

Switching Power Supplies

External Desk-Top

New 80 watt



168 x 78.5 x 44.5 mm

Output Volts DC	Current min-max	Part Number
Single Output		
3V	0-16.60A	SP80903
5V	0-12.00A	SP80905
6V	0-10.83A	SP80906
7.5V	0-8.66A	SP80907
8V	0-9.37A	SP80908
9V	0-8.33A	SP80909
12V	0-6.66A	SP80912
13.5V	0-5.92A	SP80913
15V	0-5.33A	SP80915
18V	0-4.44A	SP80918
24V	0-3.33A	SP80924
27V	0-2.96A	SP80927
33V	0-2.42A	SP80933
40V	0-2.00A	SP80940
48V	0-1.60A	SP80948
Dual Output		
3.3V	.5-7.00A	SP80959
+5V	.1-3.00A	
3.3V	.5-7.00A	SP80960
+12V	.1-2.75A	
5V	.5-7.00A	SP80950
+12V	.3-3.00A	
5V	.5-7.00A	SP80953
+15V	.1-3.00A	
5V	.5-7.00A	SP80954
+24V	.2-2.00A	
+5V	.5-7.00A	SP80955
-24V	.2-2.00A	
Triple Output		
+3.3V	.3-7.00A	SP80980
+12V	.1-3.00A	
-5V	.1-0.80A	
+5V	.5-7.00A	SP80977
+12V	.1-3.00A	
-5V	.1-0.80A	
+5V	.5-7.00A	SP80970
+12V	.1-3.00A	
-12V	.1-0.80A	
+5V	.5-7.00A	SP80974
+15V	.1-3.00A	
-15V	.1-0.50A	
+5V	.5-7.00A	SP80976
+24V	.1-2.00A	
-24V	.1-0.50A	
+5V	.5-7.00A	SP80979
+24V	.1-2.00A	
-12V	.1-0.50A	

Any single output voltage available from 3VDC to 48VDC

Optional on-off switch

Any output connector available

Input Voltage: 90-264VAC, 47-63Hz
 Efficiency: 83% typical at full load
 Overvoltage, overcurrent, short circuit protected
 Working temperature 50°C at full load
 Approvals: UL, c-UL, TUV, CE, CB
 FCC Class B, CSPR 22 Class B
 Remote sensing available

130 Watts PFC

High Power External



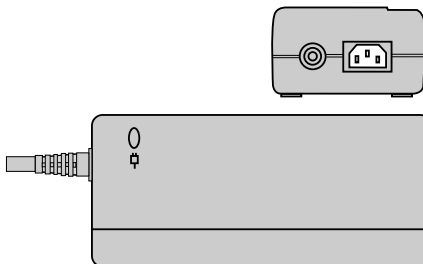
196 x 88 x 50.5 mm

Output Volts DC	Current Min-Max	Total Power Watts	Part Number Single Output
3	0 - 33.30A	100	SP130903
5	0 - 26.00A	130	SP130905
6	0 - 21.60A	130	SP130906
8	0 - 16.25A	130	SP130908
9	0 - 14.40A	130	SP130909
12	0 - 10.83A	130	SP130912
13	0 - 9.63A	130	SP130913
15	0 - 8.67A	130	SP130915
18	0 - 7.22A	130	SP130918
24	0 - 5.41A	130	SP130924
27	0 - 4.81A	130	SP130927
33	0 - 3.94A	130	SP130933
40	0 - 3.25A	130	SP130940
48	0 - 2.71A	130	SP130948
Dual Output*			
+3.3	.50 - 20.00A	83.4	SP130960
+12	.20 - 2.00A		
+5	.50 - 20.00A	130	SP130950
+12	.20 - 2.00A		
+5	.50 - 20.00A	130	SP130953
+15	.20 - 2.00A		
+5	.5 - 20.00A	130	SP130954
+24	.10 - 2.00A		

