typical average value measured at 25%, 50%, 75% and 100% at 230VAC.
- 5. For white case version add suffix '-W' e.g. AMF24US12-W. MOQ applies, contact sales for details.

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Input

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions		
Input Voltage	80		264	VAC			
Input Frequency	47		63	Hz			
Input Current			0.6	Α	Measured at 80VAC		
Inrush Current			70	Α	240VAC, cold start at 25°C		
Power Factor	EN61000-3-2	EN61000-3-2, class A					
No Load Input Power			75	mW			
Input Protection	Internal fuse	Internal fuse in line					

Output

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Output Voltage	9		48	٧	See Models and Ratings table
Minimum Load	0			Α	No minimum load required
Start Up Delay			4	s	
Start Up Rise Time	10		40	ms	
Hold Up Time	10			ms	Full load and 100VAC
Total Regulation			5	%	See Models and Ratings table
Transient Response			4	% deviation	Recovery within <1% within 500 μ s for a 60% step load change at 0.15A/ μ s
Ripple & Noise			200	mV pk-pk	Measured with 20MHz bandwidth and 10 μF electrolytic in parallel with 0.1 μF ceramic capacitor
Over Voltage Protection	110		200	%	Auto recovery
Over Load Protection	115		180	%	
Leakage Current			50	μA	At 264VAC, 60Hz, from output to ground
Temperature Coefficient			0.05	%/°C	

General

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency		88		%	Typical average of efficiencies measured at 25%, 50%, 75% and 100% load and 230VAC input
Energy Efficiency					LevelVI
Isolation	4000			VAC	Input to Output, 2 x MOPP Suitable for BF applications
Switching Frequency	24		80	kHz	Variable
Mean Time Between Failure	200			khrs	MIL-HDBK-217F at 25°C GB
Weight		0.37 (170)		lb (g)	Body only

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Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions		
Operating Temperature	0		+60	°C	Derate from 100% load at 45°C to 50% load at 60°C. Agency approval to 45°C max.		
Storage Temperature	-20		+85	°C			
Operating Humidity			90	%RH	Non-condensing		
Operating Altitude			5000	m			
Vibration	10		300	Hz	2g, 0.3 decades/min, 15 mins for each of 3 axes		
Cooling	Natural convection						
Shock	1m drop onto concrete on each of 6 axes, non operating						

EMC: Emissions

Phenomenon	Standard	Test Level	Notes & Conditions
Emissions	EN55011	Level B	Conducted and radiated
Harmonic Current	EN61000-3-2	Class A	
Voltage Flicker	EN61000-3-3		

EMC: Immunity

Phenomenon	Standard	Test Level	Criteria	Notes & Conditions
Medical Device EMC	IEC60601-1-2	Ed.4.0 : 2014	as below	
ESD Immunity	EN61000-4-2	±8kV contact, ±15 V air	А	
Radiated Immunity	EN61000-4-3	10 V/m	А	80 to 2700mHz, IEC60601-1-2 Ed. 4.0 at other frequencies
EFT/Burst	EN61000-4-4	Level 3	А	
Surge	EN61000-4-5	Level 3	А	
Conducted Immunity	EN61000-4-6	6 V	А	
Magnetic Fields	EN61000-4-8	30A/m	А	
		Dip: 30% 25 AC Cycles	A/B	High Line/Low Line
Dips and Interruptions	ENGOCO1 1 0	Int: 100% 0.5 AC Cycle	А	At 8 angles
	EN60601-1-2	Int: 100% 1 AC Cycle	В	
		Int.: >95% 5000ms	В	

