

Medically Approved External Supplies

AME SERIES

30-130 Watts



CE Marked LVD & EMC

•
Universal Input

•
100% Burn-In

•
Low Leakage Current

•
4000 V AC Isolation

•
Input Surge Protection

•
Line & Neutral Fused

Specification

(All specifications are typical at 25 °C, nominal line & 75% load)

Input Voltage	• 85-264 VAC
Input Frequency	• 47 to 63 Hz
Inrush Current	• 30 A max @ 230 V AC cold start
Output Voltage	• See Table
Hold-up Time	• 10 ms min @ 115 V AC
Line Regulation	• ±5% max
Output Ripple & Noise	• 2% pk-pk max
Transient Response	• 4% max recovering to within 1% of nominal in 500 µs for a 25% load step
Overvoltage Protection	• Output 1 only 112-132% of nominal
Overcurrent Protection	• Provided
Efficiency	• 70% min single output models, 65% min all other models
Operating Temperature	• 0 °C to +70 °C (derate linearly from full to half load from 50°C to 70 °C)
Storage Temperature	• -40 °C to +85 °C
Humidity	• 5-95% non-condensing
Isolation	• Input to output 4000 V AC Input to ground 1500 V AC Output to ground 500 V AC
Switching Frequency	• 60-75 KHz
EMC	• EN55022 (CISPR22) class B
Safety requirements	• UL2601-1, CSA 22.2 No. 601.1-M90 as cUL, IEC 601-1, EN60601-1 non-patient connected
MTBF	• 100,000 hrs (MIL-HDBK-217D) 300,000 hrs - 30 watt model only (MIL-HDBK-217D)

Output Voltage & Current Ratings - 30 Watt Models

Output Power	Output Voltage Nominal	Output Current		Output Tolerance	Model Number
		Minimum	Maximum		
25 W	5 V	0.00 A	5.00 A	5%	AME30US05
27 W	7 V	0.00 A	3.80 A	5%	AME30US07
30 W	10 V	0.00 A	3.00 A	2%	AME30US10
30 W	12 V	0.00 A	2.50 A	2%	AME30US12
30 W	15 V	0.00 A	2.00 A	2%	AME30US15
30 W	18 V	0.00 A	1.90 A	2%	AME30US18
30 W	24 V	0.00 A	1.30 A	2%	AME30US24
30 W	30 V	0.00 A	1.00 A	2%	AME30US30
30 W	36 V	0.00 A	0.83 A	2%	AME30US36
30 W	48 V	0.00 A	0.63 A	2%	AME30US48

Output Voltage & Current Ratings - 55 Watt Models

Output Power Max	Output 1			Output 2			Output 3			Model Number
	Voltage Nom	Current		Voltage Nom	Current		Voltage Nom	Current		
		Min	Max		Min	Max		Min	Max	
40 W	5 V	0 A	8.0 A							AME55US05
45 W	7 V	0 A	7.5 A							AME55US07
50 W	10 V	0 A	5.0 A							AME55US10
55 W	12 V	0 A	4.6 A							AME55US12
55 W	15 V	0 A	3.7 A							AME55US15
55 W	18 V	0 A	3.1 A							AME55US18
55 W	24 V	0 A	2.3 A							AME55US24
55 W	30 V	0 A	1.9 A							AME55US30
55 W	36 V	0 A	1.6 A							AME55US36
55 W	48 V	0 A	1.2 A							AME55US48
45 W	+5 V	1 A	5.0 A	+12 V	0.5 A	3.0 A				AME55UM21
45 W	+5 V	1 A	5.0 A	+15 V	0.4 A	2.5 A				AME55UM22
45 W	+5 V	1 A	5.0 A	+24 V	0.3 A	2.0 A				AME55UM23
45 W	+5 V	1 A	5.0 A	+12 V	0.5 A	3.0 A	-12 V	0.1 A	0.5 A	AME55UM25
45 W	+5 V	1 A	5.0 A	+15 V	0.4 A	2.5 A	-15 V	0.1 A	0.5 A	AME55UM26

NOTES:

1. Output tolerance $\pm 5\%$ ($\pm 3\%$ for 15, 18, 24, 30 & 48 V single output models, and $\pm 10\%$ for AME55UM25 and AME55UM26 third output).

