



SF80-81P & SFU80-81P Series

Date: 10/25/18

80 Watt AC - DC Power Supply, Open Frame or U-Channel
UL, EN, IEC 60950-1 2nd Edition, RoHS 2 Compliant

Rev: 080118

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The SF80P/SF81P & SFU80P/SFU81P Series open frame switch mode power supply offers 80 Watts output power (convection cooled) in a 3" x 5" size, with UL/CUL, IEC, and EN 60950-1, 2nd Edition safety approval. It is offered as an open frame or U-chassis, with input configurations and dual & triple output options.

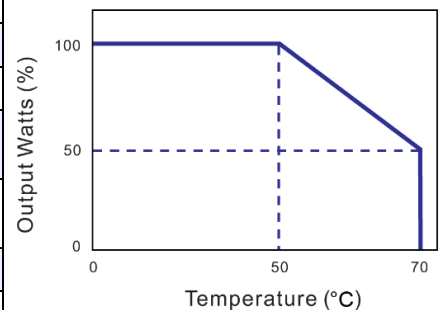


Input Voltage	90 to 264 Vac
Input Frequency	47 to 63 Hz
Input Current (Low Line)	2.0 A Typ. at 100 Vac
Input Current (High Line)	0.83 A Typ. at 240 Vac
Safety Ground Leakage Current	0.75 mA Max. at 240 Vac, Full Load
Output Voltage & Current	See Tables on Pages 2 - 3
Over-Voltage Protection	112 - 132%
Over-Current Protection	110 - 150%
Temperature Coefficient	± 0.04% / °C Max.
Transient Response	50% Load Change at 110 Vac Input: 4 ms Max.
Efficiency	Dual Output: 75 - 76% Typ. Triple Output: 76 - 78% Typ.
No Load Power Consumption	6 Watts Typ.
Line Regulation	± 1% Max. at Full Load
Load Regulation	± 7% Max. at 230 Vac
Start-Up Time	3 s Max.
Hold-Up Time	16 ms Min.
Withstanding Voltage	Primary to Secondary: 4,242 Vdc Primary to Ground: 2,121 Vdc
Inrush Current	45 A Max. @ 100 Vac, 25°C Cold Start 108 A Max. @ 240 Vac, 25°C Cold Start
Mean Time Between Failure	100,000 Hrs. Min. (MIL-HDBK-217F, Full Load at 25°C)
Operating Temperature	See Derating Curve
Storage Temperature	-40 to 85°C
Weight	SF80P & SF81P: 350 g Typ. SFU80P & SFU81P: 480 g Typ.
Industry Compliance	Directive 2011/65/EU (RoHS 2)
EMI Requirements	Meets Conduction and Radiation Limits of: FCC Part 15 Class B, CISPR-32 Class B, EN 55032 Class B
Safety Compliance	UR/cUR (UL 60950-1:2nd Ed.), TUV (EN 60950-1:2005/A2), CE, CB (IEC 60950-1:2005/A2)

Features:

- Universal Input 100 - 240 Vac
- Convection Cooled
- Internal EMI Filter
- Over-Voltage, Over-Current, and Short Protection
- 100% Burn-In
- Class I System
- RoHS 2 Compliant

Derating Curve



Derate Linearly from 100% at 50°C to 50% at 70°C



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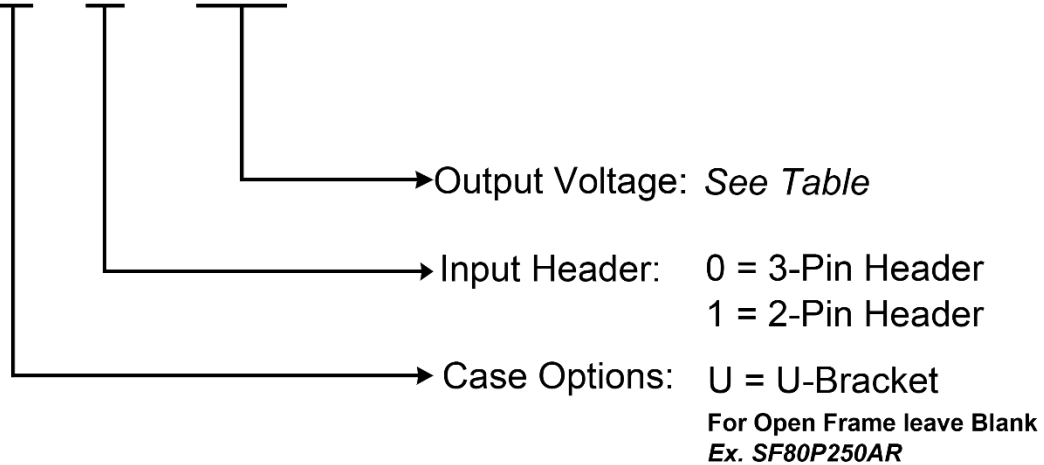
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Output Voltage and Current Table: *Dual Output*

