

## **DESCRIPTION**

UNIPOWER's MEDIMOD® AG-350PM SERIES is a 350 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 quadout put configurations ranging from 1.5 to 48 VDC. The AG-350PM feature an industry-standard footprint, medical safety approvals, Class B emissions; and -20 ~ +70°C operation (see derating).

MEDIMOD® UPGRADES include a multitude of output voltage configurations, optional covers (with or without fan), extended temperature operating range, isolated outputs, 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)
- ◆ Active PFC
- ♦ 1 or 4 Outputs configurable from 1.5~48VDC
- ◆ Medical Safety Approvals
- ♦ >500k Hours MTBF, Demonstrated
- ♦ Optional -40°C Guaranteed Start-Up
- ◆ Double Sided PC Board



#### INTERNATIONAL STANDARDS

UL/cUL 60601-1 3rd Ed. EN60601-1 3rd Ed. CB Report, IEC60601-1 CE Mark (LVD)

# MEDIMOD® AG-350PM AC INPUT / MEDICAL APPROVED 350 WATT POWER PLATFORM

8.00 x 4.50 x 2.00" / 203.2 x 114.3 x 50.8mm















Contact UNIPOWER to discuss your application and define the right part number for your specific application:

Tel: +1-954-905-1070

Email: the.power.solution@unipowerco.com

For the DC input version see DCMOD AG-350D datasheet

For the ITE Approved version see **EASYMOD AG-350P** datasheet

www.unipowerco.com



"IF WHAT YOU SEE IS WHAT YOU DON'T WANT, IT CAN EASILY BE CHANGED." The MEDIMOD® family of switching power supplies has been designed with two precepts; (1) the laws of physics are immutable, and (2) the satisfaction of customer requirements and needs is paramount.

A host of modifications, only some of which are listed below, can and will be performed on products for customer programs requiring as few as 250 units per year. These "mods" are available at nominal premium (if any), normally without non-recurring engineering costs (although a one time documentation fee may be incurred), and usually with all safety agency approvals in place. This minimizes both product development cost and new product time to market. Effectively, MEDIMODs® allow small program requirements the luxury of costly custom power supply designs.

#### TYPICAL MODIFICATIONS

- · Unique Output Combinations from 1.5 to >48 volts
- · Power Fail / Power Good Signals
- · Enable / Inhibit
- · Isolated Outputs
- · Low Output Ripple and Noise
- · Cover & Fan Assembly

- · Extended Temperature Operating Range
- · -40°C Start-Up
- · Zero Load Operation
- · Remote Sense
- · Remote On / Off

#### 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	OA	OA	OA	OA	OA	OA
CONVECTION (3)	30A	30A	16.6A	13.3A	8.3A	4.2A
30 CFM AIR (4)	60A	60A	29A	23A	14.5A	7.25A
PEAK (5)	65A	65A	31A	25A	16A	18A

## Multiple Output Capabilities

OUTPUT	DC OUTPUT	MIN	CON (3)	AIR (4)	PEAK (4, 5)
V1	1.5 ~ 48V <sup>(7)</sup>	4.0A <sup>(2, 13)</sup>	40A	60A	65A
V2	1.5 ~ 48V <sup>(8)</sup>	1.7A <sup>(2, 13)</sup>	17A	32A	35A
V3	1.5 ~ 48V <sup>(8)</sup>	0.5A <sup>(2, 13)</sup>	5A	7A	10A
V4	1.5 ~ 48V <sup>(8)</sup>	1.1A <sup>(2, 13)</sup>	11A	14A	18A

- Full power out on V3-V4 with minimal V1 and V2 loading—Option
- 10% minimum load for stated regulation on multiple O/P units.
- Convection cooling.
- 30 CFM forced air cooling conditions.
- 30 seconds maximum duration
- (6) Most output combinations from 1.5 to 48 Volts possible; up to maximum rated Current / Power...Consult UNIPOWER.

- 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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For the DC input version see <u>DCMOD AG-350P</u> datasheet | For the ITE Approved version see <u>EASYMOD AG-350P</u> datasheet.



## **SPECIFICATIONS**

Typical at Nominal Line, Full Load and 25°C Unless Otherwise Noted.

INPUT	
Input Voltage Range Options	90-264 VAC
Frequency	
Power Factor	EN61000-3-2 Compliant
Inrush Current	50A Max (cold start)
Input Current @ 115VAC	6.0A max
Fusing, dual fused	8A / 250VAC
Leakage Current	100µA max @ 264VAC

CONNECTOR 1

PIN2

PIN3...

PIN4

PIN5

PIN6...

PIN7.

PIN8

PIN2

PIN3.

PIN4..

PIN5

PIN6...

PIN7.

PIN2. PIN3

Terminal Blocks, 9.5mm pitch PIN1....LINE PIN2.....NEUTRAL

PIN3......GND

CONNECTOR 2 (single output) Terminal Blocks, 9.5mm pitch

.V1

V1

V1

.RET

.RET

..RET ....RET

.V1

.RET

RET

V2

.V3

-V4

..-SENSE

....RC

CONNECTOR 2 (multi-output)

PIN1 .....V1

PIN8.....+V4 CONNECTOR 3

MOLEX 22-27-2061 or equivalent Mates with MOLEX 22-01-3067

PIN1....+SENSE

PIN4....AC FAIL PIN5.....RTN PIN6.....PG

on / 350W with 30 cfm Airflow
16mSec 75% Typical
75% Typical
±5%
1% pk-pk max
Max ±0.2%
±3% max ±5% max
±5% max
±0.5%
±5% max
>130% (Latch Off)
>120% (Auto-Recovery)
10% max
500 µSec (25-75% step load)
60KHz (typical)

#### ENVIRONMENTAL

Operating Temp. Range	
	Consult factory for -40°C Guaranteed Start-Up
	and Industrial Temperature Range options
Output Current Derating	2.5%/°C, 50°C to 70°C
	-40°C to + 85°C
	5% to 95%, Non-Condensing
MTBF, Demonstrated	>500,000 Hours
	30 cfm Airflow for Full Power
Immunity	EN61000-4-2; -3; -4; -5; -6; -8; -11
Altitude	10,000 feet

#### PHYSICAL SPECIFICATIONS

Case Dimensions	8.00 x 4.50 x 2.00" / 203.2 x 114.3 x 50.8mm
Weight	3.15 lbs. (1.43 kg.)
Vibration from 10 - 55Hz	1.0G Peak
(3 orthogonal axes @ 1 octave/min, 5 minute dv	vell @ 4 major resonances)

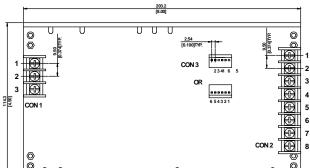
#### SAFETY STANDARDS

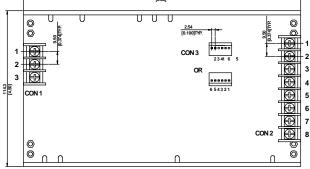
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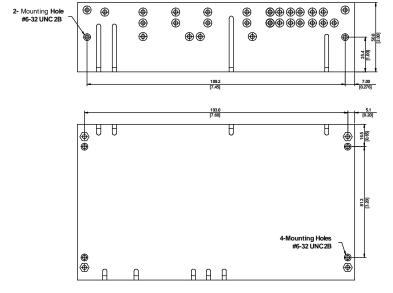
#### **EMI STANDARDS**

FCC Class A & VDE Class A, CISPR 11; EN 55011 Class A (Class B available. Consult factory.)

## **OUTLINE DRAWING**







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