

- 12V output for driving non-isolated converters
- Safety Approved
- Operation at +100°C baseplate
- Wide Adjustable Output Range
- Industry Standard Half Brick Package

## Key Market Segments & Applications

- Base Station Power Amplifiers
- Bus converters for Distributed Power Architectures

# PAH300/450 Series

300W to 450W 24V & 48V Input Half Brick DC-DC Converters

## PAH Features and Benefits

### Features

- Wide adjustment range
- Compact size
- ASIC Design
- 24V & 48V inputs

### Benefits

- Reduces need for custom modules
- Replaces 3/4 or Full Brick Power Modules
- Reduced component count, increased MTBF
- Suitable for remote & central office applications

## Specifications

ITEM	MODELS	PAH300S, 350S, 450S		
		12V	28V	48V
Nominal Output Voltage	VDC	12V	28V	48V
Input Voltage range	VDC	18-36 or 36-76		
Input Current (Max)	A	8.24-17.4A (model dependant)		
Output Voltage Adjustment	VDC	7.2 - 13.2	16.8 - 33	28.8 - 57.6(5)
Ripple & Noise (max) (pk to pk)	mV	200	280(1)	480
Line Regulation (max)	mV	24	56	96
Load Regulation (max)	mV	24	56	96
Overload Protection	%	105 - 140%, constant current with auto recovery		
Overvoltage Protection (3)	%	115-135%	125-140%(2)	125-145%(6)
Remote Sense	-	Yes		
Remote On/Off (See options)	-	Standard; Low = ON, Open = OFF /P option; Low = OFF, Open = ON		
Temperature (operating)	°C	-40°C to +100°C baseplate, full power(4)		
Temperature (storage)	°C	-40°C to +100°C		
Temperature Coefficient	-	0.02%/°C		
Humidity (operating)	-	5 - 95% RH Non condensing		
Humidity (storage)	-	5 - 95% RH Non condensing		
Cooling	-	Conduction (See Installation Manual for heatsink selection)		
Isolation Voltage	VDC	1500VDC Input to output & baseplate, 500VDC Output to baseplate		
Vibration	-	Non Operating, 10-55Hz (sweep for 1 min.)		
Amplitude	-	0.825mm constant (Max 49 m/s <sup>2</sup> ) X,Y,Z 1 hour each		
Shock	-	196.1m/s <sup>2</sup>		
Safety Agency Approvals	-	UL60950-1, CSA60950-1, EN60950-1, CE LVD (48V input models only)		
Weight (Typ)	g	90/100		
Size (WxHxD)	mm	61x12.7x57.9 See outline drawing		
Warranty	yrs	2		

