

AMP101

100W MEDICAL GRADE DESKTOP SWITCHING POWER ADAPTERS

The AMP101 - a powerful 100W medical grade desktop switching power adapter designed for ultimate performance and safety. Featuring a universal 90-260VAC input and IEC 60601 medical safety certification, this adapter offers single, dual, and triple outputs for versatile use. With 4000V isolation and 2 MOPP, along with high ESD immunity, you can trust its reliability. Equipped with a convenient power ON/OFF switch and a Class I IEC-320-C14 input receptacle, this adapter combines functionality and safety seamlessly. Upgrade your power supply with the AMP101 today.



HOW TO ORDER

AMP1011-02S

NUMBER OF OUTPUTS: 1 = SINGLE OUTPUT

2 = DUAL OUTPUT

3 = TRIPLE OUTPUT

OUTPUT POWER: 100W

FAMILY: AMP SERIES

FEATURES & BENEFITS

UNIVERSAL AC INPUT

90-260VAC Input

PROTECTIONS

Overload Protection* 110-150%, Auto Recovery
Over Voltage Protection* 112-132%

SAFETY APPROVALS

IEC 60601-1 Ed 3.1
ES 60601-1:2005
CSA C22.2
EN 60601-1:2013

EMI/EMC

EN 55011 (CISPR11), Class B
EN 60601-1-2, Class B

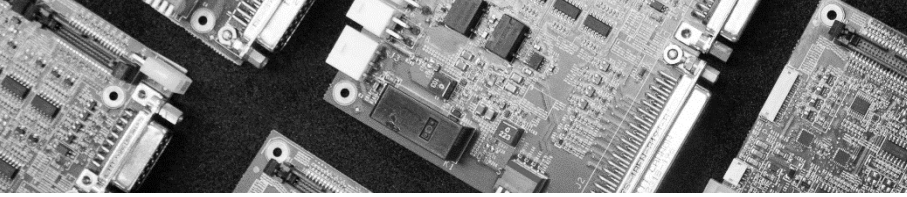
High ESD Immunity

Power ON/OFF Switch

4000VAC Isolation, limit current <10mA

7.44" x 3.52" x 1.79"

Weight: 27.4-28.2oz / 778-800g



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PARAMETERS

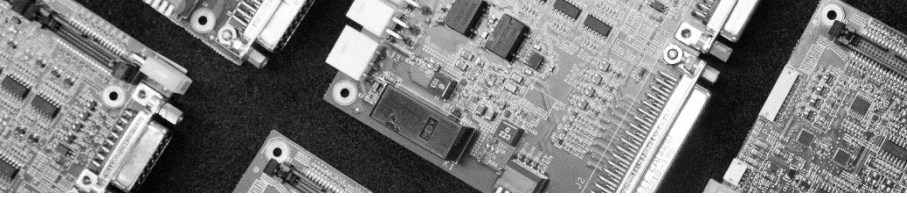
AMP101 SERIES

INPUT SPECIFICATIONS	
Input Voltage Range	90-260 VAC
Input Frequency	47-63 Hz
Input Current	1.25A at 100VAC 0.5A at 240VAC
Earth Leakage Current	0.175mA max at 264VAC
MAIN OUTPUT SPECIFICATIONS	
Output Voltage	See Selection Chart
Output Power	See Selection Chart
No Load Power	3~4W typ
Load Regulation	See Selection Chart
Line Regulation	±1% max, 100-120VAC or 200~240VAC
Over Load Protection*	110-150%, Auto Recovery
Over Voltage Protection*	112-132%
Efficiency	See Selection Chart Full Load, 230VAC
Start-Up Time	2s max, Full Load
Hold-Up Time	16ms min, Full Load, 110VAC
Transient Response	4ms max, 110Vin, FL to 1/2L
Temperature Coefficient	±0.04%/°C max
Ripple/Noise	1% Pk-Pk max, > 5V out 2% Pk-Pk max, 3.3V out
ISOLATION SPECIFICATIONS	
Primary to Secondary	4000VAC, limit current <10mA
Primary to GND	1500VAC, limit current <10mA
MECHANICAL SPECIFICATIONS	
Size **	7.44" x 3.52" x 1.79" 189 x 89.5 x 45.5 mm
Weight	27.4-28.2oz / 778-800g
Case Type	Desktop

•** Case size only

•All Specifications are typical at nominal input, full load, 25°C unless specified otherwise.

