

# PAH300-450 SERIES

DC/DC Single Output: 300 ~ 450 watts



## Features

- Input options; 24V, and 48V
- Power levels 300 ~ 450 watts
- Output voltage options 12, 28 and 48V
- Wide output external voltage trim
- 100°C operation Baseplate temperature
- Fully isolated input – output
- Overload and over voltage protection
- Safety approvals & CE marked
- High Efficiency up to 90%
- Industry standard Half Brick
- Suitable for Customer Designed power supplies

## Specifications:

<b>Input Voltage</b>	24VDC ( 19 ~ 36 ) 48VDC ( 36 ~ 76 )
<b>Input Current</b>	PAH300S24: 15A, PAH300S48: 7.2A PAH350S24: 17.3A PAH350S48: 8.2A PAH450S48: 10.4A
<b>Efficiency</b>	Model dependant 87 ~ 92%
<b>Output Voltage</b>	12 to 48vdc ( refer to table )
<b>Output Voltage Trim</b>	By external trim network 12V: -40% to +10% 28V: -40% to +18% 48V: -40% to +18%
<b>Output Ripple &amp; Noise</b>	12V / 200 mV, 28V / 280mV, 48V / 480mV
<b>Line Regulation</b>	Typically 0.2%
<b>Load Regulation</b>	12V / 24mV, 28V / 56mV, 48V / 96mV
<b>Overload Protection</b>	Constant current limit with auto recovery set at 105 ~ 140%.
<b>Overvoltage Protection</b>	Inverter Shutdown at 125 ~ 145%, recycle input power to reset.
<b>Remote Sense</b>	Yes
<b>Remote ON / OFF</b>	Yes ( Short = ON, Open = OFF )
<b>Parallel Operation</b>	NO

<b>Operating Temp.</b>	-40°C to +100°C Baseplate temperature, with over temperature protection.
<b>Over Temperature protection</b>	Operates when internal temperature of module abnormally rises. OTP operates at 105°C ~ 130°C Baseplate temperature.
<b>Operating Humidity</b>	5 ~ 95% RH Non-condensing
<b>Cooling</b>	Conduction cooling via Baseplate, refer to manual.
<b>Temp. Coefficient</b>	0.02% per °C
<b>Isolation Voltage</b>	Input – Output: 1.5KVAC. Input – Baseplate: 1.5KVAC. Output – Baseplate: 500VDC
<b>Vibration</b>	Non operating, 10-55Hz ( sweep for 1 min ) Amplitude 0.285mm constant ( max 49m/s <sup>2</sup> ) X,Y,Z for 1 hour.
<b>Shock</b>	196.1m / s <sup>2</sup>
<b>Safety</b>	UL60950-1, EN60950-1
<b>Dimensions</b>	58 x 61 x 12.7mm
<b>Weight</b>	Model dependant 90 ~ 100g

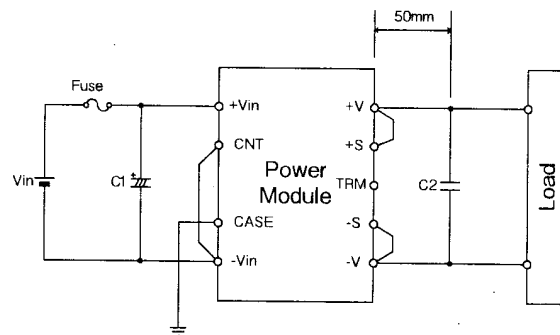


Fig.1-2 Basic Connection

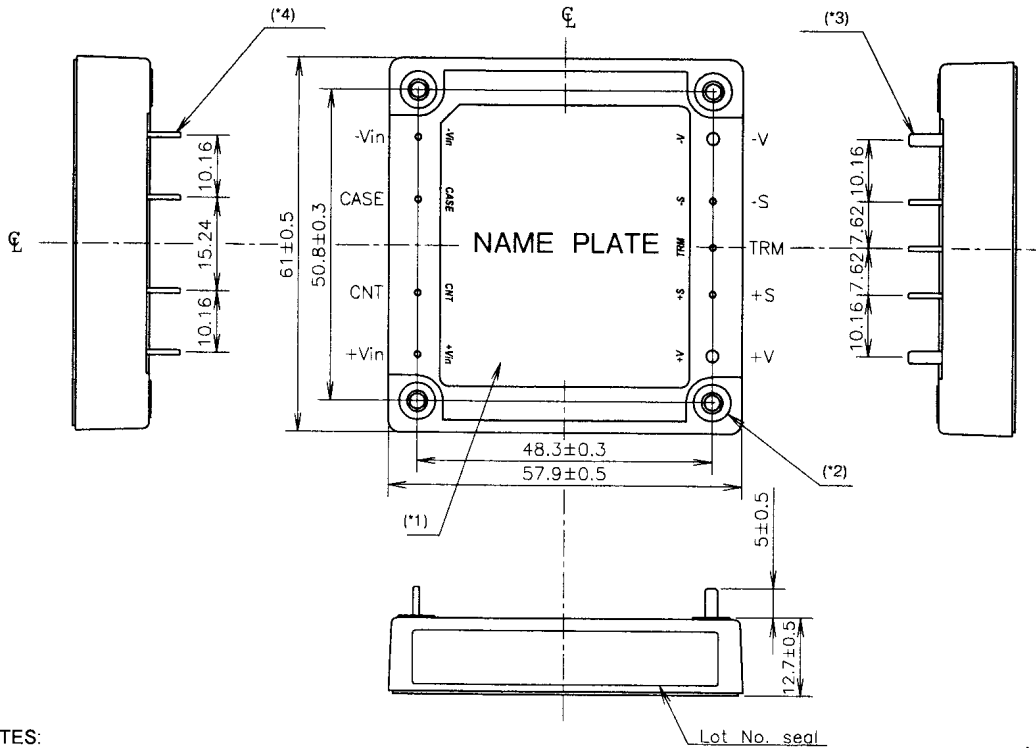
# PAH300-450 SERIES

DC/DC Single Output: 300 ~ 450 watts

Model	Input V	Output		Output Voltage Range	Power W
		V	A		
PAH300S24-12	24V	12V	25A	7.2 - 13.2V	300W
PAH300S24-28	24V	28V	11A	16.8 - 30.8V	300W
PAH350S24-28	24V	28V	12.5A	16.8 - 33.0V	350W
PAH300S48-12	48V	12V	25A	7.2 - 13.2V	300W
PAH300S48-28	48V	28V	11A	16.8V - 33.0V	300W
PAH350S48-12	48V	12V	29.2A	7.2 - 13.2V	350W
PAH350S48-28	48V	28V	12.5A	16.8 - 33.0V	350W
PAH450S48-28	48V	28V	16A	16.8 - 33.0V	450W
PAH450S48-48	48V	48V	9.4A	28.8 - 57.6V	450W

- Model Suffix: Blank = ( M3 tapped mounting inserts ( 4 ), /T = 3.3mm non-threaded inserts ( 4 )

## PAH300 - PAH450 Mechanical Outline



### NOTES:

- (\*1) Model name, input voltage range, nominal output voltage, maximum output current, country of manufacture and safety marking (C-UL-US, BSI & CE marking) are shown here in accordance with the specifications.
- (\*2) M3 threaded holes 4 for customer chassis mounting (FG).
- (\*3) Output terminals : 2-  $\phi$  2.0
- (\*4) Input and signal terminals : 7-  $\phi$  1
- (\*5) Unless otherwise specified dimensional tolerance :  $\pm 0.25$

unit :mm