

## Single Output 150 - 200W General Purpose Power Supplies

### Features

- ◆ Very low cost
- ◆ Small Size
- ◆ Wide Range AC Input
- ◆ Convection or Fan Cooled
- ◆ Three year warranty
- ◆ 1.6" high (For 1U racking)



### Key Market Segments & Applications



Specifications		LS200 (Enclosed style with internal fan)	LS200/L (U channel style - no internal fan)
Model		LS200 (Enclosed style with internal fan)	LS200/L (U channel style - no internal fan)
AC Input Voltage (300VAC for 5s)	VAC	85 - 264VAC	85 - 264VAC (3)
Input Frequency	Hz	47 - 63Hz	
DC Input Voltage	VDC	120 - 373VDC	
Inrush Current (230VAC, cold start)	A	60	
Power Factor	-	Meets EN61000-3-2, -3 (Typical PF 0.98/0.95)(1)	
Input Current (115/230VAC)	A	3.5 / 1.7 (typical)	
Temperature Coefficient	-	<0.02%/°C (0 - 50°C)	
Overcurrent Protection	-	>105% of nominal or peak. Constant current style	
Overvoltage Protection (2)	V	3.3V: 3.8 - 4.45V, 5V: 5.75 - 6.75V, 7.5V: 8.6 - 10.1V, 12V: 15.1 - 17.75V 15V: 17.25 - 20.25V, 24V: 30.25 - 35.5V, 36V: 41.4 - 48.6V, 48V: 60 - 69.6V	
Overtemperature Protection (2)	-	Yes	
Hold Up Time (115/230V input)	ms	20ms	
Leakage Current (230VAC 60Hz)	mA	<1mA	
Remote Sense	-	Yes	
Remote On/Off	-	On: 0 - 0.8V; Off: 3 - 12V	
LED Indicator	-	Green LED = On	
Operating Temperature	°C	Fan or forced air rating: -25 to +70°C. Derate linearly to 60% load from +50 to +70°C	
Storage Temperature	°C	-40 to +85°C	
Operating Humidity	-	20 - 90% RH (non condensing)	
Storage Humidity	-	10 - 95% RH (non condensing)	
Cooling	-	Internal Fan (air exhausts from fan end)	Convection or customer supplied airflow
Withstand Voltage	-	Input to Ground 1.5kVAC, Input to Output 3kVAC, Output to Ground 500VAC for 1 min.	
Isolation Resistance	-	>100M at 25°C & 70%RH, Output to Ground 500VDC	
Vibration (non operating)	-	10 - 55Hz: 19.6m/s <sup>2</sup> constant sweep 1 min X, Y, Z for 1 hour	
Shock	-	< 196.1 m/s <sup>2</sup> (20G)	
Immunity	-	IEC61000-4-2, -3, -4, -5, -6, -8, -11	
Safety Agency Approvals	-	UL /CSA (cUL) /IEC 60950-1 (2nd Ed), CE Mark (Additionally evaluated to EN 60950-1)	
Conducted & Radiated EMI	-	EN55011/EN55022-B, FCC--B	
Weight (Typ)	g	700	600
Size (LxWxH)	in	7.8 x 3.9 x 1.61"	
Warranty	yrs	Three Years	

