



SYNERGY Modular Power Supplies

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SYNERGY POWER PLATFORMS

POWER PLATFORM

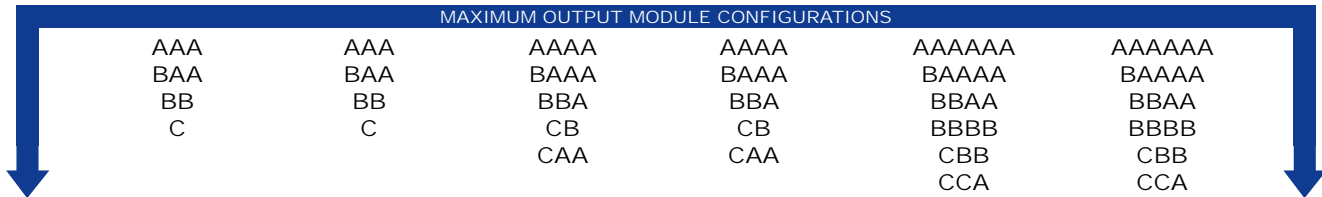
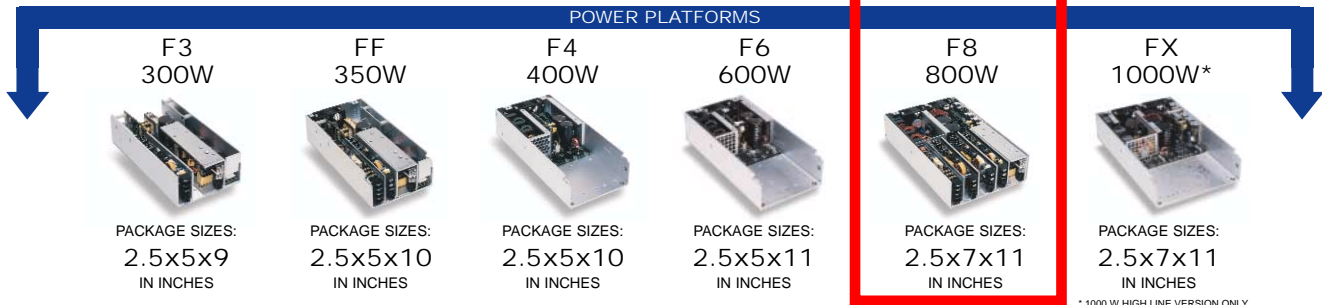
- Universal Input 90-264 VAC
- Active power factor - 0.99, compliant to EN61000-3-2 at full load
- Inrush Current – 40A max, active inrush circuit
- Efficiency 75% typical at nominal line
- Hold up time no less than 20ms at full load
- Power Fail active high TTL signal provides a minimum of 5ms warning prior to outputs losing regulation
- EMI filter FCC Level B, CISPR 22 Level B, EN55022 Level B
- Leakage current 2mA to 3mA typical (consult factory for low leakage designs to meet IEC601-1 and UL2601-1 to 100µA)
- All platforms forced air cooled with high reliability ball-bearing fans (excluding F3 which requires 400 lfm customer provided airflow).

FEATURES

- Operating temperature 0°-50°C ambient; de-rate outputs 2.5% per degree from 50° - 70°C
- Optional thermal overload protection
- MTBF demonstrated >500,000 hours
- Fully isolated outputs
- Worldwide safety approval (UL, CSA, TUV and CE)
- Single wire current share
- 2 year Warranty
- Highly Accelerated Life Tested (HALT)
- N+1 chassis configurations optional (consult factory for details)

BENEFITS

- Six power platforms and dozens of standard output modules in the Synergy series ensure –
 - Wide range of configuration options available as 'standard'
 - Availability from stock shortens lead times on production orders
 - A 24 hour turnaround on prototype and test quantities
 - Comprehensive QA and burn-in on every module
 - Reduced design time and closer adherence to specification
- Synergy Web Tools enable user configuration 7 / 24 / 365, whenever YOU want to do it
- Design engineers available to assist with custom or modified requirements



NOTE: G and H modules can be substituted for A modules • D and E modules can be substituted for B modules

A	SINGLE OUTPUT
A2	3.3V @ 20A
A3	5.0V @ 20A
A4	12V @ 10A
A5	15V @ 8A
A6	24V @ 6A
A7	28V @ 6A
A8	36V @ 4A
A9	48V @ 3A

B	SINGLE OUTPUT
B1	2.0V @ 60A
B2	3.3V @ 60A
B3	5.0V @ 60A
B4	12V @ 25A
B5	15V @ 20A
B6	24V @ 17A
B7	28V @ 14.5A
B8	36V @ 11.1A
B9	48V @ 8.5A

