

EASYMOD AE-080D SERIES DC INPUT SWITCHERS

80 watts - 3" x 5" - Single to Quad Output

IF WHAT YOU WANT IS WHAT YOU NEVER GET IN DC INPUT SWITCHERS, the POWER SOLUTION for up to 80 watts steady state of high reliability, 24 or 48 VDC input power can be found in the AE-80D family of 3.2" x 5" U-Channel mounted EASYMOD switchers. These models are available as standard in a complete range of single to quad output configurations from 2 to >48 VDC. All models deliver 80W (95W peak) of highly regulated output power. Most models deliver continuous full power output to 50°C, and are capable of operation up to 70°C.

EASYMOD simply means: IF WHAT YOU SEE IS WHAT YOU DON'T WANT, IT CAN BE EASILY CHANGED. EASYMODS include; extended temperature operating range, isolated outputs, unique output combinations, universal AC input, remote sense, low noise versions, unique cables and harnesses and much, much more. All these modifications are available at nominal (if any) additional cost, and normally without any impact on safety agency approvals which reduces both development cost and time to market. An EASYMOD can be performed on supplies for programs requiring as few as 250 units per year.

Call EASYMOD Support on (U.S.) +1-954-346-2442 or (U.K.) +44 (0)1903 768204 or email easymod@unipower-europe.com.



INPUT SPECIFICATION

Input Voltage	18-36; or 36-72 VDC
Input Current	@ 48VDC	4A
	@ 24VDC	6A
Fusing	6A @ 48VDC On Board
	8A @ 24VDC On Board

OUTPUT SPECIFICATION

Continuous Output Power ^{4, 6}	80 Watts
Line Regulation Over Input Range; V1-V4	0.2%
Load Regulation @ 60% 0% Full Load	
V1 - V2	3%
V3 - V4 ⁵	5% _{max}
Cross Regulation @ 60% 40% Full Load	
V1: Change in V2-V4	0.5%
V2-V4: Change in V1 @75 25% F/L	5% _{max}
Overvoltage Protection V1	130% Vout typ
Overshoot, All Outputs	10% max
Power Limit	Set @120% typ
Response Time ¹	500 µSec
Ripple & Noise ² @ 20 Mhz Band Width ; Full Load	
All Outputs	1% P-P max
Output Adjustment Range on V1	5% min

FEATURES & OPTIONS

- V1 & V2 REGULATED
- CB REPORT
- 2 - 48 VOLT OUTPUTS AVAILABLE
- UP TO 4 REGULATED OUTPUTS
- UL cUL 60950 APPROVAL
- EN 60950 APPROVALS
- WIDE RANGE INPUT - OPTION
- 40°C START-UP - OPTION
- UNIVERSAL AC INPUT MODELS

GENERAL SPECIFICATION

Efficiency	75% typ
Switching Frequency	60KHz typ
Susceptibility	See Note 2
Operating Temperature Range ²	-20 to +70°C
Minimum Start-up Temperature ²	-20°C
Derating from 50-70°C	2.5%/°C
Storage Temperature	-40 to +85°C
Cooling	See Note 5
Relative Humidity; Non-Condensing	5 - 95%
Altitude	10,000 ft
EMI	FCC & VDE B 8; EN55022; EN55024
Vibration ³ from 10-55Hz	1.0G Peak
Safety Agency Approvals:	UL & cUL 60950; EN 60950;
	CE; CB REPORT

Notes :

1. All outputs return within 1% of nominal for load change from 25-75% lo excursion.
2. Ripple & noise may not meet published specifications for 2 min. after start-up below 0°C.
3. Three orthogonal axes @ 1 octave/min. 5 min. dwell @ four major resonances.
4. Rating with 30 CFM air; Rated at 60 watts convection.
5. Three terminal post regulation available.
6. Derate 15% @ 24VDC input; 30% @ 12VDC input
7. Standard for 48VDC input; Available for 24 VDC input
8. All specifications typical at nominal line, full load & 25°C, and are subject to change without notice.

EASYMOD is a Sales Mark of Power Solutions Inc.

EASYMOD AE-080D FAMILY

AVAILABLE STEADY STATE CURRENT ¹ @ 50°C AMBIENT

MULTIPLE OUTPUT MODELS / OUTPUT CURRENT / AMPS

OUTPUT	DC OUTPUT ¹	MINIMUM	MAXIMUM ³	MAXIMUM ⁴	PEAK ^{4,5}
V1	1.5 to 48 ⁷ V	1.6 ²	16	16	18
V2	1.5 to 48 ⁸ V	0.7 ²	7	7.5	9
V3	1.5 to 48 ⁸ V	0.3 ²	3	4	5
V4	1.5 to 48 ⁸ V	0.2 ²	2	3	3.5

SINGLE OUTPUT MODELS (1.5 to 48VDC ^{7,11}) / OUTPUT CURRENT / AMPS

OUTPUT CURRENT	1.5V ~ 3.3V	5V	12V	15V	24V	48V
MINIMUM	0	0	0	0	0	0
MAXIMUM ³	12	12	5	4	2.5	1.25
MAXIMUM ⁴	15	16	6.6	5.3	3.3	1.6
PEAK ⁵	19	19	7.5	6.5	4	2

- (1) Full power out on V3-V4 with minimal V1 and V2 loading--Option.
 (2) 10% minimum load for stated regulation on multiple O/P units.
 (3) Convection cooling.
 (4) 30CFM forced air cooling.
 (5) 30 seconds maximum duration.
 (6) Most output combinations from 2 to 48+ Volts possible; up to maximum rated Current / Power...Consult EASYMOD Support.

- (7) Specify 0.1V increments.
 (8) Specific output voltage is current dependent
 (9) Regulation may degrade under some output conditions. Consult EASYMOD Support.
 (10) Consult EASYMOD Support for Model #.
 (11) For outputs >48 Volts, consult EASYMOD Support.
 (12) Cover and custom sheet metal available.

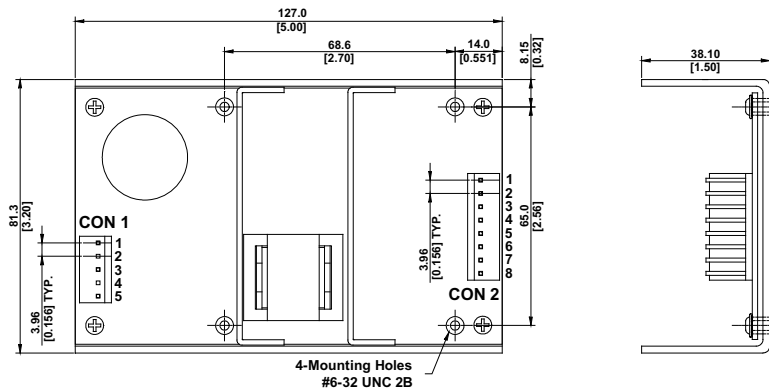
MECHANICAL

CON 1:
 Molex 09-65 2058
 Mating: Molex 09-50-3051

PIN1 GROUND
 PIN2 -V IN
 PIN3 -V IN
 PIN4 +V IN
 PIN5 +V IN

CON 2:
 Molex 09-65-2088
 Mating: Molex 09-50-3081

PIN1 V2
 PIN2~PIN3 V1
 PIN4~PIN5 RET
 PIN6 V3
 PIN7 RET
 PIN8 V4



TOLERANCE: mm +/-0.5
 [inch] +/-0.02

UNIT: mm
 [inch]