



## Single and Multiple Output Power Supplies

- ◆ 1U Profile
- ◆ Power Factor & Harmonic Correction
- ◆ Input Transient Protection per EN61000-4
- ◆ Universal Input (85 - 264VAC)
- ◆ Modifications to Standard designs available

### Key Market Segments & Applications

Office Equipment	Copiers, Printers, Projectors, Computer peripherals
Point of Sale	Gaming machines, Vending machines
Light Industrial Controllers	Control panels
Communications	Switches, Routers, Modems, LAN/WAN

## SC150 Features and Benefits

Feature	Benefit
◆ 1U Profile	◆ Saves space in limited area applications
◆ PFC compliant to EN61000-3-2	◆ Supports Global Use
◆ 3.3V & 5V output combinations	◆ Supports Embedded Processor Logic voltage requirements
◆ Level B EMI	◆ Assists System Compliance

## Specifications

MODEL		SC150
ITEMS		
Input Voltage range	-	85 - 264VAC (47 - 65Hz)
Inrush Current (230VAC/50Hz)	A	30 typical - cold start @ 25°C
Power Factor	-	Meets EN61000-3-2
Maximum Output Power	-	90W convection cooled, 150W forced air (300 lfm)
Ripple & Noise	mV	<1% (20MHz bandwidth) pk to pk
Efficiency	-	75% Typically
Overcurrent Protection	-	All outputs short circuit protected
Overvoltage Protection	V	110 to 150% on all outputs
Hold Up Time (Typ)	ms	15 typical @ full load
Leakage Current (max)	mA	<1mA at 264VAC 50Hz.
Remote Sense	-	On outputs 1 & 2: 5V and 3.3V outputs only - compensates for a total of 0.5V
Remote On / Off	-	Inhibit, TTL input "high" = PSU Enabled, "low" = PSU inhibited
AC Power Fail	-	TTL open collector ON = "AC OK"
Operating Temperature	-	0°C to 50°C, (derate 2.5%/°C from 50°C to 70°C) forced air, 0°C to 40°C convection cooled
Storage Temperature	-	-20°C to +85°C
Operating Humidity	-	5 - 95% RH (non condensing)
Cooling	-	300 lfm required for >90W operation
Output-Ground Isolation	-	100VDC
Connection Terminals	-	Molex 0.156" pitch AC input and Channels 3 & 4. Screw terminals Channel 1 & 2, Sense/Signal connector Molex 5268
Vibration (non operating)	-	10 to 200Hz Amplitude 1.5g
Safety Agency Approvals	-	UL1950, CSA950, EN60950, CE Mark
Conducted EMI	-	FCC Class B, EN55022 Class B
Immunity	-	EN61000-4-2, -3, -4, -5 Level 3 Case A
Weight (Typ)	g	900
Size (HxWxD)	mm	203 x 107 x 38 (8 x 4.2 x 1.5 inches)
Warranty	-	One Year

## SC150 Output Code Selector

Output Codes	Nom O/P (V)	Min O/P (A)	Max O/P (A)	Max. O/P Peak (A)	Max. O/P (W) Convect. Cool.	Max. O/P (W) Fan Cool.	Max. O/P (W) Fan Cool.	Regulation Line/Load %
<b>Output 1 (+ only)</b> Adjustment 3.3-3.6V, 5-5.5V, 24-28V, 48-52V								
03	3.3	3.0	15.0	30.0	30.0	50.0	100.0	+/-2%
05	5.0	2.2	15.0	22.0	22.0	75.0	110.0	+/-2%
24	24.0	0.65	3.8	5.0	6.5	91.2	120.0	+/-2%
48	48.0	0.25	1.9	2.5	2.5	91.0	120.0	+/-2%
48A	48.0	0.25	1.9	3.5	3.5	91	170	+/-2%
<b>Output 2 (+ only)</b> Adjustment 03: 3.3-3.6V, 05: 5-5.5V								
03	3.3	0.0	7.5	10.0	10.0	24.75	33.0	+/-2%
05	5.0	0.0	7.5	10.0	10.0	37.5	50.0	+/-2%
12	12.0	0.0	6.0	8.0	13.6	72.0	96.0	+/-3%
15	15.0	0.0	4.9	6.5	11.05	73.5	97.5	+/-3%
24	24.0	0.0	3.0	4.0	6.8	72.0	96.0	+/-3%
<b>Output 3 (specify +/- polarity, see model number example)</b>								
12	12.0	0.0	3.0	4.0	6.8	36.0	48.0	+/-3%
12R	12.0	0.0	1.5	2.0	3.4	18.0	24.0	+/-3%
15R	15.0	0.0	1.2	1.6	2.72	18.0	24.0	+/-3%
05	5.2	0.0	7.5	10.0	10.0	39.0	52.0	+/-3%
5R	5.2	0.0	1.5	2.0	2.0	7.8	10.4	+/-3%
<b>Output 4 (floating)</b>								
1.8	1.8	0.0	2.3	3.0	3.0	4.14	5.4	+/-3%
02	2.0	0.0	2.3	3.0	3.0	4.6	6.0	+/-3%
2.5	2.5	0.0	2.3	3.0	3.0	5.75	7.5	+/-3%
03	3.3	0.0	2.3	3.0	3.0	7.6	10.0	+/-3%
05	5.2	0.0	3.8	5.0	5.0	19.8	26.0	+/-3%
12	12.0	0.0	1.5	2.0	2.0	18.0	24.0	+/-3%
15	15.0	0.0	1.2	1.6	1.6	18.0	24.0	+/-3%
18	18.0	0.0	1.0	1.3	1.3	18.0	23.4	+/-3%
24	24.0	0.0	1.5	2.0	2.0	36.0	48.0	+/-3%
32	32.0	0.0	0.8	1.0	1.0	25.6	32.0	+/-3%
48	48.0	0.0	0.8	1.0	1.0	38.4	48.0	+/-3%

