

## Single Output Industrial Power Supplies



Manufactured by TDK

TDK-Lambda is a collaborative product brand between TDK and the Lambda group.

- ◆ 5 Year Warranty
- ◆ Ultra Thin Package
- ◆ SEMI F47 Compliant (high line AC)
- ◆ Universal Input (85 - 265VAC)
- ◆ High Efficiency

**RoHS**

### Key Market Segments & Applications

Semiconductor Fabrication  
 Test & Measurement  
 LED Signs

### Features and Benefits

Feature	Benefit
◆ 5 Year Warranty	◆ Lower Cost of Ownership
◆ Ultra Thin Package	◆ Allows use in small spaces
◆ Wide range AC Input	◆ Supports global use

### Specifications

MODELS		50W	100W	150W	300W
ITEMS					
Input Voltage range (1)		85 - 265VAC (47 - 440Hz), 120-370VDC			
Input Current (100/200VAC) (Typ)	A	0.7 / 0.4	1.5 / 0.75	1.9 / 1.0	2.0 / 4.0
Inrush Current (100/200VAC)	A	14 / 28			15 / 30
Power Factor	-	Meets EN61000-3-2			
Overcurrent Protection	-	Yes, typically 105 - 125% (100 & 150W hiccup style)			
Overvoltage Protection	V	Yes, typically 120-140%. Cycle input to reset			
Hold Up Time (100/200VAC)	ms	>20			
Leakage Current (max at 240VAC)	mA	0.6	0.45	0.65	0.75
Load Regulation	%	0.4% (0-100% load change)			
Line Regulation	%	0.2% (85-132 or 170-265VAC line change)			
Remote Sense	-	Yes			
Current Share	-	No			Yes
Remote On/Off	-	Yes, see instruction manual on website			
DC Fail Signal	-	No			Yes
Indicator	-	Green LED = ON			
Operating Temperature	-	-10°C to +71°C, -20°C start up. See derating curves on sheet 2			
Storage Temperature	°C	-30 to +75°C			
Humidity (non condensing)	-	10 - 95%RH			
Cooling	-	Convection			
Withstand Voltage	-	Input to Ground 2kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min.			
Isolation Resistance	-	>100M at 25C & 70%RH, Output to Ground 500VDC			
Vibration (non operating)	-	5 - 200Hz (10 min sweep), 19.6m/s <sup>2</sup> , 1 hour (Amplitude 10mm)			
Shock (Vertical mounting)	-	392m/s <sup>2</sup>	196m/s <sup>2</sup>	588m/s <sup>2</sup>	
Safety Agency Approvals	-	UL60950-1, CSA60950-1 (cUL), EN60950-1, CE Mark			
Line Dip	-	Complies with SEMI F47 (200VAC line only)			
Conducted & Radiated EMI	-	EN55011 / EN55022-B, FCC-B			
Immunity	-	IEC61000-4-2 (Level 4), -3, -4 (Level 3), -5 (Level 4)			
Weight (Typ)	g	290	450	600	1300
Size (WxHxD)	in	0.87x3.23x4.88	0.98x3.23x6.3	1.18x3.62x7.09	1.57x4.72x9.84
Warranty	yr	Five Years			

(1) Safety approvals do not cover DC input

(2) 100/200VAC

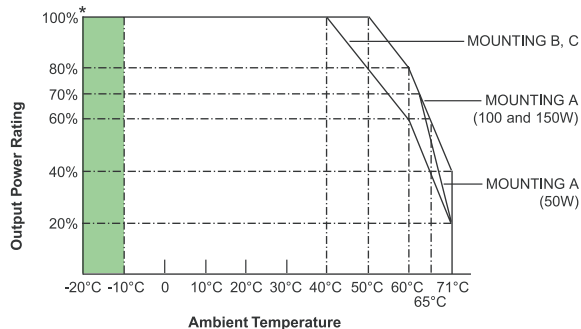
See website technical downloads for detailed information

