

# AC-DC ITE Power Module PAA05 Series

## Features:

- Ultra Compact Size 1.46" x 1.08"
- Universal Input Range 90-305VAC, 47-440Hz
- I/O Isolation 4000VAC
- Operating Ambient Temperature Range -40°C to +70°C
- No Load Power Consumption <0.1W
- Isolation Class II
- EMC Compliant without External Components
- Safety Approval to UL/IEC/EN 62368-1, IEC/EN 60335-1, and IEC/EN 61558-2-16
- 3-Year Product Warranty



## Description:

The PAA05 series of encapsulated AC/DC modules provide up to 5.04W of continuous output power in a small 1.46" x 1.08" package. These modules operate over a wide range of ambient temperatures and AC input voltages and frequencies, making them suitable for countless global applications.

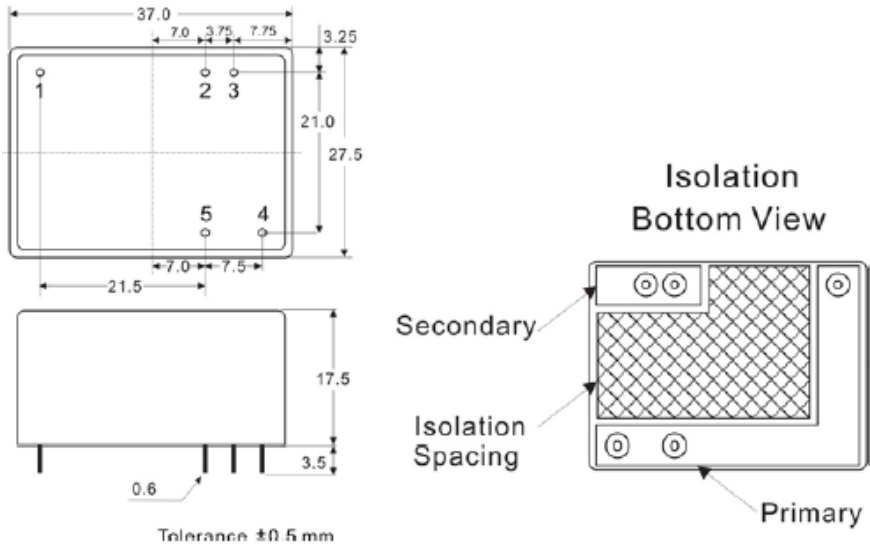
Model Number	Max Output Wattage	Output Voltage	Output Current (mA) max	Output Line Regulation	Output Load Regulation	Ripple & Noise (mVp-p)	Max Capacitive Load (µF)	Average Efficiency @ 115VAC
PAA05-10-1	5W	3.3V	1515	±0.2%	±1%	<100	3,500	73%
PAA05-10	5W	5V	1000	±0.2%	±0.5%	<100	2,500	77%
PAA05-12	5.04W	12V	420	±0.1%	±0.5%	<150	470	81%
PAA05-14	5.04W	24V	210	±0.1%	±0.5%	<200	150	83%

### NOTES:

1. Ripple & Noise measured with 20MHz of bandwidth and with 0.1µF of ceramic & 47µF of electrolytic capacitance across the output.

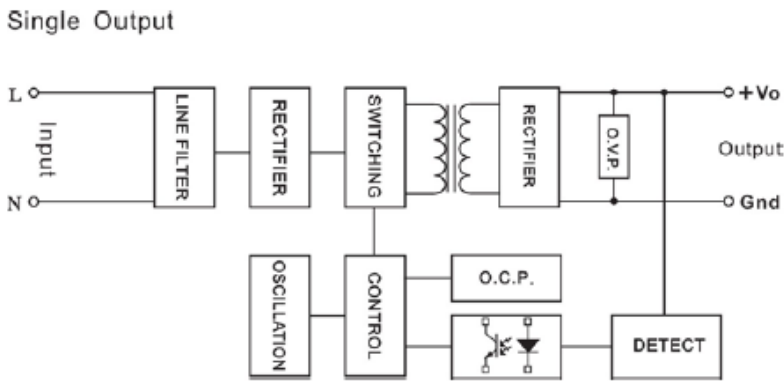
<b>Specifications</b>	
<b>Input</b>	
Input Voltage	90-305VAC or 127-430VDC
Input Frequency	47-440Hz
Input Current	150mA max. (115VAC) / 90mA max. (230VAC)
Inrush Current	30A max. (115VAC) / (60A) max. (230 VAC)
<b>Output</b>	
Total Output Power	Up to 5.04W
Hold Up Time	15ms min. (@ 230VAC)
Line Regulation	±0.2% max
Load Regulation	±1% max
Minimum Load	0
<b>Protection Features</b>	
Overvoltage Protection	Zener diode clamp
Overpower Protection	Hiccup mode, auto-recovery
Short Circuit Protection	Hiccup mode, auto-recovery
<b>Environmental</b>	
Operating Temperature	-40°C +70°C (with derating)
Storage Temperature	-40°C +85°C
Operating Humidity	95% RH
<b>General Specifications</b>	
Dimensions	1.46 x 1.08 x 0.69 Inches (37.0 x 27.5 x 17.5mm) Tolerance ±0.5 mm
Weight	24g
MTBF	>450,000h at 25°C (MIL-HDBK-217F)
<b>Safety</b>	
Agency Approvals	UL / IEC / EN 62368-1, IEC / EN 60950, IEC / EN 60335-1, IEC / EN 61558-2-16
Leakage Current	0.25mA max.
Input to Output (VAC)	4000V
<b>EMC</b>	
EMI (Conducted & Radiated Emissions) EMS (Noise Immunity)	EN 55032 Class B EN 55035

## Diagrams



PIN #	FUNCTION
1	NO CONNECT
2	DC (+)
3	DC (-)
4	AC (L)
5	AC (N)

## BLOCK DIAGRAM



## DERATING