•*These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long-term reliability. Operation under conditions other than the standard operating conditions is neither warranted nor implied.



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SAFETY AND COMPLIANCE CERTIFICATIONS

Safety Approvals	IEC 60601-1 Ed 3.1, ES 60601-1:2005, CSA C22.2, EN 60601-1:2013
EMC Emissions	EN 55011 (CISPR11), Class B EN 60601-1-2, Class B
ESD Immunity	EN 61000-4-2, Level 4 15kV air, 8kV contact
Surge Immunity	EN 61000-4-5, Level 3 2kV L-E & N-E, 1kV L-N
Case Flammability	UL 94 V-1 Rating

ENVIRONMENTAL SPECIFICATIONS

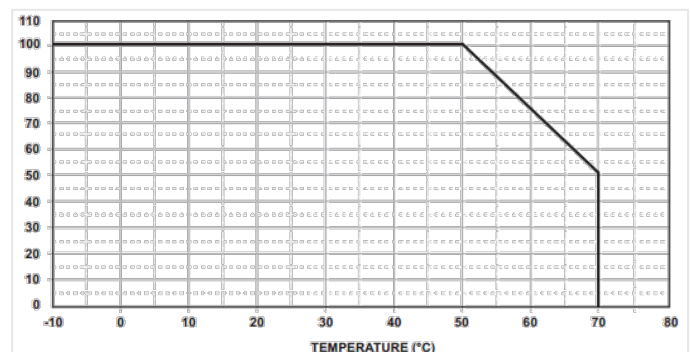
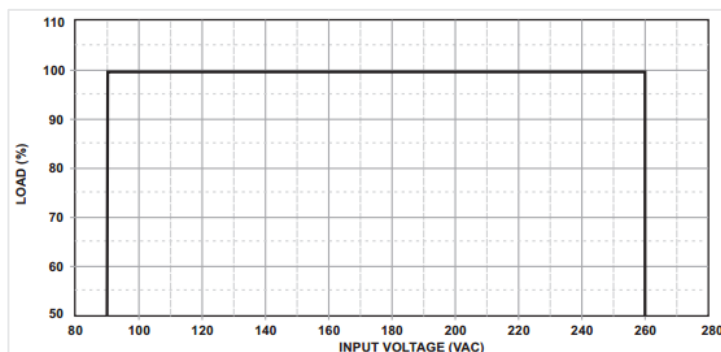
Operating Temperature	-10 to +50°C at Full Load, +50 to +70°C at Reduced Load See derating chart
Cooling	Free Air Convection
Storage Temperature*	-40 to +85°C
Relative Humidity*	0% to 95%, non-condensing operating and storage
Operating Altitude	3000m max
Vibration	5G, 10 ~500Hz, 10min./cycle, 60 min. ea. along X, Y, Z axes
MTBF (MIL-HDBK-217F)	200k hours min at +25°C

Unless specified otherwise, all specifications are typical at nominal input, full load, 25°C.

Additional Specification Notes

1. The output can provide up to the peak load when the power supply starts up.
2. Output voltage accuracy is tested at 60% of the rated load.
3. Line regulation is defined by changing the input voltage $\pm 10\%$ from the nominal line at the rated load.
4. Load regulation is defined by changing the measured output load $\pm 40\%$ from 60% of the rated load.
5. The peak-to-peak ripple is measured with a bandwidth limit of 20MHz at the output connector, with a 0.1uF ceramic capacitor and a 47uF electrolytic capacitor.
6. Hold-up time is measured from the end of the last charging pulse to the time the main output drops to the low limit of the main output at the rated load and nominal line.
7. Efficiency is measured at rated load and nominal line

INPUT VOLTAGE AND TEMPERATURE DERATING



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Technical drawing of the ECU-1000 device, showing front, top, and side views with dimensions and connection details.