### To configure a SC150 Series part number:

**Step 1:** Select an output code corresponding to your voltage and current requirements for output 1 from the code selector table.  
Example 24V@5A , code = "24".

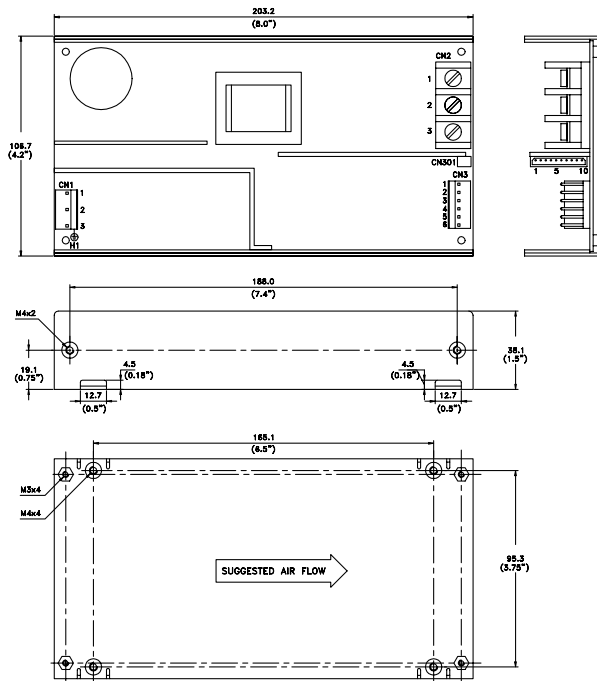
**Step 2:** Select an output code corresponding to your voltage and current requirements for outputs 2, 3, and 4 (omit any output if not required).

**Step 3:** Place the output codes in order of output 1 - 4 after the prefix "SC150U". Examples, if codes 05, 12, 5R, 24 are selected, the part number = "SC150U 05 12 5R 24". For codes 24, 12, part number = "SC150U 24 12"

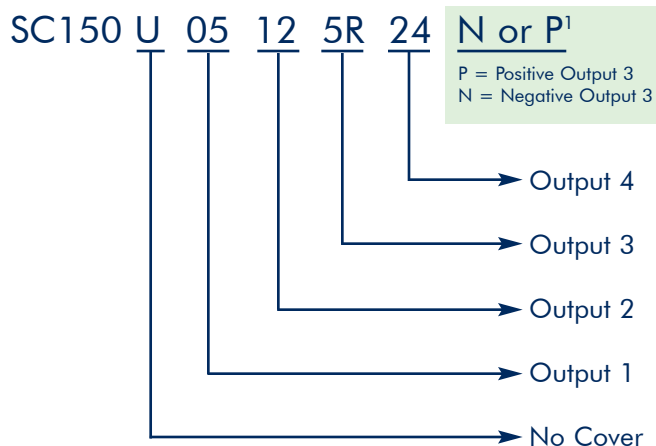
Note: Minimum load requirements are required on output 1 (see output code selector table for values).

Call 1-800-LAMBDA-4 for additional technical support.

## SC150 Outline Drawing



## SC150 Model Number Example



- Notes
1. Output #3 specify +Vout or -Vout by adding suffix as shown.
  2. Output #4 is a floating output voltage.
  3. The power supply will have a minimum of one output and a maximum of four.
  4. The max. output power for Model SC150U48A is 170W under forced air cooled.

For Additional Information, please visit [www.lambdapower.com/products/sc-150.htm](http://www.lambdapower.com/products/sc-150.htm)