Output Voltage & Current Ratings - 110 Watt Models

Output 1			Output 2				Output 3			Output 4			Model Number
Voltage	Current		Voltage	Current			Voltage	Current		Voltage	Current		
Nom	Min	Max	Nom	Min	Max	Pk	Nom	Min	Max	Nom	Min	Max	
+5 V	0 A	10 A	+12 V	0 A	5 A	9.0 A							AME110UM23
+5 V	0 A	10 A	+12 V	0 A	5 A	9.0 A	-12 V	0 A	1 A				AME110UM31
+5 V	0 A	10 A	+15 V	0 A	4 A	7.5 A	-15 V	0 A	1 A				AME110UM32
+5 V	0 A	10 A	+12 V	0 A	5 A	9.0 A	-12 V	0 A	1 A	-5 V	0.0 A	1.0 A	AME110UM40
+5 V	0 A	10 A	+15 V	0 A	4 A	7.5 A	-15 V	0 A	1 A	+24 V	0.0 A	1.0 A	AME110UM41
+5 V	0 A	10 A	+12 V	0 A	5 A	9.0 A	-12 V	0 A	1 A	+12 V	0.0 A	1.0 A	AME110UM42
+5 V	0 A	10 A	+12 V	0 A	5 A	9.0 A	-12 V	0 A	1 A	+24 V	0.0 A	1.0 A	AME110UM45
+5 V	2 A	10 A	+12 V	0 A	5 A	9.0 A	-12 V	0 A	1 A	+24 V	1.5 A	3.0 A	AME110UM46
+5 V	0 A	10 A	+24 V	0 A	3 A	5.0 A	-12 V	0 A	1 A	+12 V	0.0 A	1.0 A	AME110UM47
+5 V	0 A	10 A	+15 V	0 A	4 A	7.5 A	-15 V	0 A	1 A	-5 V	0.0 A	1.0 A	AME110UM48

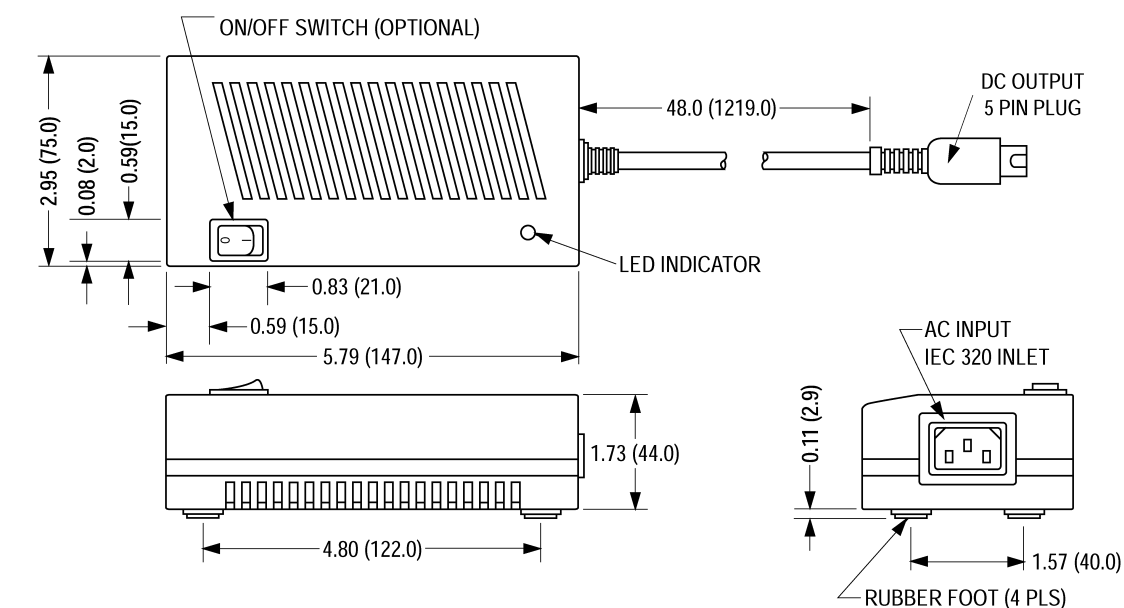
NOTES:

1. Output tolerance $\pm 5\%$ ($\pm 3\%$ for 15, 18, 24, 30 & 48 V single output models, and $\pm 10\%$ for AME55UM25 and AME55UM26 third output).