ANY single output voltage available from 3VDC to 48 VDC

Any output connector available

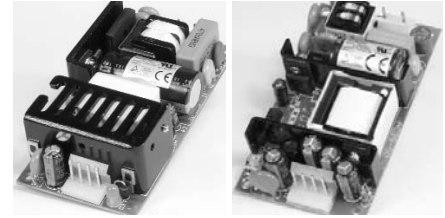
Input Voltage: 90-264VAC, 47-63Hz
 Efficiency: 80% minimum at full load
 Overvoltage protected
 Overcurrent protected, short circuit protected
 Working temperature 50°C at full load
 Approvals: UL, c-UL, TUV, CE
 FCC Class B, CSPR 22 Class B



Open Frame

10, 15, 20 Watt Open Frame

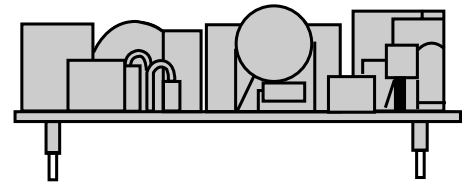
Conventional PCB or Pluggable Module



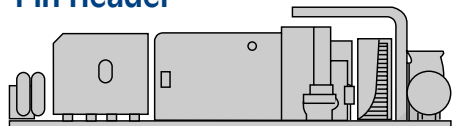
Output Volts DC	Current Min-Max	Part Number:	
		Pin Header	Pluggable
10 Watt			
3.3	0 - 2.50A		SFP10103
5	0 - 2.00A		SFP10105
12	0 - 0.83A		SFP10112
15	0 - 0.67A		SFP10115
24	0 - 0.42A		SFP10124
15 Watt			
3.3	0 - 3.00A		SFP15103
5	0 - 3.00A		SFP15105
12	0 - 1.25A		SFP15112
15	0 - 1.00A		SFP15115
24	0 - 0.63A		SFP15124
20 Watt			
3.3	0 - 4.40A	SF15103	SFP15103
5	0 - 4.40A	SF15105	SFP15105
12	0 - 1.80A	SF15112	SFP15112
15	0 - 1.40A	SF15115	SFP15115
24	0 - 0.92A	SF15124	SFP15124

Input Voltage: 90-264VAC, 47-63Hz
 Efficiency: 80% typical at full load
 Overcurrent, short circuit protected
 Working temperature 45°C at full load
 Approvals: UL, c-UL, TUV, CE
 FCC Class B, CSPR 22 Class B

Pluggable



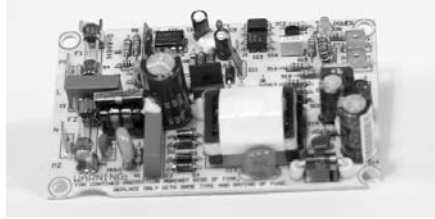
Pin Header



WATTS	PLUGGABLE	PCB, PIN HEADERS
10	2.56" x 1.77" x .91" 65 x 45 x 23 mm	
15	2.75" x 1.89" x .984" 69.9 x 48 x 25 mm	
20	3.5" x 2" x .8" 88.6 x 50.8 x 20.32 mm	3.5" x 2" x .8" 88.6 x 50.8 x 20.32 mm

Switching Power Supplies

2.4"X4.2" PCB 25 Watts



Output Volts DC	Current	Part Number
3.3V	0-5A	SF25103
5	0-5A	SF25105
7.5	0-3.3A	SF25107
12	0-2.1A	SF25112
13.5	0-1.9A	SF25113
15	0-1.7A	SF25115
24	0-1A	SF25124
48	0-0.5A	SF25148
OUTPUT VOLTAGE AND CURRENT RATING: DUAL OUTPUTS		
+5V	0.2-2.5A	SF25250
+12V	0.1-1.5A	
+5V	0.2-2.0A	SF25254
+24V	0.1-1.0A	
+5V	0.1-1.3A	SF25255
-5V	0.1-2.5A	
+12V	0.1-1.2A	SF25256
-12V	0.1-1.2A	
+15V	0.1-1.0A	SF25257
-15V	0.1-1.0A	
+3.3V	0.2-5.0A	SF25259
+5V	0.1-4.0A	