#### Notes:

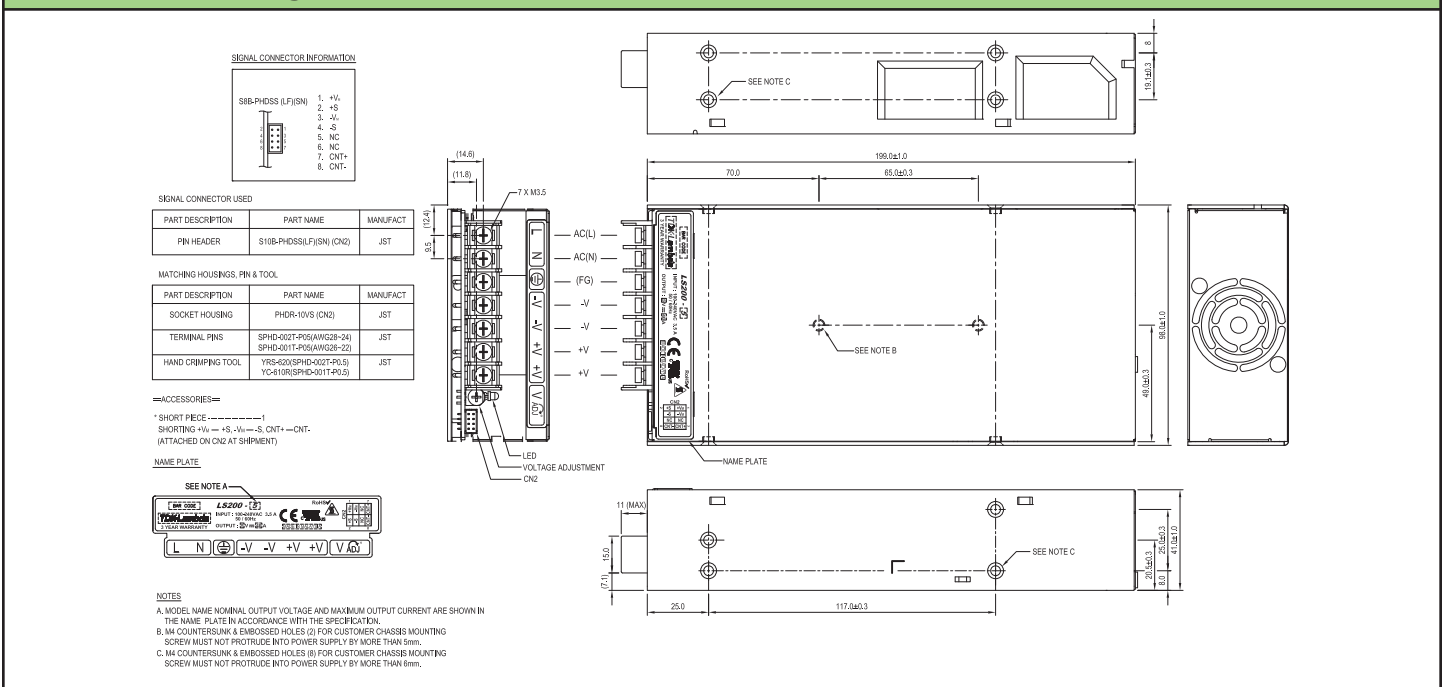
- (1) 115 / 230VAC input
- (2) Recycle AC to reset
- (3) (Derate linearly to 65% load from 115VAC to 85VAC)

## Output Ratings

Model	Adjust Range Voltage (V)	Max Current Forced Air(A) <sup>(4)</sup>	Max Current Convect.(A) <sup>(5)</sup>	Peak Current (A)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV)	Efficiency (typ) % <sup>(1)</sup>
LS200-3.3	3.3V	3.0 - 3.6	40.0	N/A	-	40	16	80 / 68
LS200-5	5V	4.75 - 5.5	40.0	N/A	-	40	20	80 / 75
LS200-7.5	7.5V	6.8 - 8.2	26.7	N/A	-	40	20	80 / 77
LS200-12	12V	10.8 - 14.4	16.7	N/A	-	96	48	76 / 79
LS200-15	15V	13.5 - 16.5	13.4	N/A	-	120	60	80 / 83
LS200-24	24V	22 - 28.8	8.4	N/A	10.4	192	96	82 / 84
LS200-36	36V	32 - 40	5.6	N/A	6.9	288	144	82 / 85
LS200-48	48V	42 - 57.6	4.2	N/A	-	384	192	82 / 85
LS200-3.3/L	3.3V	3.0 - 3.6	40.0	26	-	40	16	80 / 68
LS200-5/L	5V	4.75 - 5.5	40.0	26	-	40	20	80 / 75
LS200-7.5/L	7.5V	6.8 - 8.2	26.7	17.3	-	40	20	80 / 77
LS200-12/L	12V	10.8 - 14.4	16.7	11.6	-	96	48	76 / 79
LS200-15/L	15V	13.5 - 16.5	13.4	9.3	-	120	60	80 / 83
LS200-24/L	24V	22 - 28.8	8.4	5.8	10.4	192	96	82 / 84
LS200-36/L	36V	32 - 40	5.6	3.9	6.9	288	144	82 / 85
LS200-48/L	48V	42 - 57.6	4.2	2.9	-	384	192	82 / 85

Notes  
 (4) With internal fan version LS200-xx or LS200-xx/L version with external airflow.  
 (5) See Installation manual for derating curve.

## Outline Drawing



## Other Related Products

LS25 - 150	25W to 150W low cost
HWS15 - 1800	15W to 1800W limited lifetime warranty
SWS300 - 1000	300 to 1000W single output

## Options

Suffix	Description
/L	No cover or fan (U channel)
Blank	Cover and fan

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