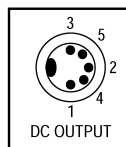
Output Voltage & Current Ratings - 130 Watt Models

Output Power	Output Voltage Nominal	Output Current		Output Tolerance	Model Number
		Minimum	Maximum		
130 W	12 V	0.0 A	10.8 A	5%	AME130US12
	15 V	0.0 A	8.6 A	4%	AME130US15
	18 V	0.0 A	7.2 A	4%	AME130US18
	24 V	0.0 A	5.4 A	3%	AME130US24
	30 V	0.0 A	4.3 A	3%	AME130US30
	36 V	0.0 A	3.6 A	2%	AME130US36
	48 V	0.0 A	2.7 A	2%	AME130US48

Mechanical Details - 30 Watt Models

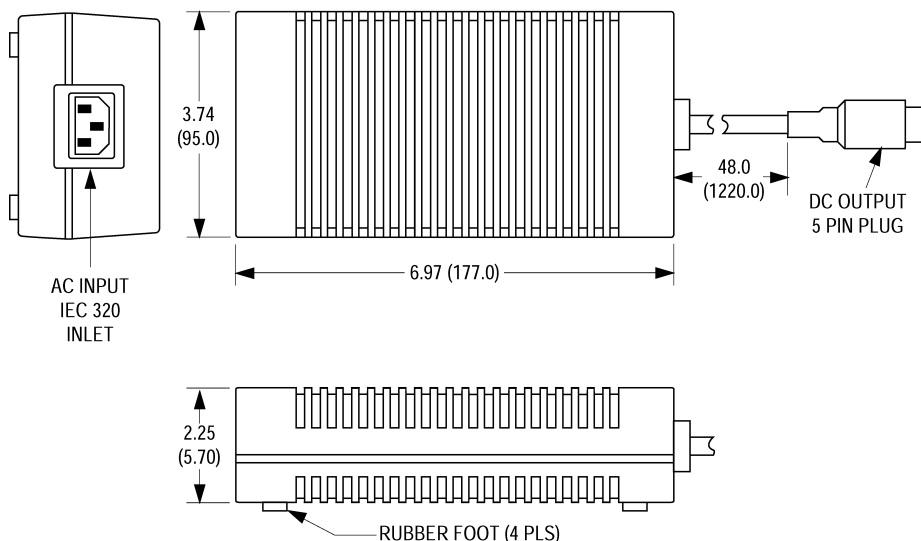


PIN CONNECTIONS	
Pin	Function
1	Return
2	Return
3	Output
4	Return
5	Output

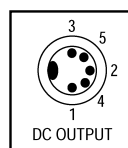


NOTES:
For optional switch add suffix 'S' to model number.
Dimensions shown in inches (mm).
Tolerance 0.02 (0.5) max.