107 X 61 X 28

2"X4"X1.2" 40 Watts

Output Volts DC	Current Min-Max	Part Number
3.3	0 - 6.00A	SF40103
5	0 - 6.00A	SF40105
9	0 - 4.45A	SF40109
12	0 - 3.34A	SF40112
15	0 - 2.67A	SF40115
24	0 - 1.67A	SF40124
48	0 - 0.83A	SF40148

101.6 x 50.8 x 30.48 mm

Note: Single Output 60 Watt models available in 2x4 inch size from 3.3 through 48VDC. Call or e-mail for details

Input Voltage: 90-264VAC, 47-63Hz
 Efficiency: 75% typical at full load
 Overcurrent protected
 Short circuit protected
 Working temperature 50°C at full load
 Approvals: UL, c-UL, TUV, CE
 FCC Class B, CSPR 22 Class B



3"X5", Open Frame, 60 and 120 Watts 60 Watts, 1.09" height

Output Volts DC	Part Number
OUTPUT VOLTAGE AND CURRENT RATING: SINGLE OUTPUT	
3.3VDC	SF60103
5VDC	SF60105
12VDC	SF60112
13.5VDC	SF60113
15VDC	SF60115
18VDC	SF60118
24VDC	SF60124
30VDC	SF60130
36VDC	SF60136
48VDC	SF60148
OUTPUT VOLTAGE AND CURRENT RATING CHART: MULTI OUTPUT	
+3.3V, +12V	SF60260
+5V, +12V	SF60250
+5V, +15V	SF60253
+5V, +24V	SF60254
+3.3V, +5V	SF60259
+5V, -24V	SF60262
+3.3V, +48V	SF60265
+5V, +28V	SF60266
+5V, +36V	SF60267
+3.3V, +12V, -12V	SF60382
+3.3V, +12V, -12V	SF60383
+5V, +12V, -5V	SF60377
+5V, +12V, -5V	SF60384
+3.3V, +12V, +5V	SF60370
+3.3V, +12V, -12V	SF60385
+5V, +15V, -15V	SF60374
+5V, +15V, +15V	SF60386
+5V, +24V, -24V	SF60376
+5V, +24V, -24V	SF60387
+5V, +24V, +24V	SF60379
+5V, +24V, -12V	SF60388
+3.3V, +12V, -5V	SF60380
+3.3V, +12V, +5V	SF60389
+5V, +10V, -10V	SF60390
+5V, +10V, +10V	SF60391
+3.3V, +5V, +12V	SF60392
+3.3V, +5V, -12V	SF60393
+3.3V, +12V, -12V, -5V	SF60401
+3.3V, +12V, -12V, +5V	SF60402
+3.3V, +12V, +12V, -5V	SF60403
+3.3V, +12V, +12V, +5V	SF60403
+5V, +12V, +12V, -5V	SF60405
+5V, +12V, -12V, +5V	SF60406
+5V, +12V, -12V, -5V	SF60407
+5V, +12V, +12V, +5V	SF60408
+5V, +12V, -12V, +12V	SF60409
+5V, +12V, +12V, +12V	SF60410
+5V, +12V, -12V, -12V	SF60411
+5V, +12V, -12V, +12V	SF60412
+5V, +12V, -12V, +24V	SF60413
+5V, +12V, +12V, +24V	SF60414
+5V, +12V, +12V, -24V	SF60415
+5V, +12V, -12V, -24V	SF60416
+5V, +15V, -15V, -5V	SF60417
+5V, +15V, -15V, +5V	SF60418
+5V, +15V, +15V, -5V	SF60419
+5V, +15V, +15V, +5V	SF60420
+5V, +24V, -15V, +12V	SF60421

