



Features:

- Universal Input 100 – 240 VAC
- Internal EMI Filter
- Single, Dual, Triple & Quad Outputs
- 3 VDC to 40 VDC Output Available
- Input Surge Current Protection
- Over-Current Protection
- Over-Voltage Protection
- 100% Burn-In
- Power Fail Detection Available



Input

Input Voltage	90 to 264 VAC
Input Frequency	47 to 63Hz
Input Current	1.6A Max. at 115VAC 0.8A Max. at 230VAC
Safety Ground Leakage Current	0.3mA Max. @ 240VAC, Full Load

Output

Output Voltage & Current	See Chart
Ripple & Noise (P-P)	1% Max., Full Load @ 90VAC Input
Over-Voltage Protection	Set at 112 - 132% of Nominal Output Voltage
Over-Current Protection	Set at 110 - 150% of Nominal Output Current
Temperature Coefficient	± 0.04% / °C Max.
Transient Response	Full Load to Half Load @ 100VAC Input: 4mS Max.

Environmental

Operating Temperature	0°C to 70°C
Derating	Derated from 100% at +50°C to 50% at +70°C
Storage Temperature	-40°C to 85°C
Relative Humidity	5% to 95% Non-Condensing

Electrical

Efficiency	85% Max.
Hold-Up Time	16mS Min.
Line Regulation	±1% Max. at Full Load
Load Regulation	±7% Max. at 230VAC
Inrush Current	18A @ 115VAC Max. 25A @ 230VAC Max. at 25°C Cold Start
Withstanding Voltage	5656 VDC from Primary to Secondary, 2828 VDC Primary to Ground
Insulation Resistance	50 MΩ Min. from Output to Ground
Mean Time Between Failure (MTBF)	100,000 Hours Min., Full Load at 25°C Ambient

Safety

EMI Requirements	Meets Conduction Limits of: (A) CISPR-11 Class B (B) FCC Part 18 Class B
Safety Standards	Meets or Exceeds: (A) UR Listed (UL 60601-1) (B) TUV/ T-Mark (EN 60601-1) (C) CE (D) CB



Single Output Voltage and Current Chart

Model Number**	Output Voltage	Output Current	Total Regulation	Maximum Output Power
SFM6 <u>Y</u> P1XXR	3 - 5 VDC	16.6 - 10.0 A	5%	50W
SFM6 <u>Y</u> P1XXR	5 - 6 VDC	11.0 - 9.16 A	5%	55W
SFM6 <u>Y</u> P1XXR	6 - 8 VDC	10.0 - 7.50 A	4%	60W
SFM6 <u>Y</u> P1XXR	8 - 11 VDC	7.87 - 5.72 A	3%	63W
SFM6 <u>Y</u> P1XXR	12 - 13 VDC	5.25 - 4.84 A	3%	63W
SFM6 <u>Y</u> P1XXR	14 - 16 VDC	4.50 - 3.93 A	3%	63W
SFM6 <u>Y</u> P1XXR	17 - 21 VDC	3.71 - 3.00 A	3%	63W
SFM6 <u>Y</u> P1XXR	22 - 27 VDC	2.86 - 2.33 A	2%	63W
SFM6 <u>Y</u> P1XXR	28 - 33 VDC	2.25 - 1.90 A	2%	63W
SFM6 <u>Y</u> P1XXR	34 - 40 VDC	1.85 - 1.57 A	2%	63W

** To Determine Part Number:

Replace "XX" with Required Output Voltage (5VDC = "05", 12VDC = "12", 24VDC = "24", ect.)
Replace "Y" with "0" for 3-pin Input Header (L - N - G), "1" for 2-Pin Input Header (L - N).

Note: For U-Channel desing, order as **SMU6Y**P1XXR

For **Power Fail Detection** on Pin 8, order as S__6YP1XXPR

Example: **SFM60P124** PR indicates a Open-Frame design, 24VDC Unit with 3-Pin Input and Power Fail Detection on Pin 8.