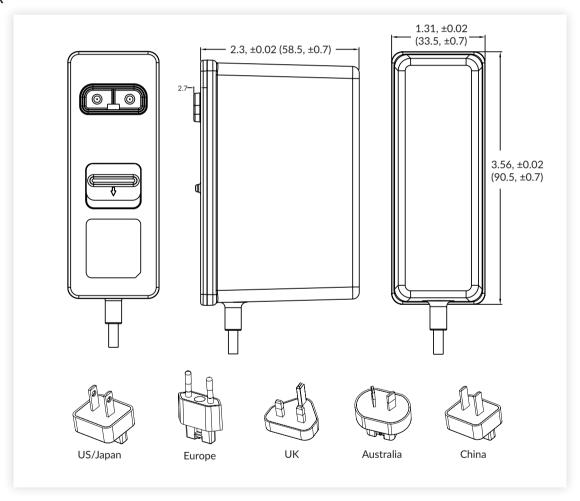
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Safety Approvals

Certification	Safety Standard	Notes & Conditions	
UL	ANSI/AAMI ES60601-1	Medical, 2 x MOPP	
EN	EN62368-1	InformationTechnology	
EIN	EN60601-1, EN60601-1-11	Medical, 2 x MOPP	
СВ	IEC60601-1, IEC60601-1-11	Medical, 2 x MOPP	
CSA	CSA C22.2 No. 60601	Medical, 2 x MOPP	
CE	Meets all applicable directives		
UKCA	Meets all applicable legislation		

Mechanical Details

AMF24USXX



Notes

- 1. All dimensions shown in inches (mm). Tolerance: ± 0.02 (± 0.7)
- 2. Weight: 0.37lb (170g)

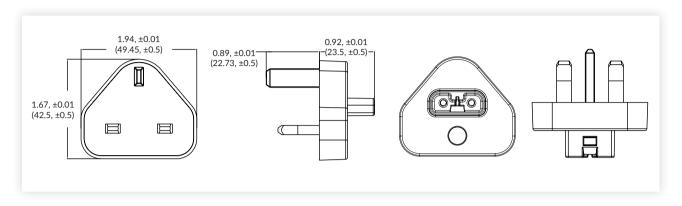
- 3. Output plug: barrel jack connector, ø5.5 x ø2.5 x 11.0mm, centre positive
- 4. Output lead: UL2468, 18AWG

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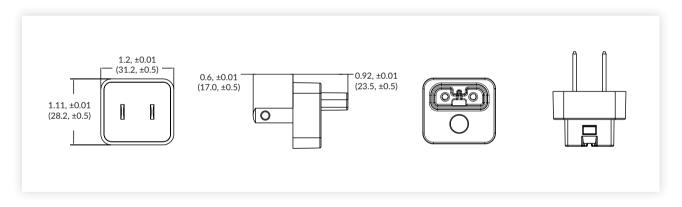
Mechanical Details

AC Input Plugs

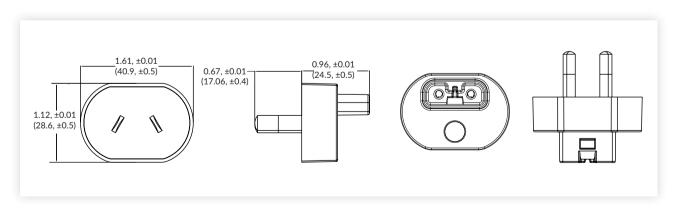
Black UK Plug: AMF PLUG UK White UK Plug: AMF PLUG UK W



Black USA Plug: AMF PLUG US White USA Plug: AMF PLUG US W



Black Australian Plug: AMF PLUG AU White Australian Plug: AMF PLUG AU W

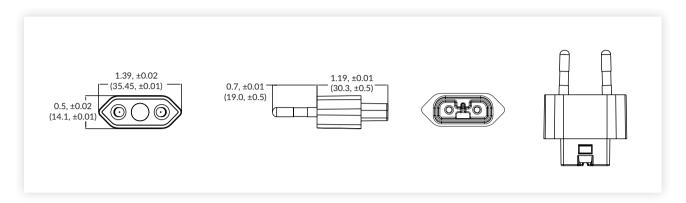


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Mechanical Details

AC Input Plugs

Black European Plug: AMF PLUG EU White European Plug: AMF PLUG EU W



Black China Plug: AMF PLUG CN White China Plug: AMF PLUG CN W