## Output Ratings

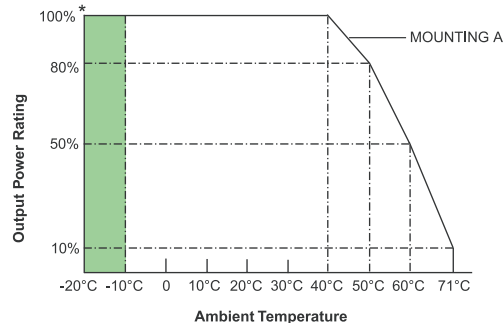
Model	Voltage	Adj. Range	Max Curr. (A)	Max Pwr (W)	Ripple/Noise (mV)	Eff (typ)% <sup>2</sup>	Pack. Size
RTW03-12R	3.3V	2.6 - 4.0	12.5	41.2	120	75 / 77	50W
RTW03-25R	3.3V	2.6 - 4.0	25	82.5	120	79 / 81	100W
RTW03-35R	3.3V	2.6 - 4.0	35	115.5	120	80 / 83	150W
RTW03-70RL	3.3V	1.8 - 3.6	70	231	120	83 / 86	300W
RTW05-10R	5V	4.0 - 5.8	10	50	120	80 / 82	50W
RTW05-20R	5V	4.0 - 5.8	20	100	120	83 / 85	100W
RTW05-30R	5V	4.0 - 5.8	30	150	120	83 / 86	150W
RTW05-60RL	5V	3.5 - 5.6	60	300	120	84 / 87	300W
RTW12-4R3	12V	9.6 - 13.2	4.3	51.6	150	81 / 83	50W
RTW12-8R4	12V	9.6 - 13.2	8.4	100.8	150	84 / 86	100W
RTW12-12R	12V	9.6 - 13.2	12.5	150	150	84 / 87	150W
RTW12-25RL	12V	7.2 - 14.4	25	300	150	83 / 86	300W
RTW15-3R5	15V	12.0 - 16.5	3.5	52.5	150	82 / 85	50W
RTW15-6R7	15V	12.0 - 16.5	6.7	100.5	150	85 / 87	100W
RTW15-10R	15V	12.0 - 16.5	10	150	150	84 / 87	150W
RTW15-20RL	15V	10.5 - 18.0	20	300	150	83 / 86	300W
RTW24-2R2	24V	19.2 - 26.4	2.2	52.8	200	82 / 85	50W
RTW24-4R2	24V	19.2 - 26.4	4.2	100.8	200	85 / 87	100W
RTW24-6R3	24V	19.2 - 26.4	6.3	151.2	150	86 / 88	150W
RTW24-13RL	24V	16.8 - 26.4	13	312	200	85 / 88	300W
RTW28-1R8	28V	22.4 - 30.8	1.8	50.4	200	82 / 85	50W
RTW28-3R6	28V	22.4 - 30.8	3.6	100.8	200	85 / 87	100W
RTW28-5R4	28V	22.4 - 30.8	5.4	151.2	200	86 / 88	150W
RTW28-11RL	28V	19.6 - 33.6	11	308	200	85 / 88	300W
RTW48-1R1	48V	38.4 - 52.8	1.1	52.8	300	82 / 85	50W
RTW48-2R1	48V	38.4 - 52.8	2.1	100.8	300	85 / 88	100W
RTW48-3R2	48V	38.4 - 52.8	3.2	153.6	200	86 / 89	150W
RTW48-6R5L	48V	33.6 - 55.0	6.5	312	300	86 / 89	300W

## Derating Curves

RTW 50-150W (without cover option)



RTW 300W



## Options

Suffix	Description
Blank	No cover
L	Vertical terminal block (50-100W models only)
C	Cover (50W, 100W & 150W models)
H	Cover (300W models), Remove 'L' suffix when specifying

## Other Lambda Industrial Products

HWS	15W to 1500W Single Output
LZSa	500W to 1500W Single output
DPP, DLP & DHP	15W to 960W DIN Rail Mount
SWS	50W to 1000W Single Output (Light industrial)

For Additional Information, please visit  
[www.lambdapower.com/products/rtw-series.htm](http://www.lambdapower.com/products/rtw-series.htm)