Pin Connection

Pin	Single Output
1	Output
2	Output
3	Output
4	Return
5	Return
6	Return
7	Return
8	PFD* (Optional)

* Power Fail Detection





Dual Output Voltage and Current Chart

Model Number**	Output #1 Voltage & Regulation	Output #2 Voltage & Regulation	Maximum Output Power
SFM6YP260R	+3.3V @ 7A 6%	+12V @ 3A 5%	59.1W
SFM6YP250R	+5V @ 7A 5%	+12V @ 3A 5%	63W
SFM6YP253R	+5V @ 7A 5%	+15V @ 3A 5%	63W
SFM6YP254R	+5V @ 7A 5%	+24V @ 2A 5%	63W
SFM6YP259R	+3.3V @ 7A 6%	+5V @ 5A 5%	48.1W
SFM6YP262R	+5V @ 7A 5%	-24V @ 2A 5%	63W

** To Determine Part Number:

Replace "Y" with "0" for 3-pin Input Header (L - N - G), "1" for 2-Pin Input Header (L - N).

Note: For U-Channel desing, order as **SMU6YP2XXR**

For **Power Fail Detection** on Pin 8, order as **S__6YP2XXPR**

Example: **SMU61P254R** indicates a U-Channel design, +5VDC & +24VDC Output Unit with 2-Pin Input.

Pin Connection

Pin	Dual Output
1	Output #2
2	Output #1
3	Output #1
4	Common
5	Common
6	No Connection
7	No Connection
8	PFD* (Optional)

* Power Fail Detection



Output Voltage and Current Chart

Model Number**	Output #1 Voltage & Regulation	Output #2 Voltage & Regulation	Output #3 Voltage & Regulation	Maximum Output Power
SFM6YP382R	+3.3V @ 6A 6%	+12V @ 3A 5%	-12V @ 0.8A 5%	63W
SFM6YP383R	+3.3V @ 6A 6%	+12V @ 3A 5%	+12V @ 0.8A 5%	63W
SFM6YP377R	+5V @ 6A 5%	+12V @ 3A 5%	-5V @ 0.8A 5%	63W
SFM6YP384R	+5V @ 6A 5%	+12V @ 3A 5%	+5V @ 0.8A 5%	63W
SFM6YP370R	+5V @ 6A 5%	+12V @ 3A 5%	-12V @ 0.8A 5%	63W
SFM6YP385R	+5V @ 6A 5%	+12V @ 3A 5%	+12V @ 0.8A 5%	63W
SFM6YP374R	+5V @ 6A 5%	+15V @ 3A 5%	-15V @ 0.8A 5%	63W
SFM6YP386R	+5V @ 6A 5%	+15V @ 3A 5%	+15V @ 0.8A 5%	63W
SFM6YP376R	+5V @ 6A 5%	+24V @ 2A 5%	-24V @ 0.5A 5%	63W
SFM6YP387R	+5V @ 6A 5%	+24V @ 2A 5%	+24V @ 0.5A 5%	63W
SFM6YP379R	+5V @ 6A 5%	+24V @ 2A 5%	-12V @ 0.8A 5%	63W
SFM6YP388R	+5V @ 6A 5%	+24V @ 2A 5%	+12V @ 0.8A 5%	63W
SFM6YP380R	+3.3V @ 6A 6%	+12V @ 3A 5%	-5V @ 0.8A 5%	59.8W
SFM6YP389R	+3.3V @ 6A 6%	+12V @ 3A 5%	+5V @ 0.8A 5%	59.8W
SFM6YP390R	+5V @ 6A 5%	+10V @ 2A 5%	-10V @ 1A 5%	60W
SFM6YP391R	+5V @ 6A 5%	+10V @ 2A 5%	+10V @ 1A 5%	60W
SFM6YP393R	+3.3V @ 5A 6%	+5V @ 5A 5%	-12V @ 1A 5%	53.5W
SFM6YP392R	+3.3V @ 5A 6%	+5V @ 5A 5%	+12V @ 1A 5%	53.5W

** To Determine Part Number:

Replace "Y" with "0" for 3-pin Input Header (L - N - G), "1" for 2-Pin Input Header (L - N).

Note: For U-Channel desing, order as **SMU6YP3XXR**

For **Power Fail Detection** on Pin 8, order as **S__6YP3XXPR**

Example: **SFM61P388R** indicates an Open-Frame design, +5VDC, +24VDC, +12VDC Output Unit with 2-Pin Input.

