UNIPOWER CORPORATION

Call U.S.: (954) 346-2442 • sales@unipower-corp.com
Call U.K.: +44(0)1903 768200 • info@unipower-europe.com

EASYMOD AJ-040D SERIES DC INPUT SWITCHERS

40 watts - 3.6” x 2.5” - Single to Triple Output

IF WHAT YOU WANT IS WHAT YOU NEVER GET IN DC INPUT SWITCHERS, The POWER SOLUTION for up to 40 watts (30 watt convection) steady state of high reliability, wide range 24, or 48 VDC input power can be found in the AJ-40 family of 3.6” x 2.5” PC Card DCMOD switchers. These models are available as standard in a complete range of single to triple output configurations from 2 to > 48VDC. All models deliver 40W (45W peak) of highly regulated output power. The entire family has on-board Class B EMI filtering, delivers continuous full power output to 50ºC and is capable of operation up to 70ºC.
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, available AC inputs, 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.

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

FEATURES & OPTIONS

- ❑ **FULL Pout @ Minimal 5 VOLT LOAD**
- ❑ **MTBF >200,000 HOURS**
- ❑ **2 - 48 VDC OUTPUTS AVAILABLE**
- ❑ **WIDE OPERATING TEMP. RANGE**
- ❑ **0.5% Pk-Pk RIPPLE OPTION**
- ❑ **UL - CSA - TUV - “CE” APPROVAL**
- ❑ **3.6” x 2.5” x 1.2” HIGH**
- ❑ **-40°C START-UP - OPTION**
- ❑ **AC INPUT MODELS AVAILABLE**

INPUT SPECIFICATION

Input Voltage	18 -36 or 36 -72 VDC
Inrush Current, Cold Start	25A max
Input Current @ 48VDC	0.8A
@ 24VDC	1.7A
Fusing	6A @ 48VDC On Board
	8A @ 24VDC On Board

OUTPUT SPECIFICATION

Continuous Output Power [5]	40 Watts
Line Regulation Over Input Range; V1-V4	± 0.5%
Load Regulation @ 60% 40% Full Load	
V1	± 3%
V2 - V3	± 5% max
Cross Regulation @ 60% 40% Full Load	
V1: Change in V2-V3	± 0.5%
V2-V3: Change in V1 @75 25% F/L	± 5% max
Overvoltage Protection V1	125% Vout typ
Overshoot, All Outputs	10% max
Power Limit	Set @120% typ
Response Time[1]	500 µSec
Ripple & Noise [3] @ 20 Mhz Band Width ; Full Load	
All Outputs	1% P-P max
Output Adjustment Range on V1	5% min

GENERAL SPECIFICATION

Efficiency	70% typ
Switching Frequency	60KHz typ
Operating Temperature Range [3]	-20 to +70°C
Minimum Start-up Temperature [6]	-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 Class B & VDE Class B
	CISPR 22; EN 55022 Class B; EN55024
Vibration [4] from 10-55Hz	1.0G Peak
MTBF per MIL 217	> 250,000 hours
Safety Agency Approvals	UL & cUL 60950; EN 60950
	CE to LVD; CB Report per EN 60950

Notes :
1. All outputs return within 1% of nominal for load change from 25-75% Iout excursion.
2. See overside for steady state and peak ratings for convection and forced air.
3. Ripple & noise may not meet published specifications for 2 min. after start-up below 0°C.
4. Three orthogonal axes @ 1 octave/min. 5 min. dwell @ four major resonances.
5. Rating with 30 CFM air; Rated at 30 watts convection . Derate by 15% for 24VDC input.
6. -40°C start up option available.
7. 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.

www.unipowercorp.com or www.powercassette.com

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EASYMOD AJ-040D 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	3.3 to 48 [7] V	0 [2]	4	5	6
V2	2.0 to 48 [8] V	0	1	1	1.5
V3	2.0 to 48 [8] V	0	0.8	1	1

SINGLE OUTPUT MODELS (3.3 to 48VDC [7,11]) / OUTPUT CURRENT / AMPS

OUTPUT CURRENT	3.3V	5V	12V	15V	24V	48V
MINIMUM	0	0	0	0	0	0
MAXIMUM [3]	6	6	2.5	2	1.3	0.6
MAXIMUM [4]	8	8	3.3	3.6	1.7	0.8
PEAK [4,5]	9.5	9.5	4	3.3	2.1	1

(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.

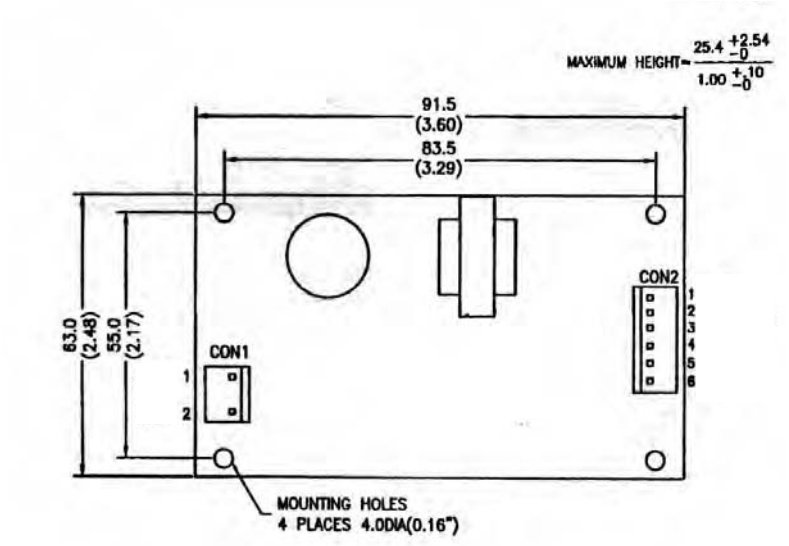
MECHANICAL

CON 1:
Molex 09-74 1031
Mating: Molex 09-50-3031

PIN1	-V IN
PIN3	+V IN

CON 2:
Molex 09-74-1061
Mating: Molex 09-50-3061

PIN1	V2
PIN2~PIN3	RET
PIN4~PIN5	V1
PIN6	V3



UNIPOWER CORPORATION • 3900 Coral Ridge Drive, Coral Springs, Florida 33065, UNITED STATES • Tel: 954-346-2442 • Fax: 954-340-7901 • sales@unipower-corp.com
UNIPOWER EUROPE • Parkland Business Centre, Chartwell Road, Lancing, BN15 8UE, ENGLAND • Tel: +44(0)1903 768200 • Fax: +44(0)1903 764540 • info@unipower-europe.com