

AMA160D-MGY

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Desktop Adapter

The AMA160D-MGY is a medical grade desktop adapter offering a commercial input voltage range of 85-264VAC and an output power up to 160W.

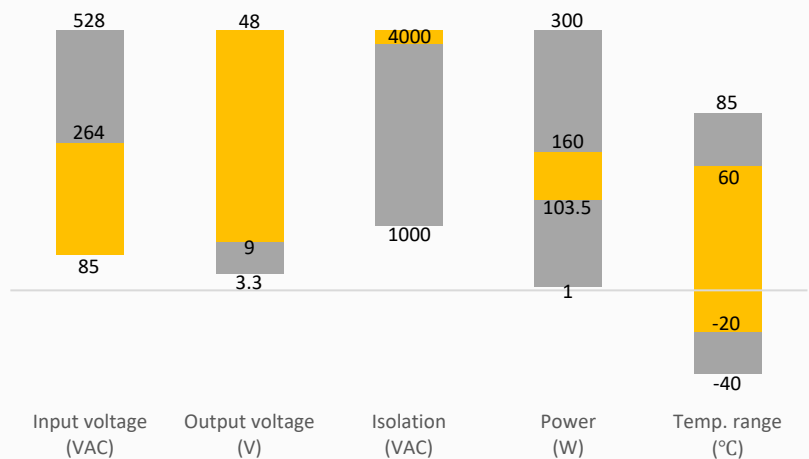
It also features an isolation of 4000VAC for improved reliability and system safety and comes standard with short-circuit protection, overload protection, over temperature protection and over-voltage protection.

Features

- Universal Input: 85 - 264VAC/50 - 60Hz
- Operating Temp: -30 °C to +70 °C
- High isolation voltage: 4000VAC
- Low ripple & noise, 300mV(p-p), max
- Overload, Over-temperature, over-voltage, and short circuit protection
- 2xMOPP

Summary

AMA160D-MGY



Training



Product Training Video
(click to open)



Press Release

Coming Soon!

Application Notes

Applications



Industrial



Portable Equipment



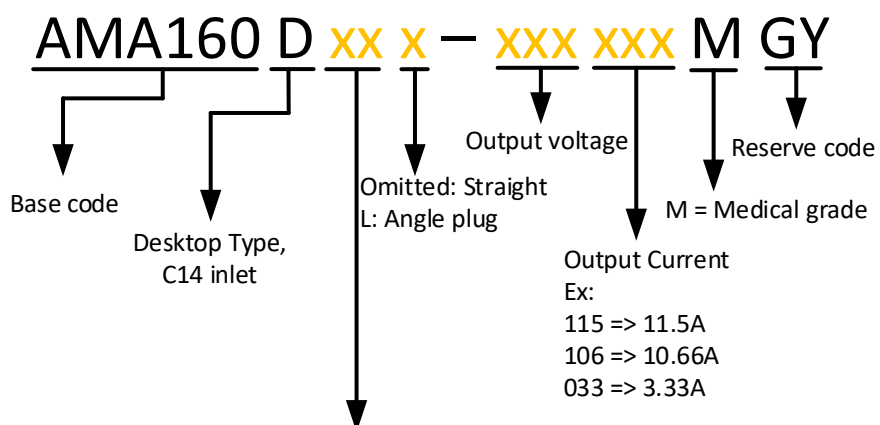
Medical

Models & Specifications

General Feature

Model	Input Voltage (VAC/Hz)	Output Voltage (VDC)	Output Current max (A)	Output Power max (W)	Efficiency (%)
AMA160D-090115MGY	85~264/50~60	9	11.5	103.5	89
AMA160D-120115MGY	85~264/50~60	12	11.5	138	90
AMA160D-150106MGY	85~264/50~60	15	10.66	160	91
AMA160D-190084MGY	85~264/50~60	19	8.42	160	91
AMA160D-240066MGY	85~264/50~60	24	6.66	160	93
AMA160D-480033MGY	85~264/50~60	48	3.33	160	92

Please refer to below coding rule for completed part numbers. Eg. AMA160D**R5**-120115MGY for medical grade desktop type adapter which comes with 5.5mm*2.5mm*9.5mm straight standard output plug.