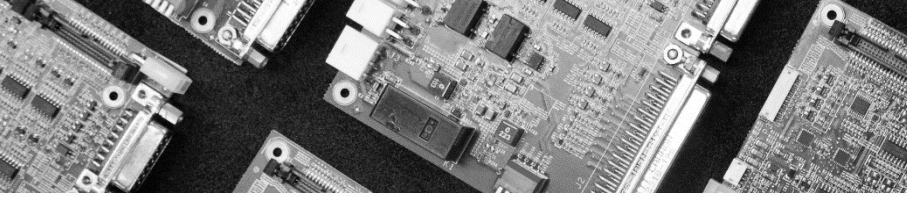
Dimensions:

- Front View:
 - Width: 189.0 ± 1.0 [7.44 ± 0.04]
 - Height: 89.5 ± 1.0 [3.52 ± 0.04]
 - Depth: 45.5 ± 1.0 [1.79 ± 0.04]
- Top View:
 - Width: 189.0 ± 1.0 [7.44 ± 0.04]
 - Depth: 1.0 ± 0.5 [0.04 ± 0.02]
- Side View:
 - Height: 1.0 ± 0.5 [0.04 ± 0.02]

Connections and Features:

- AC INPUT:** IEC 320 C14
- ON/OFF SWITCH:** Located on the front panel.
- LED:** Located on the front panel.
- DIN:** Connector for the DIN cable.
- Coaxial Plug:** Connector for the coaxial cable.

1. COM
2. COM
3. Output #1
4. N/C
5. Output #2
Shell = GND

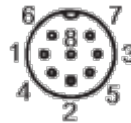


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MECHANICAL DIMENSIONS

8 Pin DIN



Single Output

- 1. COM
- 2. COM
- 3. Vout
- 4. COM
- 5. Vout
- 6. COM
- 7. Vout
- 8. Vout
- Shell = GND

Dual Output

- 1. COM
- 2. Output
- 3. Output #1
- 4. Output #2
- 5. Output #1
- 6. COM
- 7. Output #1
- 8. COM
- Shell = GND

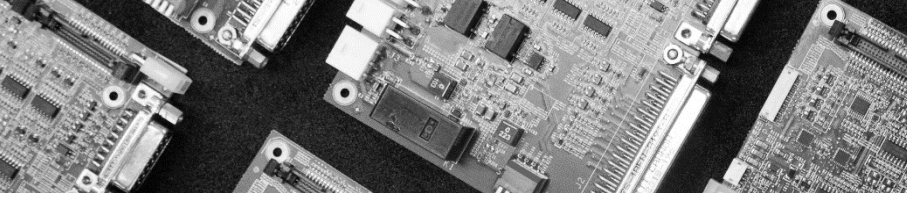
Triple Output

- 1. Output #1
- 2.COM
- 3. Output #3
- 4. Output #1
- 5. Output #2
- 6. Output #1
- 7. COM
- 8. COM
- Shell = GND

***Additional DC connector options
available – contact Sales.***

PRODUCT MODELS

MODEL	OUTPUT POWER	OUTPUT VOLTAGE	OUTPUT CURRENT	LOAD REGULATION	EFFICIENCY	OUTPUT CONNECTOR
Single Output Models						
AMP1011-02S	70W	5VDC	14.0A	±5%	76%	8 Pin DIN
AMP1011-03S	80W	6VDC	13.3A	±5%	77%	8 Pin DIN
AMP1011-04S	90W	10VDC	9.0A	±4%	82%	5 Pin DIN
AMP1011-05S	100W	12VDC	8.33A	±3%	83%	5 Pin DIN
AMP1011-06S	100W	15VDC	6.66A	±3%	83%	5 Pin DIN
AMP1011-07S	100W	18VDC	5.55A	±3%	85%	5 Pin DIN
AMP1011-08S	100W	24VDC	4.16A	±2%	86%	Coax Plug
AMP1011-09S	100W	30VDC	3.33A	±2%	86%	Coax Plug
AMP1011-10S	100W	36VDC	2.77A	±2%	86%	Coax Plug