Pin Connection

Pin	Triple Output
1	Output #2
2	Output #1
3	Output #1
4	Common
5	Common
6	Output #3
7	No Connection
8	PFD (Optional)

* Power Fail Detection



SFM60/61P & SMU60/61P Series

Switchmode Medical Power Supply, U-Channel or Open-Frame, RoHS Compliant

Date: 2/15/11

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Output Voltage and Current Chart

Model Number**	Output #1 Voltage & Regulation	Output #2 Voltage & Regulation	Output #3 Voltage & Regulation	Output #4 Voltage & Regulation	Maximum Output Power
SFM6YP401R	+3.3V @ 6A 6%	+12V @ 3A 5%	-12V @ 0.8A 5%	-5V @ 0.8A 5%	63W
SFM6YP402R	+3.3V @ 6A 6%	+12V @ 3A 5%	-12V @ 0.8A 5%	+5V @ 0.8A 5%	63W
SFM6YP403R	+3.3V @ 6A 6%	+12V @ 3A 5%	+12V @ 0.8A 5%	-5V @ 0.8A 5%	63W
SFM6YP404R	+3.3V @ 6A 6%	+12V @ 3A 5%	+12V @ 0.8A 5%	+5V @ 0.8A 5%	63W
SFM6YP405R	+5V @ 6A 5%	+12V @ 3A 5%	+12V @ 0.8A 5%	-5V @ 0.8A 5%	63W
SFM6YP406R	+5V @ 6A 5%	+12V @ 3A 5%	-12V @ 0.8A 5%	+5V @ 0.8A 5%	63W
SFM6YP407R	+5V @ 6A 5%	+12V @ 3A 5%	-12V @ 0.8A 5%	-5V @ 0.8A 5%	63W
SFM6YP408R	+5V @ 6A 5%	+12V @ 3A 5%	+12V @ 0.8A 5%	+5V @ 0.8A 5%	63W
SFM6YP409R	+5V @ 6A 5%	+12V @ 3A 5%	-12V @ 0.8A 5%	+12V @ 0.8A 5%	63W
SFM6YP410R	+5V @ 6A 5%	+12V @ 3A 5%	+12V @ 0.8A 5%	+12V @ 0.8A 5%	63W
SFM6YP411R	+5V @ 6A 5%	+12V @ 3A 5%	-12V @ 0.8A 5%	-12V @ 0.8A 5%	63W
SFM6YP412R	+5V @ 6A 5%	+12V @ 3A 5%	+12V @ 0.8A 5%	-12V @ 0.8A 5%	63W
SFM6YP413R	+5V @ 6A 5%	+12V @ 3A 5%	-12V @ 0.8A 5%	+24V @ 0.8A 5%	63W
SFM6YP414R	+5V @ 6A 5%	+12V @ 3A 5%	+12V @ 0.8A 5%	+24V @ 0.8A 5%	63W
SFM6YP415R	+5V @ 6A 5%	+12V @ 3A 5%	+12V @ 0.8A 5%	-24V @ 0.8A 5%	63W
SFM6YP416R	+5V @ 6A 5%	+12V @ 3A 5%	-12V @ 0.8A 5%	-24V @ 0.8A 5%	63W
SFM6YP417R	+5V @ 6A 5%	+15V @ 3A 5%	-15V @ 0.8A 5%	-5V @ 0.8A 5%	63W
SFM6YP418R	+5V @ 6A 5%	+15V @ 3A 5%	-15V @ 0.8A 5%	+5V @ 0.8A 5%	63W
SFM6YP419R	+5V @ 6A 5%	+15V @ 3A 5%	+15V @ 0.8A 5%	-5V @ 0.8A 5%	63W
SFM6YP420R	+5V @ 6A 5%	+15V @ 3A 5%	+15V @ 0.8A 5%	+5V @ 0.8A 5%	63W

** To Determine Part Number:

Replace "Y" with "0" for 3-pin Input Header (L - N - G), "1" for 2-Pin Input Header (L - N).