**Note: See Installation Manual for full details, test methods of parameters and application notes**

- (1) 240mV for PAH300
- (2) 125-145% for PAH450S48-28
- (3) Manual reset

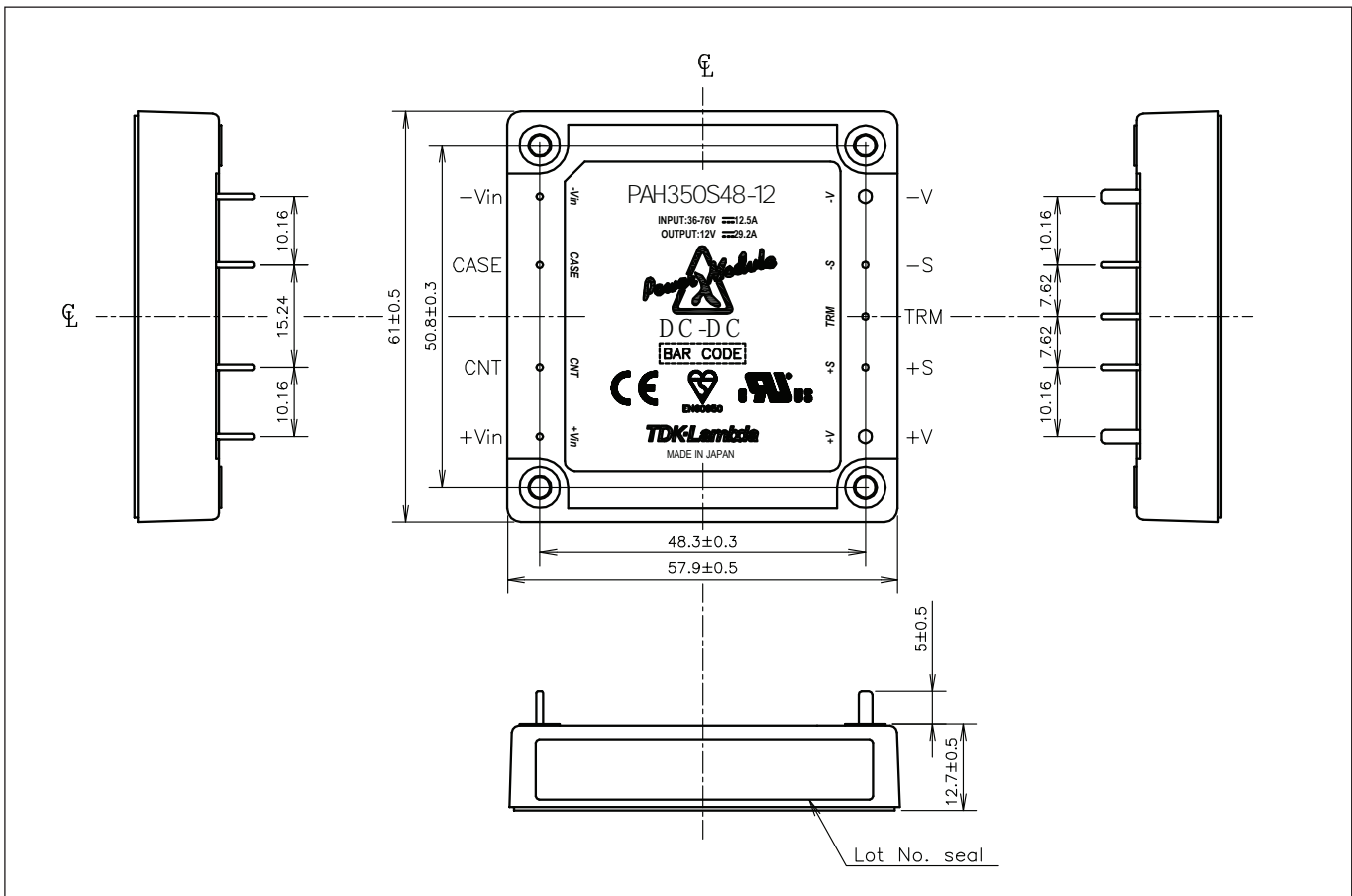
- (4) PAH350S24-28 & -48 derate linearly to 85% load from 90°C to 100°C
- (5) 28.8-52.8 PAH350S24-48
- (6) 115-140% PAH350S24-48

Model Selector					
Model	Input Voltage (V)	Output Voltage (V)	Max. Curr. (A)	Max. Output Power (W)	Efficiency Typ. (%)
PAH300S24-12	18 - 36	12	25	300	87
PAH300S48-12	36 - 76	12	25	300	90
PAH350S48-12	36 - 76	12	29.2	350	89
PAH300S24-28	18 - 36	28	11	308	88
PAH350S24-28	18 - 36	28	12.5	350	88
PAH350S24-48	18 - 36	48	7.3	350	87
PAH300S48-28	36 - 76	28	11	308	90
PAH350S48-28	36 - 76	28	12.5	350	89
PAH450S48-28	36 - 76	28	16	448	92
PAH450S48-48	36 - 76	48	9.4	451	92

