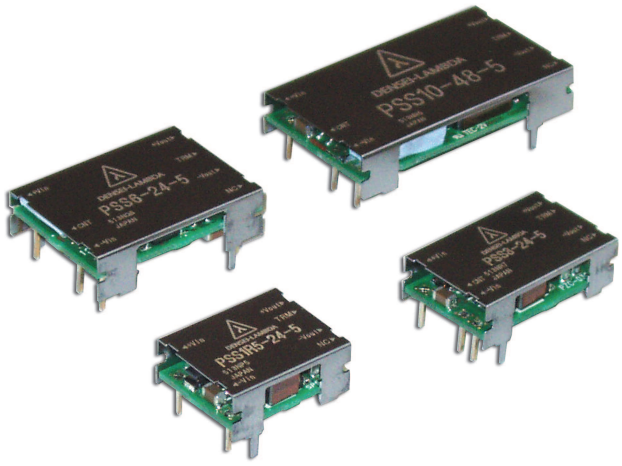
Ultra Compact, 1.5W to 12W Single and Dual DC-DC Converters

Features

- Compact Footprint / Low Profile
- Through Hole or SMT Versions
- 5V, 12V, 24V & 48V Inputs
- 3.3 to 30V* Single, ±12 to 15V Dual Outputs
- Output Voltage Adjustment
- Input - Output Isolation
- RoHS Compliant Design
- 5 Year Warranty
- Self contained
- Multiple Input Voltage configurations
- Open frame (no potting)



Key Market Segments & Applications

Industrial COMM

RoHS

Specifications

Model		3.3V	5V	12/15V (24/30V)*
DC Input	V	5V: 4.5-9.0V, 12V: 9-18V, 24V: 18-36V, 48V: 36-76V		
Efficiency	-	73 to 84% model dependant		
Output Voltage Accuracy	%	±5%		
Output Adjustment	V	2.84V-3.67V	4.3V-6V	12V-15V (24-30V)*
Line Regulation	mV	PSS: 20mV, PSD: 40mV		
Load Regulation	mV	PSS: 40mV, PSD: 600mV		
Temperature Coefficient	%/ °C	<0.02%/°C		
Preload		No preload required		
Output Ripple	mV	100	100	120
Overcurrent Protection	-	Output current limiting with automatic recovery.		
Overvoltage protection	-	No		
Remote On/Off (1)	-	Logic low (open to shutdown)		
Operating Temp. - Convection	-	-40 to 85°C, derates linearly to 40% load from 50 to 85°C		
Operating Temp. - Forced Air	-	-40 to 85°C with 1m/s air full load		
Storage Temperature	°C	-40°C to 85°C		
Humidity (Non condensing)	-	5 - 95% RH		
Isolation Voltage	-	500VAC 1 min. Input-Output, Input-Chassis		
Isolation Resistance	-	>100M at 25°C and 70%RH, 500VDC Output-Chassis		
Shock	m/s^2	196.1m/s^2		
Vibration (non operating)	-	10-55-10Hz (sweep for 1 min.) 0.825mm constant (Max 147m/s^2) 1 hour X, Y, Z		
Weight	-	PS1R5: 4g, PS3: 5g, PS6: 8g, PS10:14g		
Size (L"x W"x H") (Through hole and SMT package)	in	PSS/PSD1R5: 0.79 x 0.63 x 0.31; PSS/PSD3: 1.02 x 0.63 x 0.31 PSS/PSD6: 1.12 x 0.8 x 0.31, PSS10: 1.59 x 0.866 x 0.31		
Warranty	yrs	Five Years		

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

* For 24/30V output use PSD models - connect across +Vout & -Vout and leave "common" pin not connected