Plug type	Code	O. D.	I. D.	Length
Standard	R4 / B4	5.5mm	2.1mm	9.5mm
	R5 / B5	5.5mm	2.5mm	9.5mm
	R6 / B6	5.5mm	2.1mm	11.0mm
	R7 / B7	5.5mm	2.5mm	11.0mm
Locking	K3	5.53 mm	2.03 mm	12.06 mm
	K4	5.53 mm	2.54 mm	12.06 mm
	K5	5.53 mm	2.03 mm	9.52 mm
	K6	5.53 mm	2.54 mm	9.52 mm
Center Pin	C1	5.5 mm	3.4 mm	11.0 mm
	C2	6.5 mm	4.4 mm	11.0 mm
	C3	7.4 mm	5.1 mm	11.0 mm
Min. Pin	M1	2.35 mm	0.7 mm	11.0 mm
	M2	4.0 mm	1.7 mm	11.0 mm
	M3	4.75 mm	1.7 mm	11.0 mm
3 Pin with Lock (male)	3M	max 7.5A		
4 Pin with Lock (male)	4M	max 7.5A		

4 Pin with Lock (female)	4F	
5 Pin (male)	5M	max 7.5A
Wire	WI	

Input Specification

Parameters	Conditions	Minimum	Typical	Maximum	Units
Voltage range			85 - 264		VAC
Frequency			50 - 60		Hz
Input current	Vin at 115VAC			1.9	A
	Vin at 230VAC			1	A
Inrush Current	Vin at 115VAC		40		A
	Vin at 230VAC		60		A
Leakage Current	240VAC			0.1	mA

Output Specification

Parameters	Conditions	Minimum	Typical	Maximum	Units
Voltage regulation				±5	%
Line regulation				±3	%
Load regulation				±5	%
Ripple and Noise	9V, 20 MHz bandwidth			120	mVp-p
	12V, 20 MHz bandwidth			120	mVp-p
	15V, 20 MHz bandwidth			200	mVp-p
	19V, 20 MHz bandwidth			200	mVp-p
	24V, 20 MHz bandwidth			220	mVp-p
	48V, 20 MHz bandwidth			300	mVp-p
Start-up time	230VAC input, full load		0.5		s
	115VAC input, full load		1.0		s
Rise time	230VAC at full load		30		ms
	115VAC at full load		30		ms
Hold-up time	230VAC at full load		120		ms
	115VAC at full load		25		ms

Ripple and Noise are measured at 20MHz bandwidth.

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec, leakage current < 10mA, I/O		4000	VAC
Resistance	500VDC	100		MΩ

General Specification

Parameters	Conditions	Minimum	Typical	Maximum	Units
Operating temperature	20% ~ 95% RH Non-Condensing	-30		70	°C
Storage temperature	10 ~ 95% RH	-40		85	°C
Storage humidity		10		95	% RH
Over voltage Protection	Shut down o/p voltage, manual recovery	105		130	% of lout
Overload Protection	Hiccup mode, auto recovery	105		150	% of lout
Over temperature Protection	Protected when the NTC resistance temperature is between 85°C and 100°C				
Short circuit protection	Hiccup mode, auto recovery				
Weight			590		g
Dimensions (L x W x H)	6.77 x 2.80 x 1.66 inches (172.00 x 71.00 x 42.00mm)				
MTBF	> 500 000 hrs min. MIL-HDBK-217F(25°C)				

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.

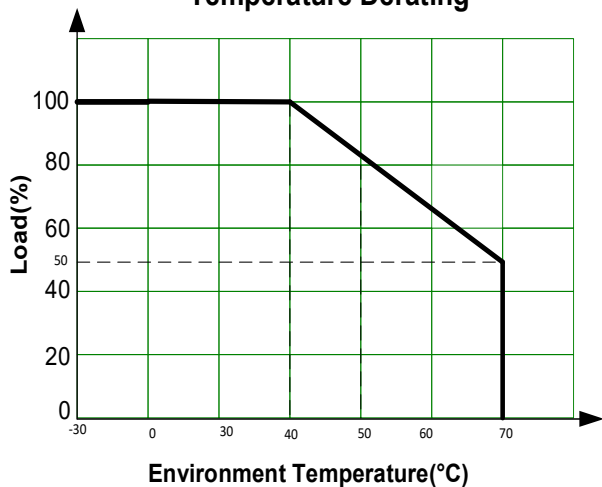
Safety Specifications

Parameters		
Agency approvals	UL60601-1, IEC60601-1, EN60601-1	
Standards	EMC - Radiated & Conducted emission	EN55032 (CISPR32), Class B
	EMC - Immunity	EN/EN 61000-4-2,3,4,5,6,8,11