Model Number	Output Voltage	Output Current <i>Limited to Output Power²</i>	Ripple & Noise (mV P-P) ³	Output Power
SF80P260AR ¹	V1: 3.3 Vdc	1.2 – 12.0 A	50	80 Watts
	V2: 12 Vdc	0.5 – 5.0 A	120	
SF_8_P250AR	V1: 5 Vdc	1.2 – 12.0 A	50	80 Watts
	V2: 12 Vdc	0.5 – 5.0 A	120	

SF 8 P2 AR



Notes:

1. Available with 3-Pin Input Header and PCB Configuration Only.
2. Total (combined) Output Voltage/Current cannot exceed Output Power.
(Voltage #1 x Current #1) + (Voltage #2 x Current #2) ≤ Max. Power (Watts)
3. Measured w/ 0.1 μF ceramic capacitor & 47 μF electrolytic capacitor in parallel and a 20 MHz Bandwidth-limited scope.



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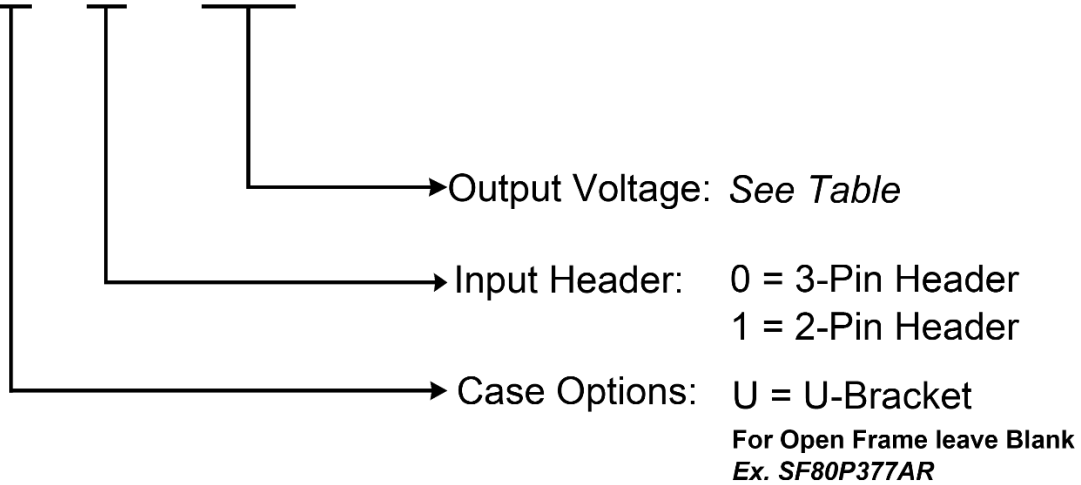
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Output Voltage and Current Table: Triple Output

Model Number	Output Voltage	Output Current <i>Limited to Output Power²</i>	Ripple & Noise (mV P-P) ³	Output Power
SF80P377AR ¹	V1: 5 Vdc	1.2 – 12.0 A	50	80 Watts
	V2: 12 Vdc	0.5 – 5.0 A	120	
	V3: -5 Vdc	0.0 – 0.8 A	50	
SF_8_P370AR	V1: 5 Vdc	1.2 – 12.0 A	50	80 Watts
	V2: 12 Vdc	0.5 – 5.0 A	120	
	V3: -12 Vdc	0.0 – 0.8 A	120	
SF80P374AR ¹	V1: 5 Vdc	1.2 – 12.0 A	50	80 Watts
	V2: 15 Vdc	0.5 – 5.0 A	150	
	V3: -15 Vdc	0.0 – 0.8 A	150	

SF 8 P3 AR



Notes:

1. Available with 3-Pin Input Header and PCB Configuration *Only*.
2. Total (combined) Output Voltage/Current cannot exceed Output Power.
(Voltage #1 x Current #1) + (Voltage #2 x Current #2) + (Voltage #3 x Current #3) ≤ Max. Power (Watts)
3. Measured w/ 0.1 μF ceramic capacitor & 47 μF electrolytic capacitor in parallel and a 20 MHz Bandwidth-limited scope.



