

DESCRIPTION

UNIPOWER's **AL-085UM SERIES** is an 85 Watt Medical Power Supply platform with both standard and configurable models featuring output voltage(s) that can be quickly configured to order while maintaining all international safety approvals.

These power supplies are available with Universal AC Input and single or quad output configurations ranging from 1.5 to 48 VDC. The AL-085UM features an industry-standard footprint, medical safety approvals, Class B emissions; and -20 ~ +70°C operation (see derating).

EASYMOD UPGRADES include a multitude of output voltage configurations, optional covers (with or without fan), extended temperature operating range, isolated outputs, DC inputs, attached wire harnesses and much, much more. All these modifications are available without any impact on safety approvals to reduce both development cost and time to market.

FEATURES

- ◆ Universal AC Input Range (90-264 VAC)
- ◆ Industry-Standard 3" x 5" U-Frame Footprint
- ◆ 1 or 4 Outputs configurable from 1.5~48VDC
- ◆ Medical Safety Approvals
- ◆ >250k Hours MTBF (MIL-217F)
- ◆ Optional -40°C Guaranteed Start-Up



**Contact Unipower to discuss
your application and define
the right part number for your
specific application.**

TWO-YEAR WARRANTY

INTERNATIONAL STANDARDS

UL/cUL 60601-1,
CB Report, IEC60601-1
CE Mark (LVD)

FLEXIBLE OUTPUT CONFIGURATION GUIDELINES

with 90-264 VAC Input and -20-50°C Operation

Single Output Capabilities

| OUTPUT CURRENT | 1.5~3.3V | 5V | 12V | 15V | 24V | 48V |
|---------------------------|----------|-------|------|------|------|------|
| MINIMUM | 0A | 0A | 0A | 0A | 0A | 0A |
| CONVECTION ⁽³⁾ | 13A | 13A | 5.4A | 4.3A | 2.7A | 1.4A |
| 15 CFM AIR ⁽⁴⁾ | 17A | 17A | 7.1A | 5.7A | 3.5A | 1.8A |
| PEAK ⁽⁵⁾ | 19.5A | 19.5A | 8.1A | 6.5A | 4.0A | 2.0A |

Multiple Output Capabilities

| OUTPUT | DC OUTPUT | MIN | CON ⁽³⁾ | AIR ⁽⁴⁾ | PEAK ^(4, 5) |
|--------|--------------------------|------------------------|--------------------|--------------------|------------------------|
| V1 | 1.5 ~ 48V ⁽⁷⁾ | 1.3A ^(2,13) | 13A | 17A | 19.5A |
| V2 | 1.5 ~ 48V ⁽⁸⁾ | 0.6A ^(2,13) | 6A | 8.5A | 9A |
| V3 | 1.5 ~ 48V ⁽⁸⁾ | 0.3A ^(2,13) | 3A | 5A | 5.5A |
| V4 | 1.5 ~ 48V ⁽⁸⁾ | 0.3A ^(2,13) | 3A | 3.5A | 4.0A |

- (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)...15 CFM forced air cooling conditions.
 (5)...30 seconds maximum duration.
 (6)...Most output combinations from 1.5 to 48 Volts possible; up to maximum rated Current / Power...Consult UNIPOWER.

- (7)...Specify 0.1V increments.
 (8)...Specific output voltage is current dependent.
 (9)...Regulation may degrade under some output Consult UNIPOWER.
 (10)...Consult UNIPOWER for Model #.
 (11)...For outputs >48 Volts, consult UNIPOWER.
 (12)...Cover and custom sheet metal available.
 (13)...10% minimum of marked rating.

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STOCKED / OFF-THE-SHELF MODELS

Listed below are common configurations stocked by UNIPOWER for immediate delivery.

Single Output Models

| MODEL | V1 | MIN | CON | AIR | PEAK |
|-----------------|-----|-----|------|------|-------|
| AL-085UM-S1-STD | 5V | 0A | 13A | 17A | 19.5A |
| AL-085UM-S2-STD | 12V | 0A | 5.4A | 7.1A | 8.1A |
| AL-085UM-S4-STD | 24V | 0A | 2.7A | 3.5A | 4.0A |
| AL-085UM-S5-STD | 48V | 0A | 1.4A | 1.8A | 2.0A |

Quad Output Models

| MODEL | V1 | MIN | CON | AIR | V2 | MIN | CON | AIR | V3 | MIN | MAX | V4 | MIN | MAX |
|--------------------|-------|-----|-----|-----|------|------|-----|-----|------|------|-----|------|------|-----|
| AL-085UM-Q1221-STD | +5V | 1A | 10A | 12A | +12V | 0.3A | 2A | 3A | -12V | 0.3A | 3A | -5V | 0.4A | 4A |
| AL-085UM-Q1331-STD | +5V | 1A | 10A | 12A | +15V | 0.3A | 2A | 3A | -15V | 0.3A | 3A | -5V | 0.4A | 4A |
| AL-085UM-Q1224-STD | +5V | 1A | 10A | 12A | +12V | 0.3A | 2A | 3A | -12V | 0.3A | 3A | +24V | 0.2A | 2A |
| AL-085UM-Q1334-STD | +5V | 1A | 10A | 12A | +15V | 0.3A | 2A | 3A | -15V | 0.3A | 3A | +24V | 0.2A | 2A |
| AL-085UM-Q0122-STD | +3.3V | 1A | 10A | 12A | +5V | 0.6A | 6A | 8A | +12V | 0.3A | 3A | -12V | 0.3A | 3A |
| AL-085UM-Q0133-STD | +3.3V | 1A | 10A | 12A | +5V | 0.6A | 6A | 8A | +15V | 0.3A | 3A | -15V | 0.3A | 3A |
| AL-085UM-Q0124-STD | +3.3V | 1A | 10A | 12A | +5V | 0.6A | 6A | 8A | +12V | 0.3A | 3A | +24V | 0.2A | 2A |

MIN = Minimum Load Required for specified regulation
CON = Maximum continuous output current with Convection Cooled Operation (Total power not to exceed 65 Watts continuous)
AIR = Maximum continuous output current with 15 CFM Airflow Operation (Total power not to exceed 85 Watts continuous)