127 X 76.2 X 27.1 mm

ANY single output voltage available from 3VDC to 50VDC

60 watt mechanical options:
 2 or 3 pin AC input, U-Channel
 with overall height 37.6mm, Vented cover:
 order as SFC Series

Input Voltage: 90-264VAC, 47-63Hz, Efficiency: 83% typical at full load, Overvoltage, Overcurrent, Short circuit protected, Working temperature 50°C at full load
 Approvals: UL, c-UL, TUV, CE, FCC Class B, CSPR 22 Class B

Max Output Power Single Outputs: 3.3V - 0 - 50 watts, 5V - 0 - 55 watts, 12 volts up: 0 - 63 watts.

Multiple Outputs Total combined power = 63 watts except models with 3.3VDC on output #1: 48 watts typical.

120 Watts PFC



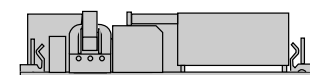
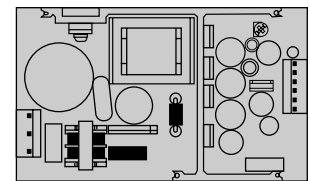
Output Volts DC	Part Number
3.3	SF120103
5	SF120105
12	SF120112
13.5	SF120113
15	SF120115
24	SF120124
36	SF120136
48	SF120148
OUTPUT VOLTAGE AND CURRENT RATING: MULTI OUTPUT	
+3.3V, +12V	SF120260
+5V, +12V	SF120250
+5V, +15V	SF120253
+5V, +24V	SF120254
+3.3V, +5V	SF120259
+5V, -24V	SF120262
+3.3V, +12V, -12V	SF120382
+3.3V, +12V, -12V	SF120383
+5V, +12V, -5V	SF120377
+5V, +12V, -5V	SF120384
+3.3V, +12V, +5V	SF120370
+3.3V, +12V, -12V	SF120385
+5V, +15V, -15V	SF120374
+5V, +15V, +15V	SF120386
+5V, +24V, -24V	SF120376
+5V, +24V, -24V	SF120387
+5V, +24V, +24V	SF120379
+5V, +24V, -12V	SF120388
+3.3V, +12V, -5V	SF120380
+3.3V, +12V, +5V	SF120389
+5V, +10V, -10V	SF120390
+5V, +10V, +10V	SF120391
+3.3V, +5V, +12V	SF120392
+3.3V, +5V, -12V	SF120393
+3.3V, +12V, -12V, -5V	SF120401
+3.3V, +12V, -12V, +5V	SF120402
+3.3V, +12V, +12V, -5V	SF120403
+3.3V, +12V, +12V, +5V	SF120403
+5V, +12V, +12V, -5V	SF120405
+5V, +12V, -12V, +5V	SF120406
+5V, +12V, -12V, -5V	SF120407
+5V, +12V, +12V, +5V	SF120408
+5V, +12V, -12V, +12V	SF120409
+5V, +12V, +12V, +12V	SF120410
+5V, +12V, -12V, -12V	SF120411
+5V, +12V, -12V, +12V	SF120412
+5V, +12V, -12V, +24V	SF120413
+5V, +12V, +12V, +24V	SF120414
+5V, +12V, +12V, -24V	SF120415
+5V, +12V, -12V, -24V	SF120416
+5V, +15V, -15V, -5V	SF120417
+5V, +15V, -15V, +5V	SF120418
+5V, +15V, +15V, -5V	SF120419
+5V, +15V, +15V, +5V	SF120420
+5V, +24V, -15V, +12V	SF120421

127 X 76.2 X 37.6 mm

ANY single output voltage available from 3V to 50V

Max Output Power
 Single Outputs:
 3, 3V, 4V: 100 watts
 12 volts and up: 0 - 120 watts