Note: For U-Channel desing, order as **SMU6YP4XXR**

For **Power Fail Detection** on Pin 8, order as **S__6YP4XXPR**

Example: **SMU60P407PR** indicates an U-Channel desing, +5VDC, +12VDC, -12VDC, -5VDC Output Unit with 3-Pin Input and Power Fail Detection on Pin 8.

Pin Connection

Pin	Quad Output
1	Output #2
2	Output #1
3	Output #1
4	Common
5	Common
6	Output #3
7	Output #4
8	PFD (Optional)

* Power Fail Detection



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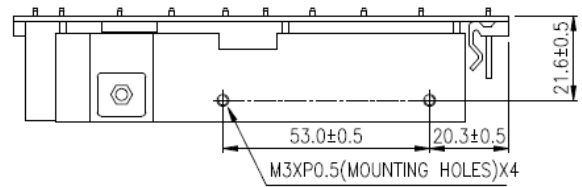
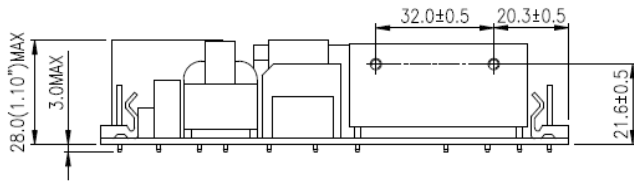
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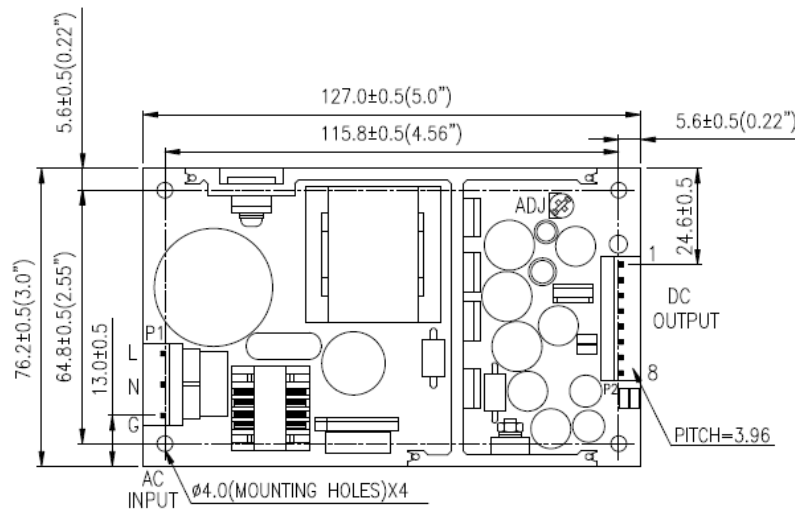
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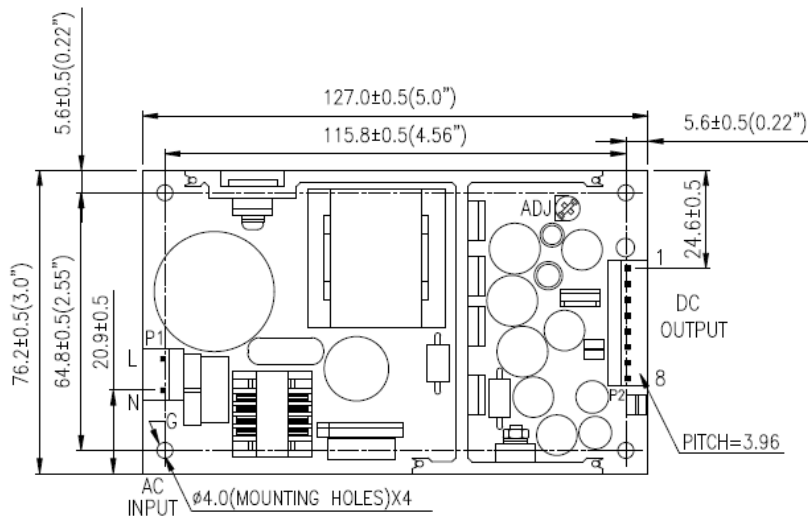
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For 3-pin
Input Order as: SFM60P___R



