

# PSD-A40W Series

## 40 Watts Compact Size DIN-Rail Power Supply



### Features

- Extra slim design with 40 watts output
- High power density: 2.27 watts per inch<sup>3</sup>
- Input range 85 ~ 264 V<sub>AC</sub>/ 110 ~ 375 V<sub>DC</sub>
- Power boost with 150% peak load
- Full load output up to 60°C
- Adjustable output

### Specifications

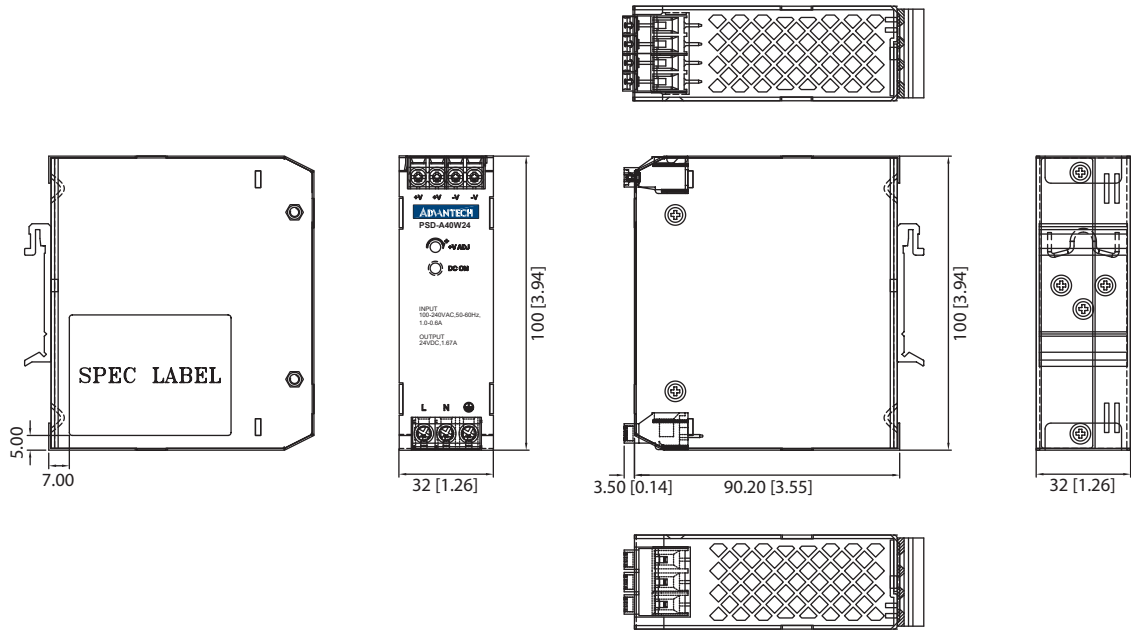
	Model	PSD-A40W12	PSD-A40W24	PSD-A40W48
<b>Output</b>	Output Voltage	12V <sub>DC</sub>	24V <sub>DC</sub>	48V <sub>DC</sub>
	Output Voltage Adjustment Range	12V <sub>DC</sub> to 14V <sub>DC</sub>	22V <sub>DC</sub> to 27V <sub>DC</sub>	46V <sub>DC</sub> to 50V <sub>DC</sub>
	Rated Current	3.34A	1.67A	0.84A
	Peak Current (Max Output Current, 3 seconds)	5.00A	2.50A	1.25A
	Efficiency (typical)	88%	89%	89%
	Output Power	40 Watts		
	Accuracy (%)	±1%		
	Max. Ripple & Noise (mVp-p)	120 mVp-p		
	Line Regulation	±1%		
	Load Regulation	±1%		
	Hold-up Time	115V/60Hz: 16ms Minimum; 230V/50Hz: 20ms. Minimum		
<b>Input</b>	Input Voltage	85 ~ 264 V <sub>AC</sub> ; 110 ~ 375 V <sub>DC</sub>		
	Input Frequency	47 ~ 63 Hz		
	Input Current	< 0.93 A @ 115V <sub>AC</sub> , < 0.40 A @ 230V <sub>AC</sub>		
	Max. Inrush Current	80A @ 230V <sub>AC</sub> , cold start @ 25°C and full load		
	Leakage Current	< 1 mA when power supply is connected to 240V <sub>AC</sub> /60Hz		
<b>Protection</b>	OVP (Over Voltage Protection)	16V max (Latch Mode)	35V max (Latch Mode)	55V max (Latch Mode)
	OCP (Output Peak Current Protection, 3-5 sec.)	5.00A	2.50A	1.25A
	SCP (Short Circuit Protection)	< 0.1 ohm		
	OTP (Over Temperature Protection)	Latch Mode		
<b>Environment</b>	Operating Temperature	-25 ~ 70°C (Please Refer to Power Derating Curve)		
	Cold Start	-40°C		
	Power Derating	Full load to 60°C; output power derated 2.5% per °C		
	Operating Humidity	5 to 95% RH, non-condensing		
	Storage Temperature	-40 ~ 85 °C		
	Operating Altitude	5,000 m		
	Shock Test (Non-Operating)	IEC60068-2-27, 30G (300m/S <sup>2</sup> ) for a duration of 18ms		
Vibration Test (Non-Operating)	IEC60068-2-6, 10Hz to 150Hz @ 50m/S <sup>2</sup> (5G peak); 90 min per axis for all X, Y, Z direction			
<b>Insulation</b>	Withstand Voltage	I/P-O/P: 3KV <sub>AC</sub> , I/P-FG: 2KV <sub>AC</sub> , O/P-FG: 0.5KV <sub>AC</sub> , O/P-DC OK: 0.5KV <sub>AC</sub>		
	Insulation Resistance	AC input - DC output/FG, DC output - FG: >100M Ohms / 500V <sub>DC</sub>		
<b>Safety &amp; EMC</b>	CB/UL/CCC	IEC 62368-1/GB4943.1		
	EMC Emission	EN55032 (CISPR32), EN61000-3-2, EN61000-3-3, EN55011		
	EMC Immunity	EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2, EN61000-6-4, EN61204-3, heavy industry level, criteria A, SEMI F47		