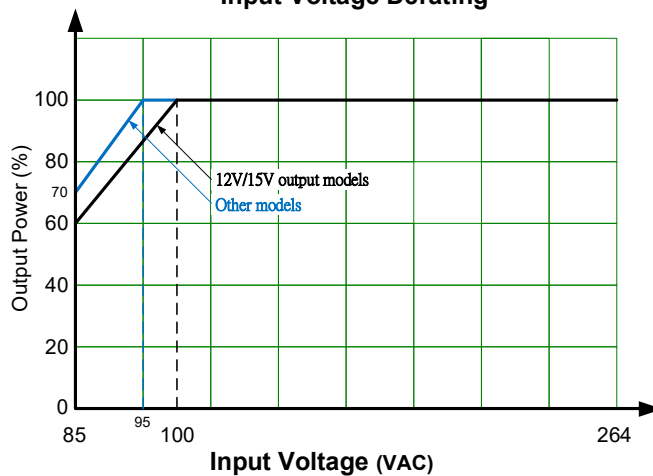
Derating



Temperature Derating

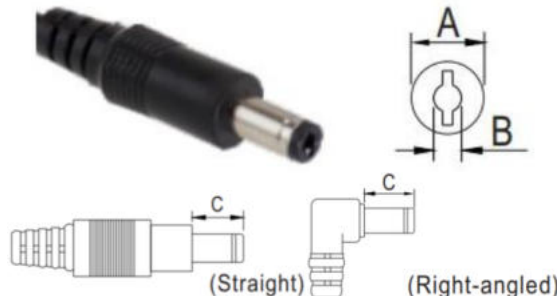
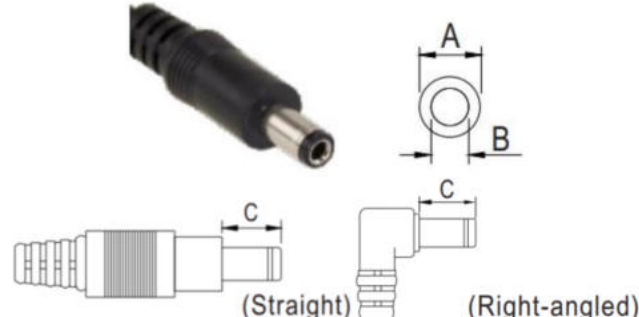
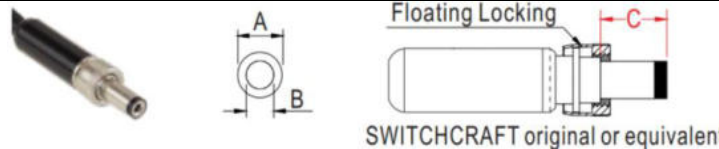
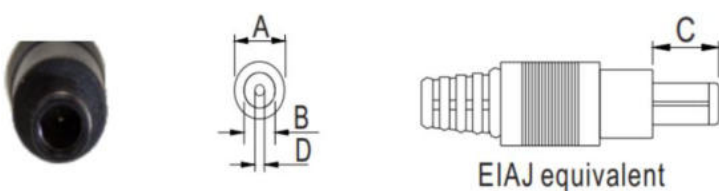
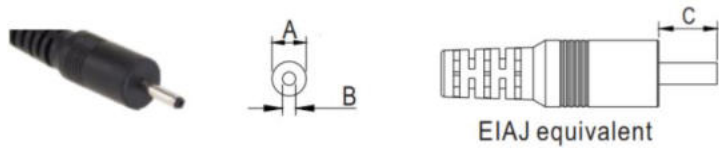


Input Voltage Derating



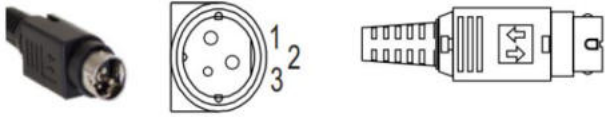
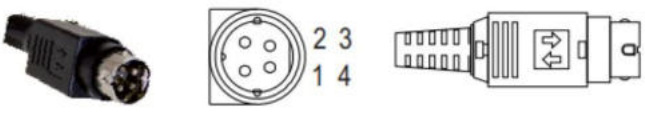
DC output plug