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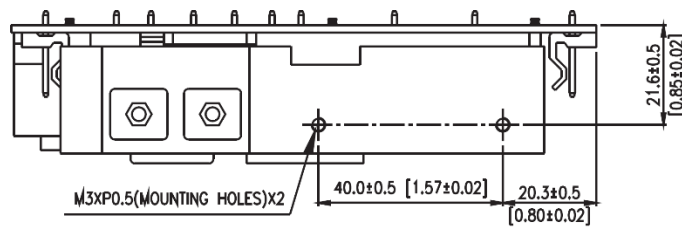
Specification subject to
change without notice.



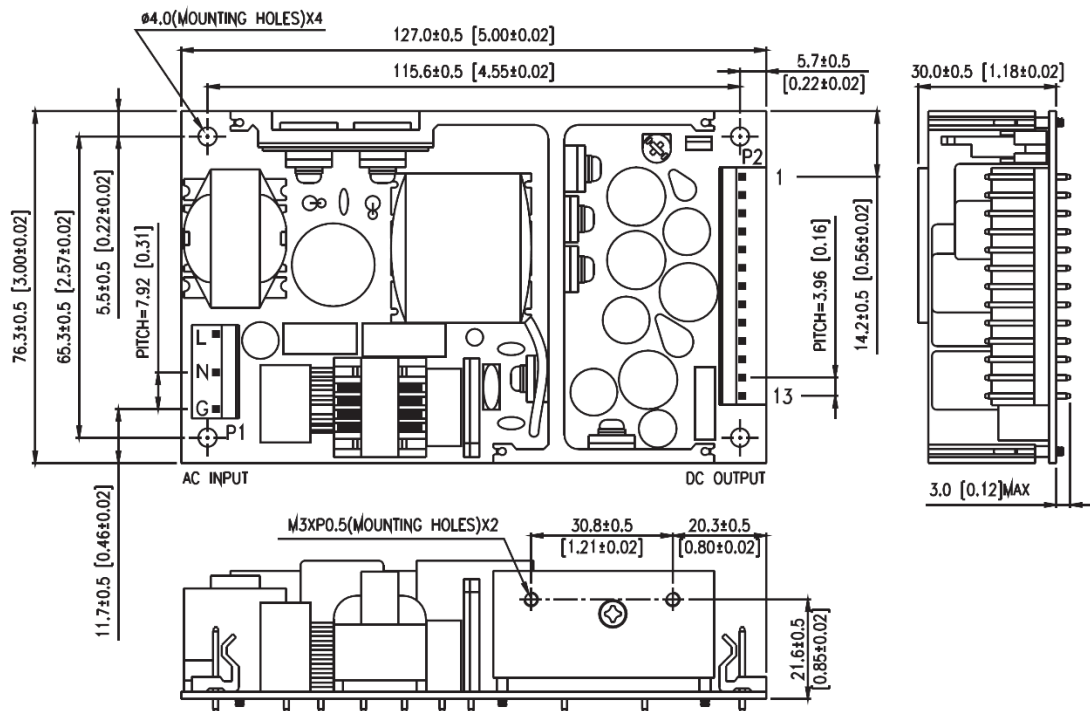
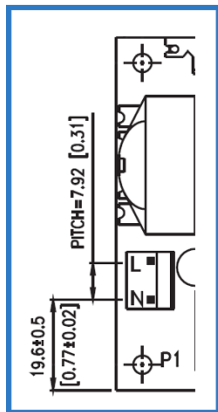
Mechanical Specification (mm [in])

SF8_P__AR: PCB Style

Pin Connection 13-Pin Header													
Output Type	Pin												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Dual Output	V2	V2	V1	V1	V1	V1	Com	Com	Com	N/C	Com	Com	N/C
Triple Output	V2	V2	V1	V1	V1	V1	Com	Com	Com	V3	Com	Com	N/C