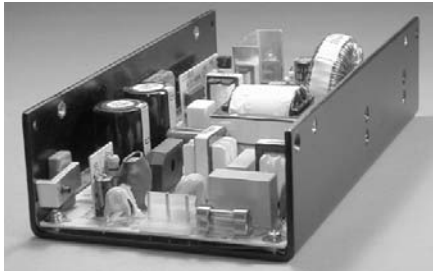
Multiple Outputs
 All multiple outputs total combined power 120 watts except models with 3, 3V on output #1: 100 watts typical



UL2061 Medical Models available
 3X5 Size, 45 and 65 watts

Switching Power Supplies

150 Watts PFC Single, Multiple Output



127 X 81 X 38.1

Output Volts DC	Current With 17. cfm* Min-Max	Part Number
3	0.50 TO 30.00A	SF150103
5	0.50 TO 30.00A	SF150105
12	0.50 TO 12.50A	SF150112
15	0.50 TO 10.00A	SF150115
18	0.50 TO 8.33A	SF150118
24	0.50 TO 6.25A	SF150124
36	0.50 TO 4.17A	SF150136
48	0.50 TO 3.13A	SF150148

Any output voltage available from 3VDC to 56VDC

Output (VDC)	Current With 18.7 cfm* Min-Max	Part Number
+5	2.00A - 15.00A	SF150402
+3.3	0A - 15.00A	
+12	0.30A - 3.00A	SF150403
-12	0A - 1.00A	
+5	2.00A - 15.00A	SF150404
+3.3	0A - 15.00A	
+12	0.30A - 3.00A	SF150405
-5	0A - 1.00A	
+5	2.00A - 15.00A	SF150405
+3.3	0A - 15.00A	
+24	0.30A - 2.00A	SF150405
-12	0A - 1.00A	

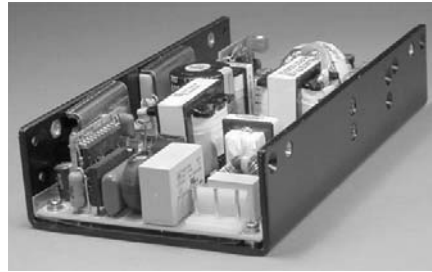
Size: 173 X 97 X 38.1

Total combined output power for +3 and +5VDC 100 Watts or 70 Watts with convection outputs

*100 watts continuous with convection cooling.

All models can be supplied as triple output by deleting either output 3 or 4
 Input Voltage: 115/ 230VAC auto range, 47-63Hz
 Efficiency: 83% typical at full load
 Overvoltage, Overcurrent, Short circuit protected
 Working temperature 50°C at full load
 Approvals: UL, c-UL, TUV, CE
 FCC Class B, CSPR 22 Class B

200 Watts PFC Single, Multiple Output



173 X 97 X 38.1

Output Volts DC	Current With 18.0cfm* Min-Max	Part Number
3	0.50 TO 30.00A	SF200103
5	0.50 TO 40.00A	SF200105
12	0.50 TO 16.67A	SF200112
15	0.50 TO 13.33A	SF200115
18	0.50 TO 11.11A	SF200118
24	0.50 TO 8.33A	SF200124
36	0.50 TO 5.55A	SF200136
48	0.50 TO 4.17A	SF200148

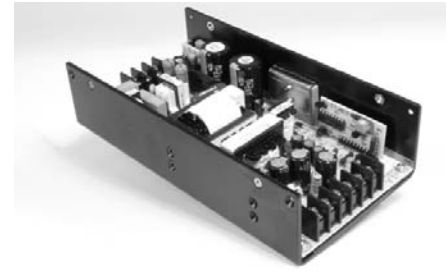
ANY output voltage available from 3VDC to 56VDC