Pinout	
Pin Description	Function
-Vin	Negative Input Terminal
+Vin	Positive Input Terminal
CNT	On / Off Control terminal
+V	Positive Output Terminal
-V	Negative Output Terminal
TRIM	Output adjustment Trim pin
+S	Positive Remote sense
-S	Negative Remote sense

Options	
Suffix	Description
-	M3 Tapped inserts for mounting
/T	M3 clearance inserts for mounting
/P	Positive logic remote On/Off (not on PAH450S)

## Outline Drawing PAH300/450 Series





**TDK-Lambda France SAS**

3 Avenue du Canada  
 Parc Technopolis  
 Bâtiment Sigma  
 91940 les Ulis  
 France  
 Tel: +33 1 60 12 71 65  
 Fax: +33 1 60 12 71 66  
[france@fr.tdk-lambda.com](mailto:france@fr.tdk-lambda.com)  
[www.fr.tdk-lambda.com](http://www.fr.tdk-lambda.com)



**Italy Sales Office**

Via dei Lavoratori 128/130  
 20092 Cinisello Balsamo (MI)  
 Italy  
 Tel: +39 02 61 29 38 63  
 Fax: +39 02 61 29 09 00  
[info.italia@it.tdk-lambda.com](mailto:info.italia@it.tdk-lambda.com)  
[www.it.tdk-lambda.com](http://www.it.tdk-lambda.com)



**Netherlands**

[info@nl.tdk-lambda.com](mailto:info@nl.tdk-lambda.com)  
[www.nl.tdk-lambda.com](http://www.nl.tdk-lambda.com)



**TDK-Lambda Germany GmbH**

Karl-Bold-Strasse 40  
 77855 Achem  
 Germany  
 Tel: +49 7841 666 0  
 Fax: +49 7841 5000  
[info.germany@de.tdk-lambda.com](mailto:info.germany@de.tdk-lambda.com)  
[www.de.tdk-lambda.com](http://www.de.tdk-lambda.com)



**Austria Sales Office**

Aredstrasse 22  
 2544 Leobersdorf  
 Austria  
 Tel: +43 2256 655 84  
 Fax: +43 2256 645 12  
[info@at.tdk-lambda.com](mailto:info@at.tdk-lambda.com)  
[www.de.tdk-lambda.com](http://www.de.tdk-lambda.com)



**Switzerland Sales Office**

Bahnhofstrasse 50  
 8305 Dietlikon  
 Switzerland  
 Tel: +41 44 850 53 53  
 Fax: +41 44 850 53 50  
[info@ch.tdk-lambda.com](mailto:info@ch.tdk-lambda.com)  
[www.de.tdk-lambda.com](http://www.de.tdk-lambda.com)



**Nordic Sales Office**

Haderslevvej 36B  
 DK-6000 Kolding  
 Denmark  
 Tel: +45 2911 9556  
[info@dk.tdk-lambda.com](mailto:info@dk.tdk-lambda.com)



**TDK-Lambda UK Ltd.**

Kingsley Avenue  
 Ilfracombe  
 Devon EX34 8ES  
 United Kingdom  
 Tel: +44 (0) 12 71 85 66 66  
 Fax: +44 (0) 12 71 86 48 94  
[powersolutions@uk.tdk-lambda.com](mailto:powersolutions@uk.tdk-lambda.com)  
[www.uk.tdk-lambda.com](http://www.uk.tdk-lambda.com)



**TDK-Lambda Ltd.**

Kibbutz  
 Givat Hashlosha 48800  
 Israel  
 Tel: +9 723 902 4333  
 Fax: +9 723 902 4777  
[info@tdk-lambda.co.il](mailto:info@tdk-lambda.co.il)  
[www.tdk-lambda.co.il](http://www.tdk-lambda.co.il)



**C.I.S.**

**Commercial Support:**  
 Tel: +7 (495) 665 2627  
**Technical Support:**  
 Tel: +7 (812) 658 0463  
[info@tdk-lambda.ru](mailto:info@tdk-lambda.ru)  
[www.tdk-lambda.ru](http://www.tdk-lambda.ru)

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