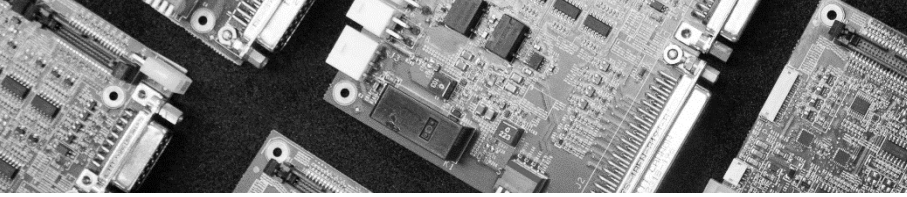
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MODEL	OUTPUT POWER	OUTPUT VOLTAGE	OUTPUT CURRENT	LOAD REGULATION	EFFICIENCY	OUTPUT CONNECTOR
Dual Output Models						
AMP1012-00S	69W	3.3VDC 12VDC	1.0A 0.3A	10.0A 3.0A	±7% ±5%	75%
AMP1012-01S	80W	5VDC 12VDC	1.0A 0.3A	10.0A 3.0A	±5% ±5%	76%
AMP1012-02S	80W	5VDC 15VDC	1.0A 0.3A	10.0A 3.0A	±5% ±6%	76%
AMP1012-03S	80W	5VDC 24VDC	1.0A 0.2A	10.0A 2.0A	±5% ±7%	76%
AMP1012-04S	55W	3.3VDC 5VDC	1.0A 0.5A	10.0A 5.0A	±7% ±5%	76%
AMP1012-09S	80W	+12VDC -12VDC	0.7A (none)	7.0A 1.0A	±5% ±5%	81%
AMP1012-10S	80W	+15VDC -15VDC	0.6A (none)	6.0A 1.0A	±5% ±5%	82%
AMP1012-15S	874W	+5VDC -24VDC	1.0A (none)	10.0A 1.0A	±5% ±5%	82%

MODEL	OUTPUT POWER	OUTPUT VOLTAGE	OUTPUT CURRENT	LOAD REGULATION	EFFICIENCY	OUTPUT CONNECTOR
Triple Output Models						
AMP1013-00S	74W	+3.3VDC +12VDC -12VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±7% ±5% ±5%	76%
AMP1013-00-1S	74W	+3.3VDC +12VDC +12VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±7% ±5% ±5%	76%
AMP1013-01S	80W	+5VDC +12VDC -5VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±5% ±5% ±5%	76%
AMP1013-01-1S	80W	+5VDC +12VDC +5VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±5% ±5% ±5%	76%
AMP1013-02S	80W	+5VDC +12VDC -12VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±5% ±5% ±5%	78%
AMP1013-02-1S	80W	+5VDC +12VDC +12VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±5% ±5% ±5%	78%
AMP1013-03S	80W	+5VDC +15VDC -15VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±5% ±6% ±5%	79%
AMP1013-03-1S	80W	+5VDC +15VDC +15VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±5% ±6% ±5%	79%

