

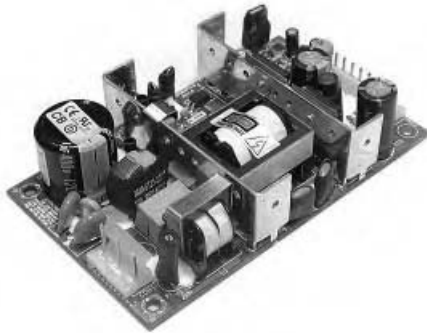
EASYMOD AJ-040UM SERIES MEDICAL SWITCHERS

40 watts - 3.6" x 3.5" - 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, universal AC input power can be found in the AJ-40 family of 3.6" x 2.5" PC Card EASYMOD medical 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 50°C and is 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, available DC 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.



INPUT SPECIFICATION

| | |
|----------------------------------|--------------------------------|
| Input Voltage | 47-63 Hz; 90-264 VAC |
| Power Factor | Meets EN61000-3-2 Amendment 14 |
| Inrush Current, Cold Start | 25A max |
| Input Current @ 115VAC | 0.5A P- P |
| Fusing | 3.15A @ 250 VAC On Board |
| Leakage Current | < 90µA |

OUTPUT SPECIFICATION

| | |
|---|---------------|
| Continuous Output Power ⁵ | 40 Watts |
| Holdup Time | 16 mSec |
| Line Regulation Over Input Range; V1-V4 | ± 0.2% |
| Load Regulation @ 60% 0% Full Load | |
| V1 | ± 3% |
| V2 - V3 | ± 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 |
| Overshoot 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 |

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" MEDICAL
- 3.6" x 2.5" x 1.2" HIGH
- 40°C START-UP - OPTION
- DC INPUT MODELS AVAILABLE

GENERAL SPECIFICATION

| | |
|---|-------------------------------------|
| Efficiency | 70% typ |
| Switching Frequency | 60KHz typ |
| Immunity | See Note 6 Below |
| Operating Temperature Range ³ | -20 to +70°C |
| Minimum Start-up Temperature ⁷ | -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 2601; |
| | IEC 601-1; CE |

Notes :

1. All outputs return within 1% of nominal for load change from 25-75% lo 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.
6. Meets EN61000-4 -2; -3; -4; -5; -6; -8; -11 Level 3
7. -40°C start up option available
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.

www.unipowercorp.com or www.powercassette.com

EASYMOD AJ-040UM 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 (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 | 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 NEUTRAL
 PIN3 LIVE

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

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