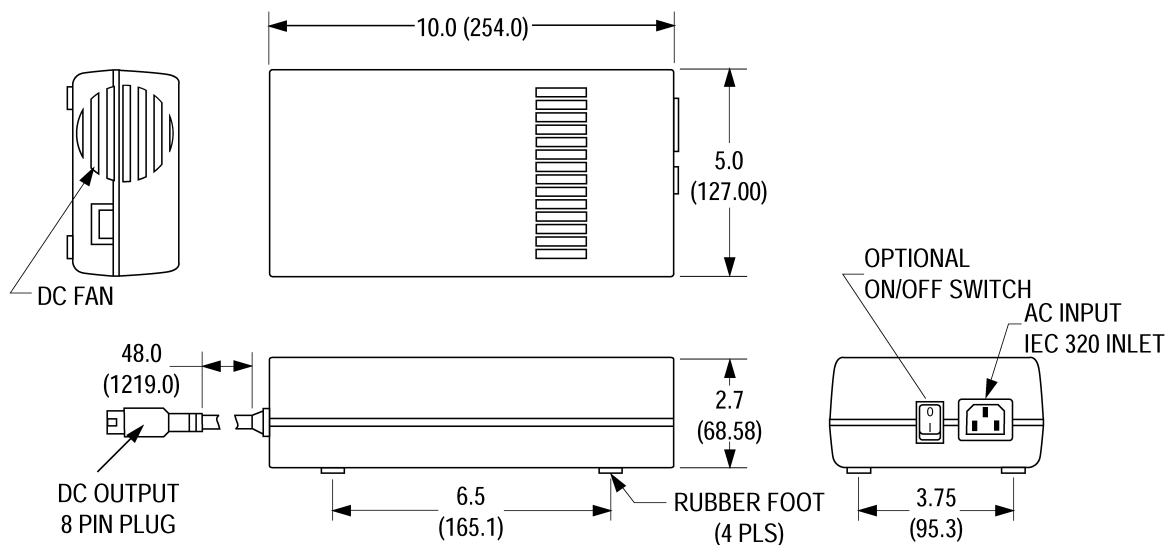
Mechanical Details - 55 Watt Models



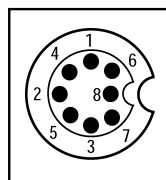
PIN CONNECTIONS			
Pin	SINGLE	DUAL	TRIPLE
1	Return	Common Rtn	Common Rtn
2	Return	Common Rtn	Common Rtn
3	Output 1	Output 1	Output 1
4	Return	Common Rtn	Output 3
5	Output 1	Output 2	Output 2



NOTES:
Dimensions shown in inches (mm).
Tolerance 0.02 (0.5) max.

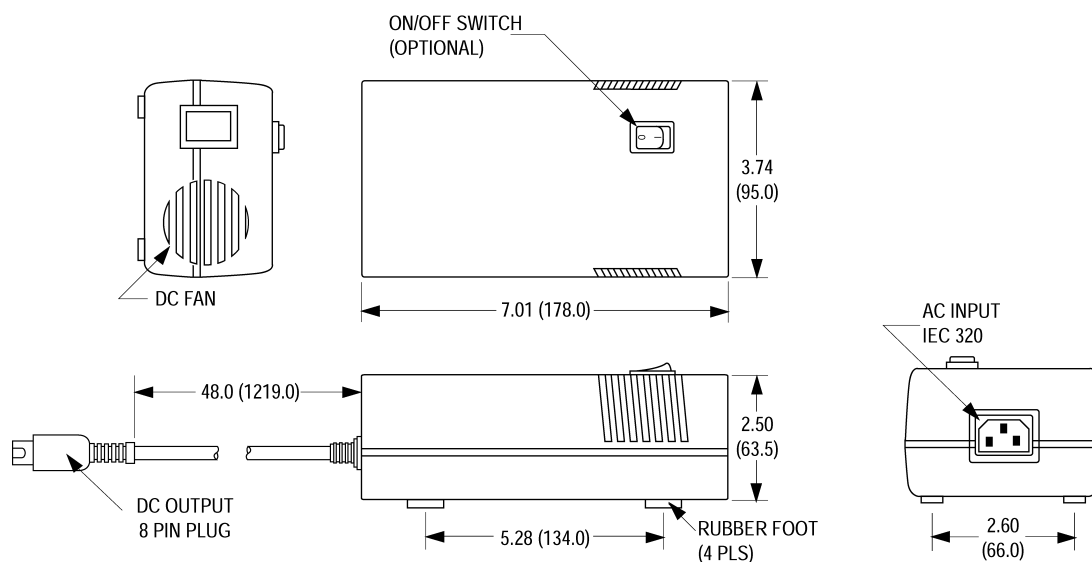
Mechanical Details - 110 Watt Models

PIN CONNECTIONS			
Pin	AME110UM2X	AME110UM3X	AME110UM4X
1	Common Rtn	Common Rtn	Common Rtn
2	N/C	Output 3	Output 3
3	Output 1	Output 1	Output 1
4	N/C	N/C	Output 4
5	Output 2	Output 2	Output 2
6	Common Rtn	Common Rtn	Common Rtn
7	Output 1	Output 1	Output 1
8	PFD	PFD	PFD

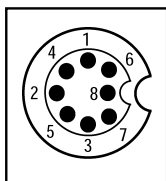


NOTES:
For optional switch add suffix 'S' to model number.

Dimensions shown in inches (mm).
Tolerance 0.02 (0.5) max.

Mechanical Details - 130 Watt Models

PIN CONNECTIONS	
Pin	Function
1	Return
2	Return
3	Output +
4	Return
5	Output +
6	Return
7	Output +
8	Output +



NOTES:
For optional switch add suffix 'S' to model number.

Dimensions shown in inches (mm).
Tolerance 0.02 (0.5) max.