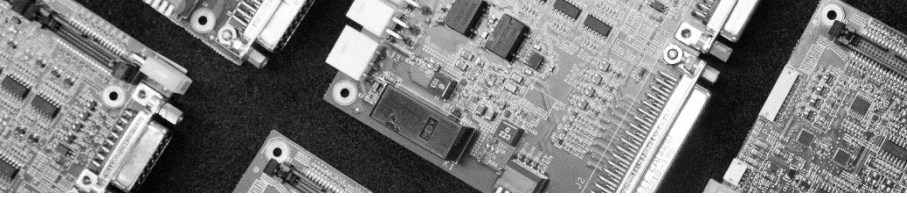


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MODEL	OUTPUT POWER	OUTPUT VOLTAGE	OUTPUT CURRENT	LOAD REGULATION	EFFICIENCY	OUTPUT CONNECTOR
Triple Output Models						
AMP1013-04S	80W	+5VDC +24VDC -24VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±5% ±5% ±5%	82%
AMP1013-04-1S	80W	+5VDC +24VDC +24VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±5% ±5% ±5%	82%
AMP1013-05S	80W	+5VDC +24VDC -12VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±5% ±5% ±5%	82%
AMP1013-05-1S	80W	+5VDC +24VDC +12VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±5% ±5% ±5%	82%
AMP1013-06S	74W	+3.3VDC +12VDC -5VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±7% ±5% ±5%	75%
AMP1013-06-1S	74W	+3.3VDC +12VDC +5VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±7% ±5% ±5%	75%
AMP1013-08S	60W	+3.3VDC +5VDC -12VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±7% ±5% ±5%	60%
AMP1013-08-1S	60W	+3.3VDC +5VDC +12VDC	1.0A 0.3A (none)	10.0A 3.0A 1.0A	±7% ±5% ±5%	60%



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PRODUCT MODELS WITH INDUSTRIAL CERTIFICATIONS

MODEL	OUTPUT POWER	OUTPUT VOLTAGE	OUTPUT CURRENT	LOAD REGULATION	OUTPUT CONNECTOR	DC CORD LENGTH
Class I Models (with IEC C14 AC Inlet)						
EDP125-120-B1-400	125W	12VDC	10.4A	±3%	4-Pin Mini DIN	0.8m
EDP125-150-B1-100	125W	15VDC	8.3A	±3%	2.5mm Straight Plug	0.8m
EDP125-180-B1-110	125W	18VDC	6.9A	±3%	2.5mm Straight Plug	1.2m
EDP125-190-B1-110	125W	19VDC	6.6A	±3%	2.5mm Straight Plug	1.2m
EDP125-240-B1-110	125W	24VDC	5.2A	±3%	2.5mm Straight Plug	1.2m
EDP125-280-B1-110	125W	28VDC	4.5A	±3%	2.5mm Straight Plug	1.2m
EDP125-300-B1-110	125W	30VDC	4.2A	±3%	2.5mm Straight Plug	1.2m
EDP125-360-B1-110	125W	36VDC	3.5A	±3%	2.5mm Straight Plug	1.2m
EDP125-480-B1-110	125W	48VDC	2.6A	±3%	2.5mm Straight Plug	1.2m
EDP125-540-B1-110	125W	54VDC	2.3A	±3%	2.5mm Straight Plug	1.2m

CLASS II MODEL	OUTPUT POWER	OUTPUT VOLTAGE	OUTPUT CURRENT	LOAD REGULATION	OUTPUT CONNECTOR	DC CORD LENGTH
Class II Models (with IEC C18 AC Inlet)						
EDP125-120-B2-400	125W	12VDC	10.4A	±3%	4-Pin Mini DIN	0.8m
EDP125-150-B2-100	125W	15VDC	8.3A	±3%	2.5mm Straight Plug	0.8m
EDP125-180-B2-110	125W	18VDC	6.9A	±3%	2.5mm Straight Plug	1.2m
EDP125-190-B2-110	125W	19VDC	6.6A	±3%	2.5mm Straight Plug	1.2m
EDP125-240-B2-110	125W	24VDC	5.2A	±3%	2.5mm Straight Plug	1.2m
EDP125-280-B2-110	125W	28VDC	4.5A	±3%	2.5mm Straight Plug	1.2m
EDP125-300-B2-110	125W	30VDC	4.2A	±3%	2.5mm Straight Plug	1.2m
EDP125-360-B2-110	125W	36VDC	3.5A	±3%	2.5mm Straight Plug	1.2m
EDP125-480-B2-110	125W	48VDC	2.6A	±3%	2.5mm Straight Plug	1.2m
EDP125-540-B2-110	125W	54VDC	2.3A	±3%	2.5mm Straight Plug	1.2m