SF81 2-pin input



- **Input Connector Mating:**
 - 2-Pin Header: Molex Housing 09-52-4034 and Molex 2478 Series Crimp Terminals
 - 3-Pin Header: Molex Housing 09-52-4054 and Molex 2478 Series Crimp Terminals

- **Output Connector Mating:**
 - 13-Pin Header: Molex Housing 09-52-4134 and Molex 2478 Series Crimp Terminals



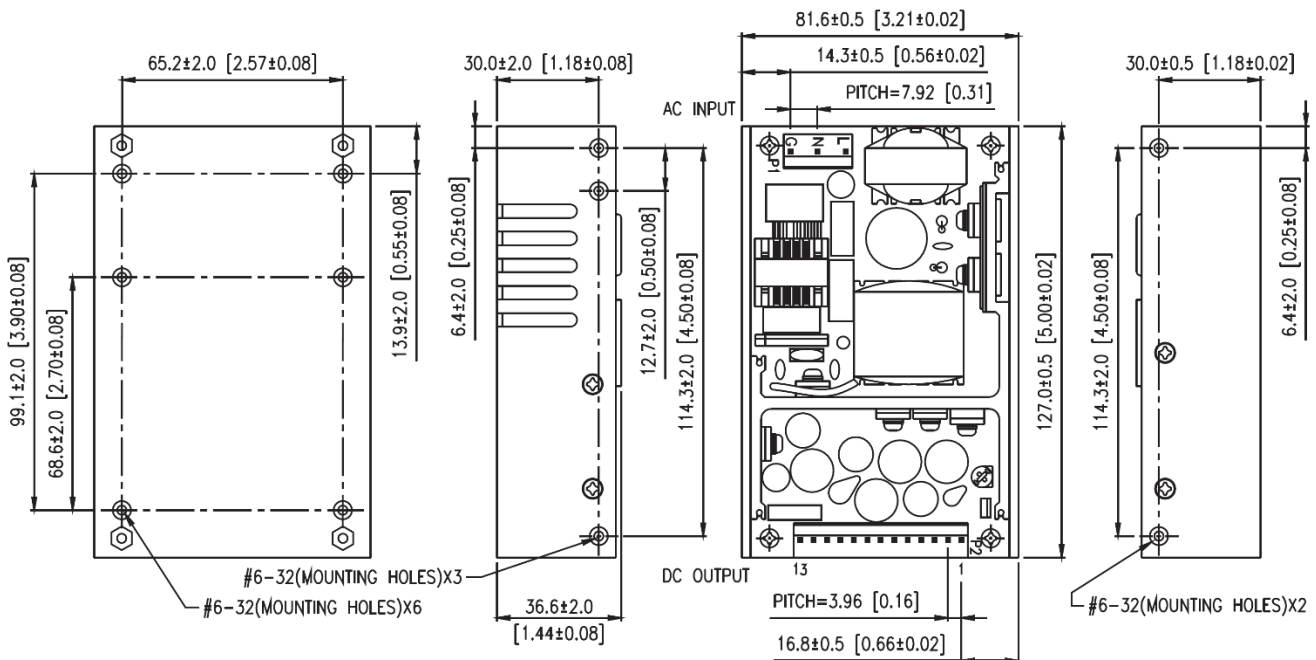
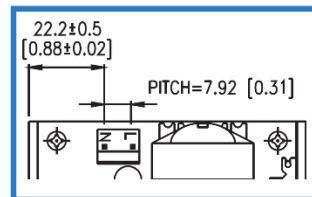


Mechanical Specification (mm [in]) Continued

SFU8_P__AR: U-Channel Style

Pin Connection 13-Pin Header													
Output Type	Pin												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Dual Output	V2	V2	V1	V1	V1	V1	Com	Com	Com	N/C	Com	Com	N/C
Triple Output	V2	V2	V1	V1	V1	V1	Com	Com	Com	V3	Com	Com	N/C

SFU81 2-pin input



• Input Connector Mating:

- 2-Pin Header: Molex Housing 09-52-4034 and Molex 2478 Series Crimp Terminals
- 3-Pin Header: Molex Housing 09-52-4054 and Molex 2478 Series Crimp Terminals

• Output Connector Mating:

- 13-Pin Header: Molex Housing 09-52-4134 and Molex 2478 Series Crimp Terminals