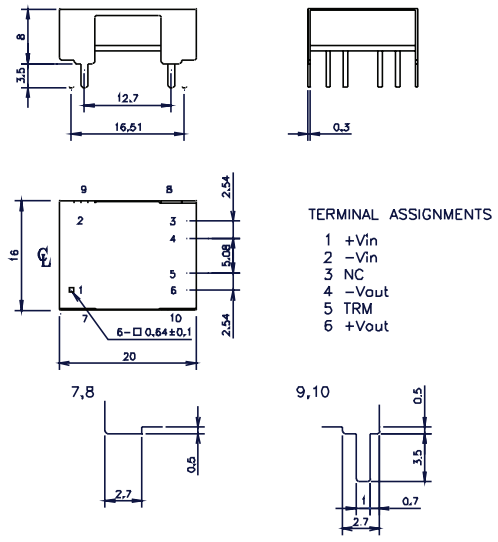
(1) Not available on PS1R5

Not Recomended For New Designs

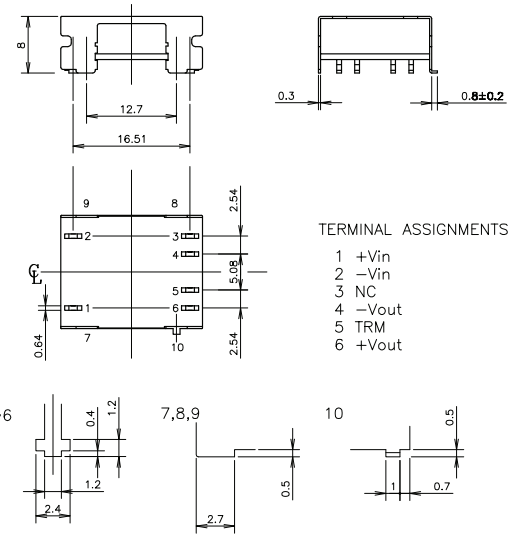
Model Selector

Output Voltage (V)	Output Current (A)	Max Output Power (W)	5V Input	12V Input	24V Input	48V Input
Single Outputs						
3.3	0.4	1.32	PSS1R5-5-3R3	PSS1R5-12-3R3	PSS1R5-24-3R3	PSS1R5-48-3R3
3.3	0.6	1.98	PSS3-5-3R3	PSS3-12-3R3	PSS3-24-3R3	PSS3-48-3R3
3.3	1.2	3.96	PSS6-5-3R3			
3.3	1.5	4.95		PSS6-12-3R3	PSS6-24-3R3	PSS6-48-3R3
3.3	2.0	6.6	PSS10-5-3R3	PSS10-12-3R3		
3.3	2.5	8.25			PSS10-24-3R3	PSS10-48-3R3
5.0	0.3	1.5	PSS1R5-5-5	PSS1R5-12-5	PSSIR5-24-5	PSS1R5-48-5
5.0	0.6	3.0	PSS3-5-5	PSS3-12-5	PSS3-24-5	PSS3-48-5
5.0	1.0	5.0	PSS6-5-5	-	-	-
5.0	1.2	6.0	-	PSS6-12-5	PSS6-24-5	PSS6-48-5
5.0	1.6	8.0	PSS10-5-5			
5.0	2.0	10.0	-	PSS10-12-5	PSS10-24-5	PSS10-48-5
12 (15)	0.125 (0.1)	1.5	PSS1R5-5-12	PSS1R5-12-12	PSS1R5-24-12	PSS1R5-48-12
12 (15)	0.25 (0.2)	3.0	PSS3-5-12	PSS3-12-12	PSS3-24-12	PSS3-48-12
12 (15)	0.5 (0.4)	6.0	PSS6-5-12	PSS6-12-12	PSS6-24-12	PSS6-48-12
12 (15)	0.7 (0.56)	8.4	PSS10-5-12			
12 (15)	1.0 (0.8)	12.0		PSS10-12-12	PSS10-24-12	PSS10-48-12
Dual Outputs						
±12(15)*	±0.065 (0.052)	1.44	PSD1R5-5-1212	PSD1R5-12-1212	PSD1R5-24-1212	PSD1R5-48-1212
±12(15)*	±0.13 (0.1)	3.0	PSD3-5-1212	PSD3-12-1212	PSD3-24-1212	PSD3-48-1212
±12(15)*	±0.25 (0.2)	6.0	PSD6-5-1212	PSD6-12-1212	PSD6-24-1212	PSD6-48-1212
±12(15)*	±0.35 (0.28)	8.4	PSD10-5-1212			
±12(15)*	±0.50 (0.40)	10.8		PSD10-12-1212	PSD10-24-1212	PSD10-48-1212

PSS1R5 Outline Drawing



PSS1R5/S Outline Drawing



Options

Suffix	Description
Blank	Through hole mounting
/S	Surface mount

Other Industrial Products

X	10 - 20W, 24 & 48V input DC-DC converters
PX	10 - 40W 12, 24, 48V DC-DC converters
PAQ, PAH, PAF	50 -700W quarter, half & full bricks

For Additional Information, please visit
us.tdk-lambda.com/lp/products/ps-series.htm