C	SINGLE OUTPUT
C1	2.0V @ 100A
C2	3.3V @ 100A
C3	5.0V @ 100A
C6	24V @ 21A
C7	28V @ 18A
C8	36V @ 14A
C9	48V @ 10.5A

D	DUAL OUTPUT
D1	5.0V @ 10A; 12V @ 10A
D2	12V @ 10A; 12V @ 10A
D3	5.0V @ 10A; 24V @ 5A

G	DUAL OUTPUT
G1	12V @ 4A; 12V @ 4A
G2	15V @ 3A; 15V @ 3A
G3	12V @ 4A; 5V @ 8A
G4	15V @ 3A; 24V @ 2A

E	TRIPLE OUTPUT
E1	5.0V@20A; 12V@2A; 12V@2A
E2	5.0V@20A; 15V@2A; 15V@2A
E3	12V @10A; 15V@2A; 15V@2A

H	SINGLE OUTPUT
H3	5V @ 8A
H4	12V @ 4A
H5	15V @ 3A
H6	24V @ 2A

Select an **Input Power Platform** to suit your requirements & Add **Output Modules** for the voltage combination you need. **or** Use the **Online Configurator** at [ssi4power.com](http://www.ssi4power.com) to automatically configure your power supply.





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Output Module Specifications	A MODULE	G MODULE	H MODULE	B MODULE	D MODULE	E MODULE	C MODULE
	A2 3.3V @ 20A A3 5.0V @ 20A A4 12V @ 10A A5 15V @ 8A A6 24V @ 6A A7 28V @ 6A A8 36V @ 4A A9 48V @ 3A	G1 12V @ 4A; 12V @ 4A G2 15V @ 3A; 15V @ 3A G3 12V @ 4A; 5.0V @ 8A G4 15V @ 3A; 24V @ 2A	H3 5V @ 8A H4 12V @ 4A H5 15V @ 3A H6 24V @ 2A	B1 2.0V @ 60A B2 3.3V @ 60A B3 5.0V @ 60A B4 12V @ 25A B5 15V @ 20A B6 24V @ 17A B7 28V @ 14.5A B8 36V @ 11.1A B9 48V @ 8.5A	D1 5.0V @ 10A 12V @ 10A D2 12V @ 10A 12V @ 10A D3 5.0V @ 10A 24V @ 5A	E1 5V @ 20A; 12V @ 2A 12V @ 2A E2 5V @ 20A; 15V @ 2A 15V @ 2A E3 12V @ 10A; 15V @ 2A 15V @ 2A	C1 2.0V @ 100A C2 3.3V @ 100A C3 5.0V @ 100A C6 24V @ 21A C7 28V @ 18A C8 36V @ 14A C9 48V @ 10.5A
Line Regulation	0.1% over input range	0.5% over input range	0.5% over input range	0.1% over input range	0.1% over input range	0.1% main, 0.3% auxiliary outputs over input range	0.1% over input range
Load Regulation	0.4% from no load to full load and full load to no load.	1% from no load to full load and full load to no load.	1% from no load to full load and full load to no load.	0.4% from no load to full load and full load to no load.	0.4% from no load to full load and full load to no load.	0.4% main, 2% auxiliary outputs from no load to full load to no load.	0.4% from no load to full load and full load to no load.
Ripple and noise (PARD)	50mV or 1% whichever is greater.	50mV or 1% whichever is greater.	50mV or 1% whichever is greater.	50mV or 1% whichever is greater.	50mV or 1% whichever is greater.	50mV or 1% whichever is greater.	50mV or 1% whichever is greater.
Over voltage set point	115% to 130% of nominal output.	Not Available	Not Available	115% to 130% of nominal output.	115% to 130% of nominal output.	115% to 130% of nominal output.	115% to 130% of nominal output.
Current limit	Set at 110% to 140% of nominal rating.	Set at 110% to 140% of nominal rating.	Set at 110% to 140% of nominal rating.	Set at 110% to 140% of nominal rating.	Set at 110% to 140% of nominal rating.	Set at 110% to 140% of nominal rating.	Set at 110% to 140% of nominal rating.
Minimum current	No minimum current required.	No minimum current required.	No minimum current required.	No minimum current required.	No minimum current required.	1 amp on V1.	No minimum current required.
Remote sense	Standard on all "A" output modules.	Not Available	Not Available	Standard on all "B" output modules.	Standard on all "D" output modules.	Yes on V1 only.	Standard on all "C" output modules.
Remote inhibit	Standard on all "A" output modules. Active Low	Not Available	Not Available	Standard on all "B" output modules. Active Low	Standard on all "D" output modules. Active Low	Standard on all "E" output modules. (inhibits all outputs) Active Low	Standard on all "C" output modules. Active Low
Power valid (GOOD)	Open Collector standard on all "A" output modules.	Not Available	Not Available	Open Collector standard on all "B" output modules.	Open Collector applies to Output 1	Open Collector on main output. Not available on auxiliary output.	Open Collector standard on all "C" output modules.
Output Voltage Adjust	± 5% of nominal output.	± 5% of nominal output.	± 5% of nominal output.	± 5% of nominal output.	± 5% of nominal output.	± 5% of nominal output. (Main output only)	± 5% of nominal output.
Logic Connector D Module Only Mating Plug: AMP PN 87631-5 Contact, 20-24 AWG; AMP PN 1-87523-6	A MODULE Single Output	G MODULE Dual Output	H MODULE Single Output	B MODULE Single Output	D MODULE Dual Output	E MODULE Triple Output	C MODULE Single Output
	PIN FUNCTION 1 NOT USED 2 OUTPUT 2 - SENSE 3 NOT USED 4 NOT USED 5 NOT USED 6 INHIBIT 7 OUTPUT 1 - SENSE 8 POWER VALID 9 GROUND FOR PV/PV 10 POWER FAIL	Logic Connector PIN FUNCTION 1 +SENSE 2 - SENSE 3 NOT USED 4 CURRENT SHARE 5 NOT USED 6 INHIBIT 7 NOT USED 8 POWER VALID 9 NOT USED 10 POWER FAIL	Power Connector 1 OUTPUT 1 RTN 2 OUTPUT 1 3 OUTPUT 2 RTN 4 OUTPUT 2 Does Not Include Logic Connector	Logic Connector PIN FUNCTION 1 +SENSE 2 - SENSE 3 NOT USED 4 CURRENT SHARE 5 NOT USED 6 INHIBIT 7 NOT USED 8 POWER VALID 9 NOT USED 10 POWER FAIL	Power Connector Mating Connector: Molex PN 39-01-2080 Contact, 18-24 AWG; Molex PN 39-00-0056 3,7 OUTPUT 2+ 4,8 OUTPUT 2 RTN 1,5 OUTPUT 1+ 2,6 OUTPUT 1 RTN Logic Connector pin connections shown in blue panel (left).	Power Connector Mating Plug: Molex PN 39-01-2080 Contact, 18-24 AWG; Molex PN 39-00-0056 1 OUTPUT 3 RETURN 2 NOT USED 3 NOT USED 4 OUTPUT 2 RETURN 5 OUTPUT 3+ 6 NOT USED 7 NOT USED 8 OUTPUT 2+ Logic Connector pin connections are the same as C module	Logic Connector PIN FUNCTION 1 +SENSE 2 - SENSE 3 NOT USED 4 CURRENT SHARE 5 NOT USED 6 INHIBIT 7 NOT USED 8 POWER VALID 9 NOT USED 10 POWER FAIL