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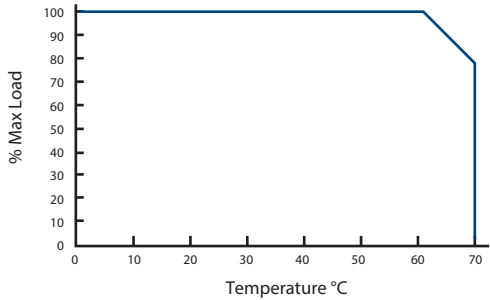
<b>Mechanical</b>	level, criteria A, SEMI F47	Metal Case
	Input Connector	3 Pins (300V/ 20A)
	Output Connector	4 Pins (300V/ 20A)
	Terminal Type	Screw Terminal (Screw Torque: 5.5 lb. per inch)
	Wire	AWG22-16
	Mounting Rail	Standard TS35 DIN-Rail in accordance with EN60715
	Cooling System	Conventional
	Dimensions (W x H x D)	32 x 100 x 90.2 mm / 1.26 x 3.94 x 3.54 inch
<b>Reliability and Warranty</b>	Weight	305±5 g / 0.671 lb.
	MTBF (hours)	500,000 (based on SR-332)
	Warranty	3 Years

Dimensions

Unit: mm [inch]



Derating Curve



PSD-A40W series full load to 60°C, with 2.5% derating per °C

Ordering Information

Part Number	Description
PSD-A40W12	12 V <sub>DC</sub> / 40 Watts DIN-Rail Power Supply
PSD-A40W24	24 V <sub>DC</sub> / 40 Watts DIN-Rail Power Supply
PSD-A40W48	48 V <sub>DC</sub> / 40 Watts DIN-Rail Power Supply