





# Switching power supplies

## Low profile DIN rail mounting

Types	SPM 1	SPM 3	SPM 4	SPM 5
				
Dimensions HxWxD (mm)	91 x 18 x 55.5	91 x 52 x 55.5	91 x 71 x 55.5	91 x 90 x 55.5
<b>Output specifications</b>				
Voltage	5 VDC, 12 VDC, 15 VDC, 24 VDC	5 VDC, 12 VDC, 15 VDC, 24 VDC	5 VDC, 12 VDC, 15 VDC, 24 VDC	5 VDC, 12 VDC, 15 VDC, 24 VDC, 24 VDC (S ver.)
Current	1.5 A - 0.83 A 0.67 A - 0.42 A	3.0 A - 2.1 A 2.0 A - 1.3 A	7.0 A - 4.5 A 4.0 A - 2.5 A	12 A - 6 A - 5 A 4.2 A - 3.8 A
Line regulation	±1%	±1%	±1%	±1%
Load regulation	±1%	±1%	±1%	±1%
<b>Input specifications</b>				
Voltage range	Autoselec.. 90 to 264 VAC, 120 to 370 VDC	Autoselec.. 90 to 264 VAC, 120 to 370 VDC	Autoselec.. 90 to 264 VAC, 120 to 370 VDC	Autoselec.. 90 to 264 VAC, 120 to 370 VDC
Frequency range	47 to 63Hz	47 to 63Hz	47 to 63Hz	47 to 63Hz
<b>General specifications</b>				
Ambient temperature	-25°C to +71°C	-25°C to +71°C	-25°C to +71°C	-25°C to +71°C
Storage	-25°C to +85°C	-25°C to +85°C	-25°C to +85°C	-25°C to +85°C
Derating (>60°C)	2.5 % /°C	2.5 % /°C	2.5 % /°C	2.5 % /°C
Approvals / Marks	cULus - TÜV - CE - Classl DIV2	cULus - TÜV - CE - Classl DIV2	cULus - TÜV - CE - Classl DIV2	cULus - TÜV - CE - Classl DIV2
Installation	DIN Rail	DIN Rail	DIN Rail	DIN Rail
Connection	Screw terminals	Screw terminals	Screw terminals	Screw terminals
<b>Main features</b>				
		Adjustable output voltage	Adjustable output voltage	Adjustable output voltage
LED indicator for "power on"	Yes	Yes	Yes	Yes
LED indicator for DC "too low"	Yes	Yes	Yes	Yes
<b>References</b>				
5 VDC	<b>SPM1-051</b>	<b>SPM3-051</b>	<b>SPM4-051</b>	<b>SPM5-051</b>
12 VDC	<b>SPM1-121</b>	<b>SPM3-121</b>	<b>SPM4-121</b>	<b>SPM5-121</b>
15 VDC	<b>SPM1-151</b>	<b>SPM3-151</b>	<b>SPM4-151</b>	<b>SPM5-151</b>
24 VDC	<b>SPM1-241</b>	<b>SPM3-241</b>	<b>SPM4-241</b>	<b>SPM5-241</b>
24 VDC (class 2 UL)				<b>SPM5-241S</b>