Output Volts DC	Current With 18.7 cfm* Min-Max	Part Number
+5	0.50A - 20.00A	SF200250
+12	0.50A - 8.40A	
+5	0.50A - 20.00A	SF200253
+15	0.50A - 6.70A	
+5	0.50A - 20.00A	SF200254
+24	0.50A - 4.20A	
+5	0.50A - 20.00A	SF200370
+12	0.50A - 8.00A	
-12	0A - 1.00A	SF200385
+5	0.50A - 20.00A	
+12	0.50A - 8.00A	SF200374
+12	0A - 1.00A	
+5	0.50A - 20.00A	SF200386
+15	0.50A - 6.00A	
-15	0A - 1.00A	SF200405
+5	0.50A - 20.00A	
+15	0.50A - 6.00A	SF200417
+15	0A - 1.00A	
+5	0.50A - 20.00A	SF200413
+12	0.50A - 7.00A	
-5	0A - 1.00A	SF200417
*12	0A - 1.00A	
+5	0.50A - 20.00A	SF200417
+15	0.50A - 5.3.00A	
-5	0A - 1.00A	SF200413
*15	0A - 1.00A	
+5	0.50A - 20.00A	SF200413
+24	0.50A - 3.20A	
-12	0A - 1.00A	SF200413
*12	0A - 1.00A	

*150 watts continuous with convection cooling.

Input Voltage: 115/ 230VAC auto range
 Efficiency: 83% typical at full load
 Overvoltage, Overcurrent, Short circuit protected
 Working temperature 50°C at full load
 Approvals: UL, c-UL, TUV, CE
 FCC Class B, CSPR 22 Class B

300 Watts PFC Single, Multiple Output



203 X 109 X 31 mm

Output Volts DC	Current With 30 cfm* Min-Max	Part Number
3	0.5 TO 60A	SF300103
5	0.5 TO 60A	SF300105
12	0.5 TO 25A	SF300112
15	0.5 TO 20A	SF300115
18	0.5 TO 16.67A	SF300118
24	0.5 TO 12.50A	SF300124
30	0.5 TO 10.00A	SF300130
48	0.5 TO 6.25A	SF300148

*200 watts continuous output with convection cooling

ANY output voltage available from 3VDC to 56VDC
 Also available with enclosure and fan

Output Volts DC	Current Min-Max With 30 cfm*	Part Number
+5	0.50 - 30.00A	SF300250
+12	0.50 - 12.50A	
+5	0.50 - 30.00A	SF300253
+15	0.50 - 10.00A	
+5	0.50 - 30.00A	SF300254
+24	0.50 - 6.30A	
+5	0.50 - 30.00A	SF300385
+12	0.50 - 10.50A	
+12	0 - 2.00A	SF300386
+5	0.50 - 30.00A	
+15	0.50 - 8.00A	SF300386
+15	0 - 2.00A	
+15	0 - 2.00A	SF300422
+5	0.50 - 30.00A	
+15	0.50 - 8.00A	SF300423
-5	0 - 2.00A	
*12	0 - 2.00A	SF300423
+5	0.50 - 30.00A	
+15	0.50 - 7.4A	SF300413
+5	0 - 2.00A	
*15	0 - 2.0A	SF300413
+5	0.50 - 30.00A	
+24	0.50 - 4.30A	SF300413
-12	0 - 2.00A	
*12	0 - 2.00A	SF300413

Note: Output 4 is floating; can be (+) or (-).

*150 watts continuous output with convection cooling

Input Voltage: 90-264VAC, 47-63Hz
 Efficiency: 83% typical at full load
 Overvoltage, Overcurrent, Short circuit protected
 Working temperature 50°C at full load
 Approvals: UL, c-UL, TUV, CE
 FCC Class B, CSPR 22 Class B

Common Options Available, Consult Sales:

Input/Output mechanical interfaces • perforated covers • enclosure with fan • All protection set points • low-line under voltage protection • isolated outputs.

Consult Sales for 500 and 600 watt output power.