Figure 6 - F8 Power Platform I/O and Mounting

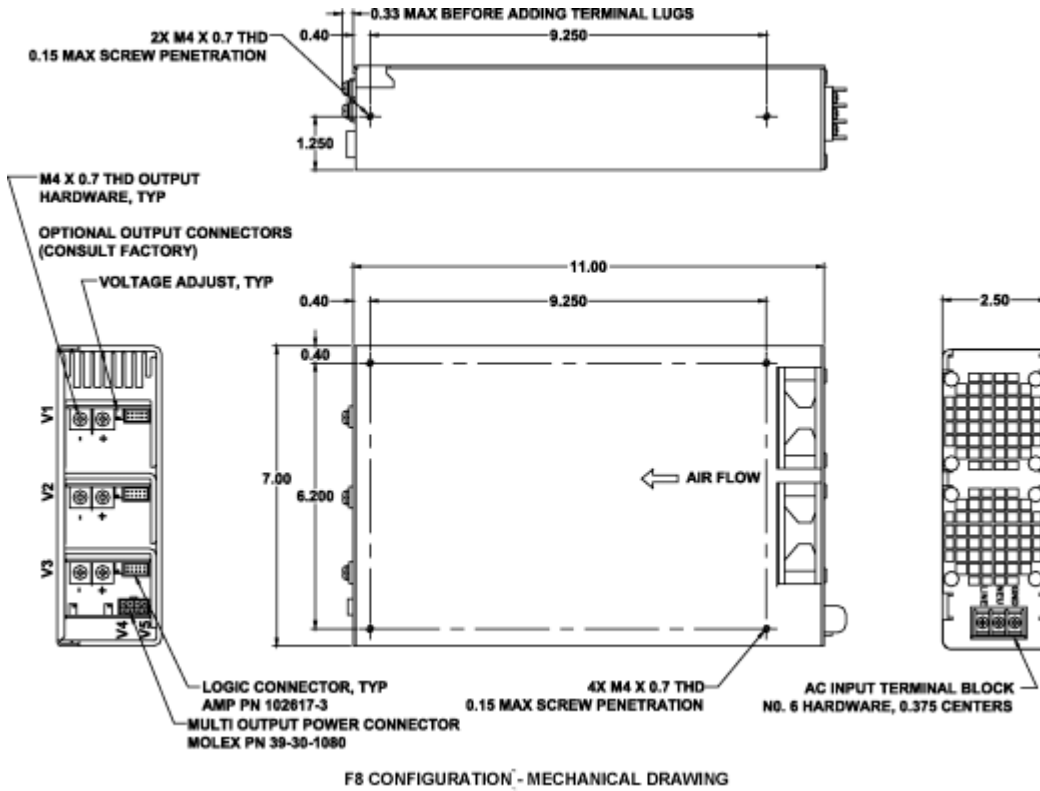


Figure 7 - FX Power Platform I/O and Mounting

