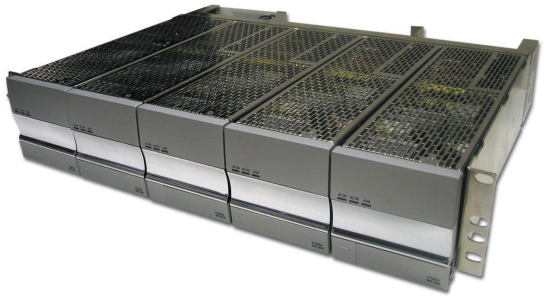
1000 to 2500W Front End Power Supplies

Features

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



RoHS

Specifications

Model			24V Nominal (Factory Set)	48V Nominal (Factory Set)
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	
Overvoltage Protection	(3)	VDC	27 to 30V	54 to 60V
Load sharing		-	±10%	
Redundancy		-	Internal “or”-ing protection	
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		yrs	Two Years	

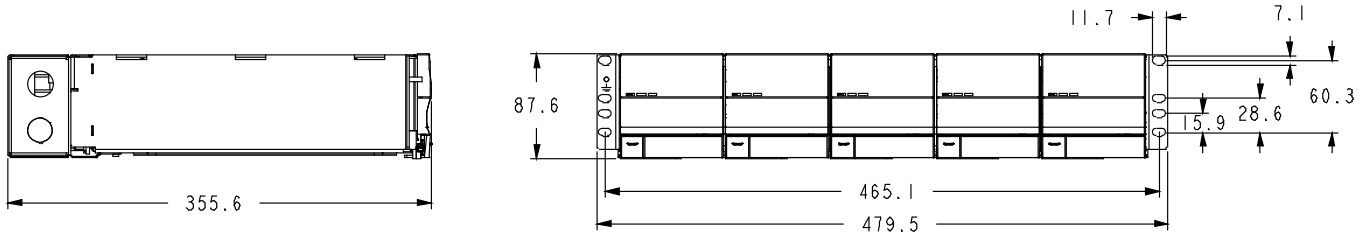
(1) Contact Factory for application

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

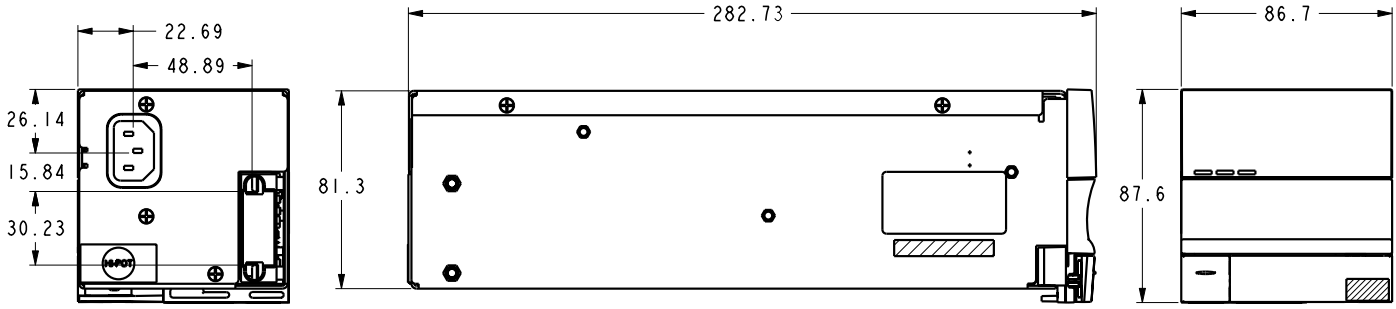
(3) Factory Programmable

Not Recommended For New Designs

TL Rack Outline Drawing



TL Module Outline Drawing



Other 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

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		

Not Recomended For New Designs

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TDK-Lambda:

TL100024 TL100048 TL150024 TL150048 TL200048 TL250048 TL50012 TL50024 TL50048 TL75012 TLHB19 TLR401B TLR5H1 TLRBP TLRC01 TLR5 TLR401A TLCK232