For 2-pin
Input Order as: SFM61P___R



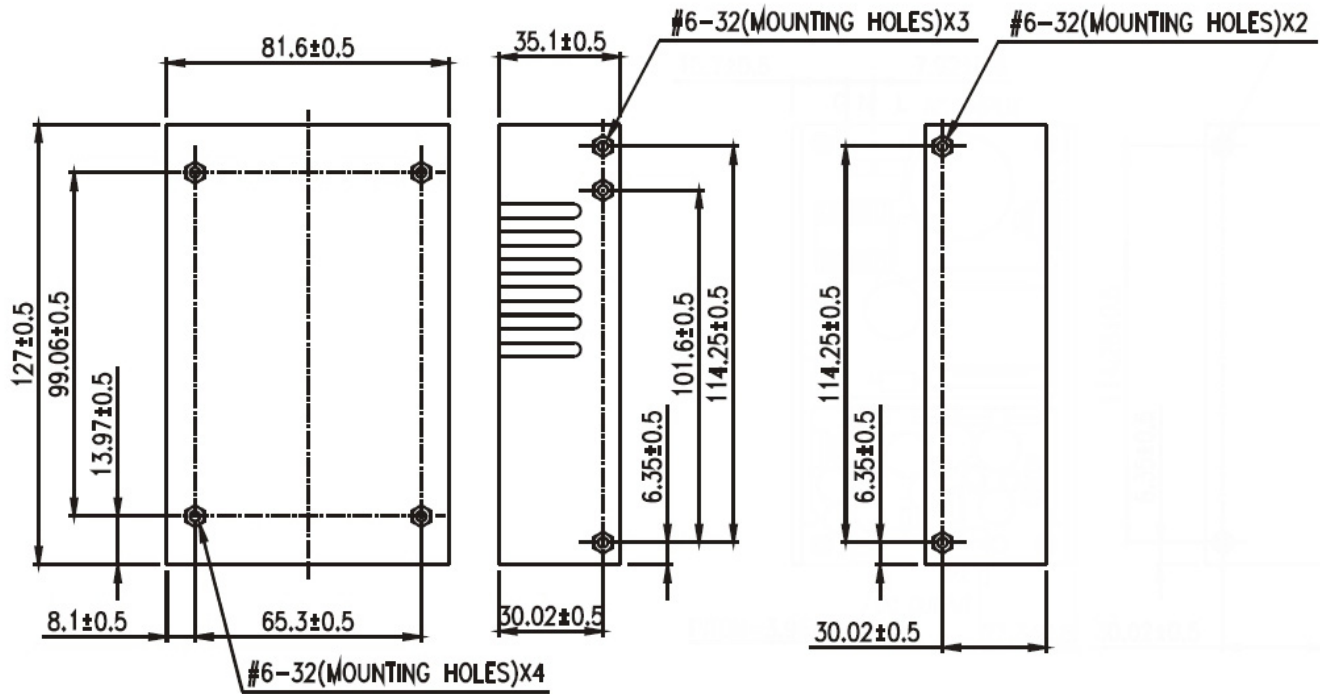
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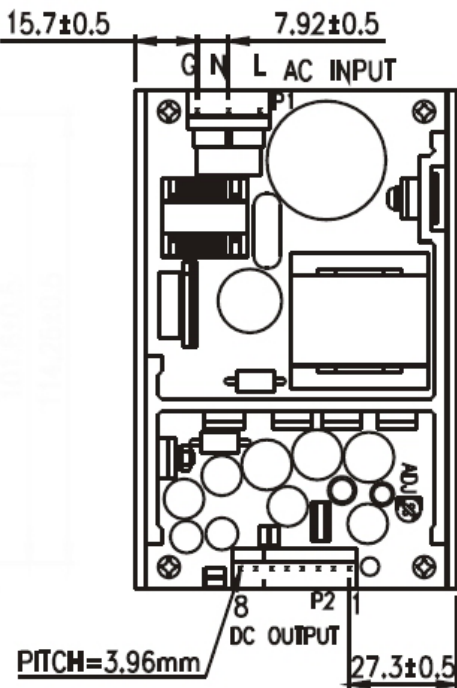
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For 3-pin
Input Order as: SMU60P___R



For 2-pin
Input Order as: SMU61P___R