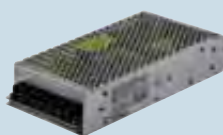

# Switching power supplies

## Enclosed switching power supplies

Types	SPPC 25 W	SPPC 35 W	SPPC 50 W	SPPC 75 W
				
Dimensions HxWxD (mm)	79 x 51 x 28.8	101.6 x 63.5 x 33	99 x 82 x 35	129 x 98 x 38
<b>Output specifications</b>				
Voltage	5V, 12V, 24V	5V, 12V, 24V	5V, 12V, 15V, 24V, 48V	5V, 12V, 24V, 48V
Current	5A, 2.1A, 1.1A	6A, 3A, 1.5A	8A, 4.2A, 3.4A, 2.2A, 1.12A	12A, 6A, 3.2A, 1.62A
Line regulation	±0.5%	±0.5%	±0.5%	±0.5%
Load regulation	±2.0%, ±1.0%, ±1.0%	±1.0%	±1.0%	±2.0%
Efficiency (typ)	115VAC 230VAC	76%, 80%, 84% 78%, 82%, 85%	79%, 83%, 86% 80%, 84%, 87%	79%, 84%, 87%, 88% 80%, 85%, 88%, 89%
<b>Input specifications</b>				
Voltage range	90 ~ 264VAC 127 ~ 370VDC	90 ~ 264VAC 127 ~ 370VDC	90VAC~264VAC 27~370VDC	90VAC~264VAC 127~370VDC
Frequency range	47-63Hz	47-63Hz	47Hz~63Hz	47Hz~63Hz
<b>General specifications</b>				
Ambient temperature	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
Storage	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C;
Derating (>50°C)	2% /°C	2% /°C	1.5% /°C	1.5% /°C
Cooling	Free air convection	Free air convection	Free air convection	Free air convection
Approvals / Marks	UL60950-1 2 <sup>nd</sup> Ed; IEC 60950-1:2005 (2 <sup>nd</sup> Ed); EN60950-1:2006	UL60950-1 2 <sup>nd</sup> Ed; IEC 60950-1:2005 (2 <sup>nd</sup> Ed); EN60950-1:2006	UL60950-1 2 <sup>nd</sup> Ed; IEC 60950-1:2005 (2 <sup>nd</sup> Ed); EN60950-1:2006	UL60950-1 2 <sup>nd</sup> Ed; IEC 60950-1:2005 (2 <sup>nd</sup> Ed); EN60950-1:2006
Installation	Screw terminal	Screw terminal	Screw terminal	Screw terminal
<b>Main features</b>				
Mounting	Horizontal and Vertical (DIN rail mounting accessories available)	Horizontal and Vertical (DIN rail mounting accessories available)	Horizontal and Vertical (DIN rail mounting accessories available)	Horizontal and Vertical (DIN rail mounting accessories available)
<b>References</b>				
5 VDC	SPPC 525 1	SPPC 535 1	SPPC 550 1	SPPC 575 1
12 VDC	SPPC 1225 1	SPPC 1235 1	SPPC 1250 1	SPPC 1275 1
15 VDC			SPPC 1550 1	
24 VDC	SPPC 2425 1	SPPC 2435 1	SPPC 2450 1	SPPC 2475 1
48 VDC			SPPC 4850 1	SPPC 4875 1

# Switching power supplies

## Enclosed switching power supplies

Types	SPPC 150 W					SPPC 150 W (PFC) Power Factor Correction				
										
Dimensions HxWxD (mm)	199 x 98 x 38					194 x 99 x 50				
Output specifications										
Voltage	5 VDC	12 VDC	15 VDC	24 VDC	48 VDC	5 VDC	12 VDC	15 VDC	24 VDC	48 VDC
Current	26 A	12.5 A	10 A	6.5 A	3.3A	30 A	12.5 A	10 A	6.3 A	3.2 A
Line regulation	± 0.5%					± 0.5%				
Load regulation	±1%					±1%				
Efficiency (typ)	up to 85%					up to 87%				
Built-in active PFC						PFC > 0.98 @ 115 VAC ; PFC > 0.95 @ 230 VAC				
Input specifications										
Voltage input range	88 - 132 VAC 176 - 264 VAC 124 - 186 VDC 248 - 370 VDC					88 - 264 VAC 124 - 370 VDC				
Frequency range	47- 63 Hz					47- 63 Hz				
General specifications										
Ambient temperature	-25°C to +70°C					-25°C to +70°C				
Storage	-40°C to +85°C					-30°C to +85°C				
Output short circuit	Long-term, Auto recovery					Long-term, Auto recovery				
Derating (>50°C)	2.5% / °C					2.5% / °C				
Approvals / Marks	CE - cURus - RoHS					CE - cURus - RoHS - CB				
Installation	Screw terminal					Screw terminal				
Main features										
Mounting	Horizontal and Vertical (DIN rail mounting accessories available)					Horizontal and Vertical (DIN rail mounting accessories available)				
References										
5 VDC	SPPC-5150 1					SPPC-5150 1F				
12 VDC	SPPC-12150 1					SPPC-12150 1F				
15 VDC	SPPC-15150 1					SPPC-15150 1F				
24 VDC	SPPC-24150 1					SPPC-24150 1F				
48 VDC	SPPC-48150 1					SPPC-48150 1F				

