



## 1000 to 2500W Front End Power Supplies

- ◆ 2U high
- ◆ Up to 12,500W in 19" rack
- ◆ Hotswap capable
- ◆ >90% efficiency
- ◆ Full power at 65°C ambient

**RoHS**

### Key Market Segments & Applications

Power for Distributed Power Architecture  
Factory Automation

### Features and Benefits

Feature	Benefit
◆ 2U high	◆ Utilizes less cabinet space
◆ Hotswap capable	◆ Suitable for N+1 redundancy
◆ High efficiency	◆ Higher density
◆ Full array of signals	◆ Easier system monitoring

### Specifications

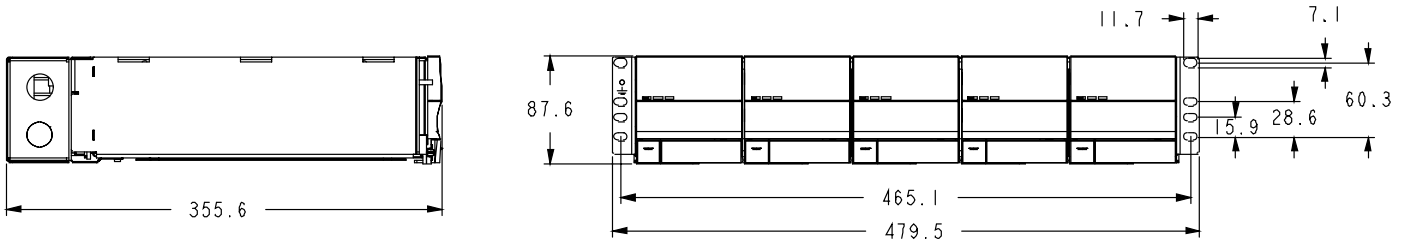
ITEMS	MODEL		24V Nominal (Factory Set)	48V Nominal (Factory Set)
	(1)	VDC	21 - 28V	42 - 56V
Output Voltage Range	(1)	VDC	21 - 28V	42 - 56V
Total Regulation		%	±1	
Current limit		%	105 to 120%	
Short Circuit Current		%	150% maximum	
Output Noise		mV	480mV maximum, peak to peak (10Hz to 20MHz)	
Output Rise Time		-	100 - 400ms	
Dynamic Response		-	3% in 10ms for a 10 - 100% load change	
Oversoltage Protection	(3)	VDC	27 to 30V	54 to 60V
Load sharing		-	±10%	
I2C programming	(1)	-	Set Output Volt., Monitors AC Present, Converter OK, Thermal profile, Fan fail	
Signals (opto isolated)	(2)	-	Converter OK, AC Present, and Over-temperature alarms. Active Low on Fail	
Remote On/Off		-	Shuts down output(s) by applying 5V	
Auxiliary Output		-	12V 0.1A bias voltage	
AC Input		-	TL1000: 90~264VAC, 95VAC start up; TL1500-2500: 180~264VAC, 185VAC start up	
Power Factor		-	0.99 Typical meets EN61000-3-2	
Inrush Current		A	<40A	
Leakage Current		mA	<3.2mA	
Efficiency (typical)		%	92%	
Immunity		-	EN61000-4-2, -3, -4, -5, -6, -8	
EMC (conducted and radiated)		-	EN55022, level B, FCC Class B	
Operating Temperature		-	-40°C to +65°C, short duration at 75°C, no derating (TL250048: -40°C to 65°C)	
Storage Temperature		-	-40 to +85°C	
Humidity		-	5 - 95% RH non condensing	
Altitude		-	-200 to 8000 feet, derate max. ambient 2°C/1000 feet	
Shock		-	IEC68-2-27, MIL STD 810E, 20G	
Vibration		-	IEC68-2-64 (random) 20 - 200Hz, 30 minutes	
Safety Agency		-	UL60950, CSA 22.2 No. 60950-00, EN60950, CE Mark	
Size (L x W x H)		-	11.12" x 3.41" x 3.45" (stand alone), 14" x 18.9" (incl. ears) x 3.45" (TLR5 rack)	
Weight		lbs	Stand alone unit: 5.6lbs, Rack: 9.5lbs	
Warranty		-	Two Years	

(1) Contact Factory for application

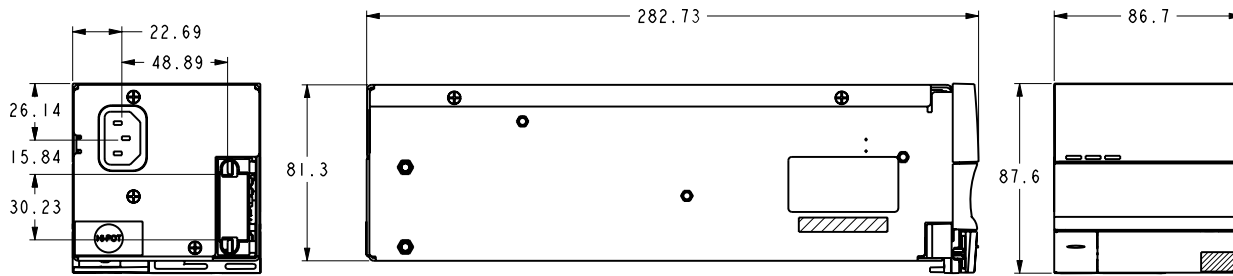
(2) All three signals share a common return - Logic GND

(3) Factory Programmable

## TL Rack Outline Drawing



## TL Module Outline Drawing



## Other Lambda Industrial Products

FPS	1U 1kW to 3kW Front end
PX, CC-E, PAQ, PAH, PAF	DC-DC Converters
HWS, LZSA	15W to 1800W Single output

For Additional Information, please visit  
[us.tdk-lambda.com/lp/products/tl-series.htm](http://us.tdk-lambda.com/lp/products/tl-series.htm)

## Models

Model	Output Voltage	Output Current	Maximum Power
TL100024	24V	40A	1000W
TL150024	24V	55A	1500W
TL100048	48V	20A	1000W
TL150048	48V	30A	1500W
TL250048	48V	50A	2500W
TLR5	19" Rack, holds up to 5 TL Modules		
TLRBP	Blanking Panel for One Module Slot		
TLRC01	Signal Cable		
TLCK232	RS232 Communications Kit		