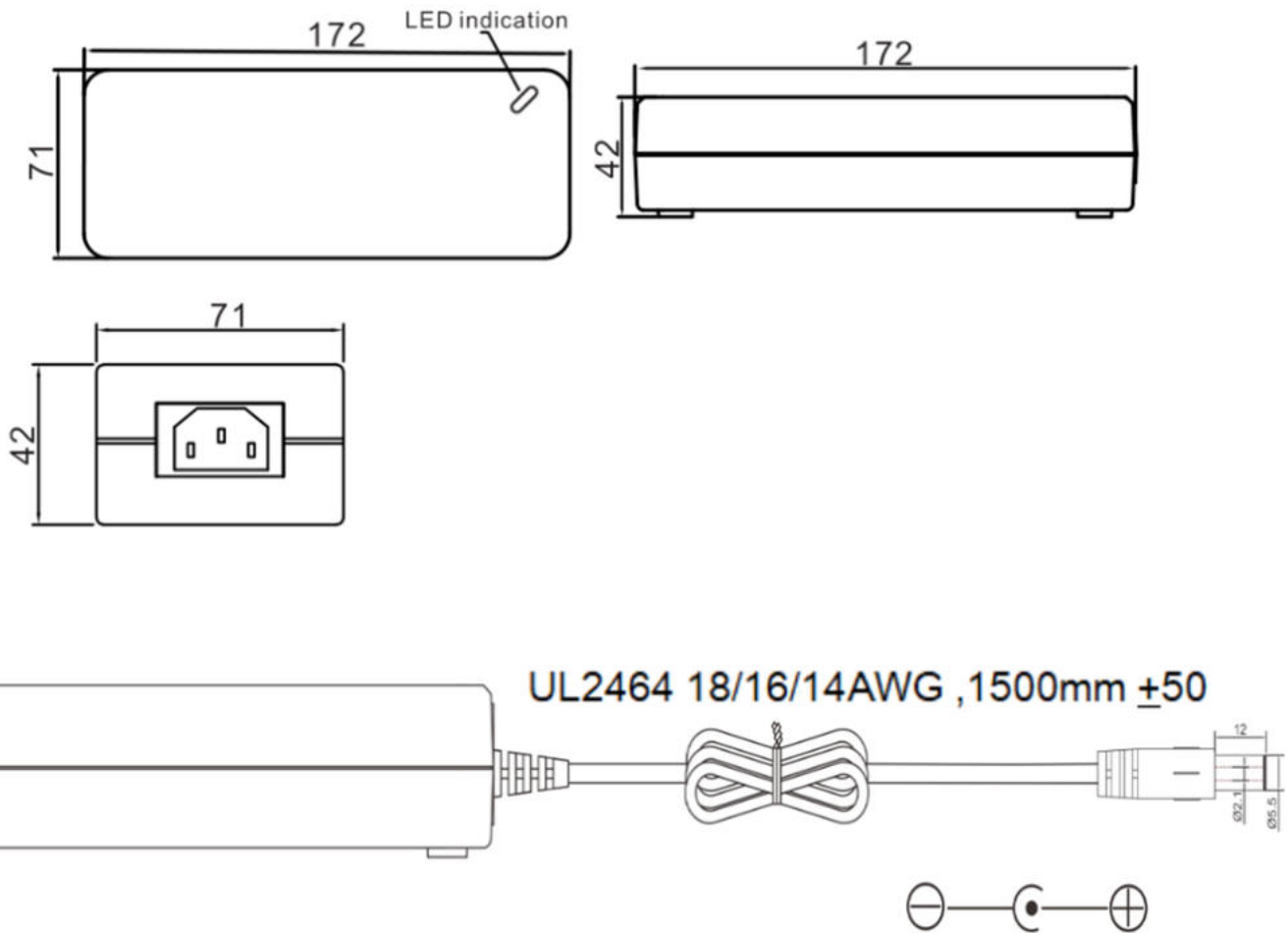
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Optional Connector



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Dimensions



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