# Switching power supplies

## Compact enclosed switching power supplies

Types	SPPC 200 W	SPPC 240 W	SPPC 320 W
  			
Dimensions HxWxD (mm)	199 x 99 x 50	199 x 99 x 50	199 x 99 x 50
<b>Output specifications</b>			
Voltage	5V, 12V, 24V, 48V	12V, 24V	5V, 12V, 24V, 48V
Current	40A, 16.7A, 8.4A, 4.2A	20A, 10A	55A, 25A, 13A, 6.7A
Line regulation	±0.5%	±0.5%	±0.5%
Load regulation	±1.0%	±1.0%	±1.0%
Efficiency (typ)	79%, 84%, 86%, 87.5%	84%, 86%	79%, 84.5%, 87%, 87.5%
Built-in active PFC	(115VAC): PF>0.98 (230VAC): PF>0.96	(115VAC): PF>0.98 (230VAC): PF>0.96	(115VAC): PF>0.98 (230VAC): PF>0.96
<b>Input specifications</b>			
Voltage range	85 ~ 264VAC 120 ~ 370VDC	85 ~ 264VAC 120 ~ 370VDC	85 ~ 264VAC 120 ~ 370VDC
Frequency range	47-63Hz	47-63Hz	47-63Hz
<b>General specifications</b>			
Ambient temperature	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
Storage	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Derating (>50°C)	2% /°C	2% /°C	2% /°C
Cooling	Forced air (built-in DC fan controlled by load and internal temperature)	Forced air (built-in DC fan controlled by load and internal temperature)	Forced air (built-in DC fan controlled by load and internal temperature)
Approvals / Marks	UL60950-1 2 <sup>nd</sup> Ed; IEC 60950-1:2005 (2 <sup>nd</sup> Ed); EN60950-1:2006	UL60950-1 2 <sup>nd</sup> Ed; IEC 60950-1:2005 (2 <sup>nd</sup> Ed); EN60950-1:2006	UL60950-1 2 <sup>nd</sup> Ed; IEC 60950-1:2005 (2 <sup>nd</sup> Ed); EN60950-1:2006
Installation	Screw terminal	Screw terminal	Screw terminal
<b>Main features</b>			
Mounting	Horizontal and Vertical (DIN rail mounting accessories available)	Horizontal and Vertical (DIN rail mounting accessories available)	Horizontal and Vertical (DIN rail mounting accessories available)
<b>References</b>			
5 VDC	SPPC 5200 1FC		SPPC 5320 1FC
12 VDC	SPPC 12200 1FC	SPPC 12240 1FC	SPPC 12320 1FC
15 VDC			
24 VDC	SPPC 24200 1FC	SPPC 24240 1FC	SPPC 24320 1FC
48 VDC	SPPC 48200 1FC		SPPC 48320 1FC

# Switching power supplies

## Compact enclosed switching power supplies

Types	SPPC 480 W	SPPC 600 W	SPPC 800 W
  			
Dimensions HxWxD (mm)	218 x 116.5 x 41	218 x 116.5 x 41	226 x 116.5 x 41
<b>Output specifications</b>			
Voltage	12V, 24V, 36V, 48V	12V, 24V, 36V, 48V	24V, 48V
Current	34A, 22A, 14A, 11A	(100~127VAC): 34A, 22A, 14A, 11A (128~264VAC): 42A, 26.5A, 17.5A, 13.6A	(100~127VAC): 27A, 14A (128~264VAC): 33A, 16.5A
Line regulation	±0.5%, ±0.5%, ±0.5%, ±0.2%	±0.5%	±0.5%
Load regulation	±1.0%	±1.0%	±1.0%
Efficiency (typ)	88%, 89%, 90%, 90%	88%, 89%, 90%, 90%	88%, 89%
Built-in active PFC	(115VAC): PF>0.98 (230VAC): PF>0.96	(115VAC): PF>0.98 (230VAC): PF>0.96	(115VAC): PF>0.98 (230VAC): PF>0.96
<b>Input specifications</b>			
Voltage range	90~264VAC 127 ~ 370VAC	90~264VAC 127 ~ 370VAC	90~264VAC 127 ~ 370VAC
Frequency range	47-63Hz	47-63Hz	47-63Hz
<b>General specifications</b>			
Ambient temperature	-30°C to +70°C	-30°C to +70°C	-30°C to +70°C
Storage	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Derating (>50°C)	2% /°C	2% /°C	2% /°C
Cooling	Forced air (built-in DC fan controlled by load and internal temperature)	Forced air (built-in DC fan controlled by load and internal temperature)	Forced air (built-in DC fan controlled by load and internal temperature)
Approvals / Marks	UL60950-1 2 <sup>nd</sup> Ed; IEC 60950-1:2005 (2 <sup>nd</sup> Ed); EN60950-1:2006	UL60950-1 2 <sup>nd</sup> Ed; IEC 60950-1:2005 (2 <sup>nd</sup> Ed); EN60950-1:2006	UL60950-1 2 <sup>nd</sup> Ed; IEC 60950-1:2005 (2 <sup>nd</sup> Ed); EN60950-1:2006
Installation	Screw terminal	Screw terminal	Screw terminal
<b>Main features</b>			
Mounting	Horizontal and Vertical (DIN rail mounting accessories available)	Horizontal and Vertical (DIN rail mounting accessories available)	Horizontal and Vertical (DIN rail mounting accessories available)
<b>References</b>			
12 VDC	SPPC 12480 1FC	SPPC 12600 1FC	
24 VDC	SPPC 24480 1FC	SPPC 24600 1FC	SPPC 24800 1FC
36 VDC	SPPC 36480 1FC	SPPC 36600 1FC	
48 VDC	SPPC 48480 1FC	SPPC 48600 1FC	SPPC 48800 1FC