



SYN

28PS0036

Manuf P/N: F8C6A6A6



SYNERGY POWER PLATFORMS

POWER PLATFORM

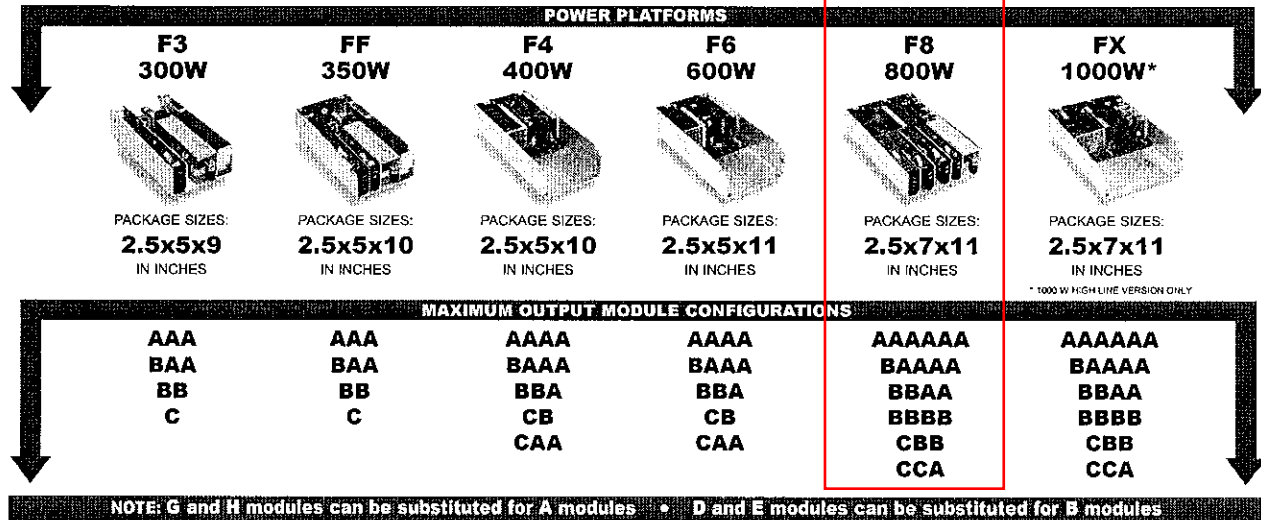
Universal Input 90-264 VAC
 Active power factor - 0.99, compliant to EN61000-3-2 at full load
 Inrush Current - 40A max, active inrush circuit
 Efficiency 75% typical at nominal line
 Hold up time no less than 20ms at full load
 Power Fail active high TTL signal provides a minimum of 5ms warning prior 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



A SINGLE OUTPUT

A2	3.3V @ 20A
A3	5.0V @ 20A
A4	12V @ 10A
A5	15V @ 10A
A6	24V @ 6A
A7	24V @ 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	24V @ 21A
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

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 to automatically
 configure your power supply.

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



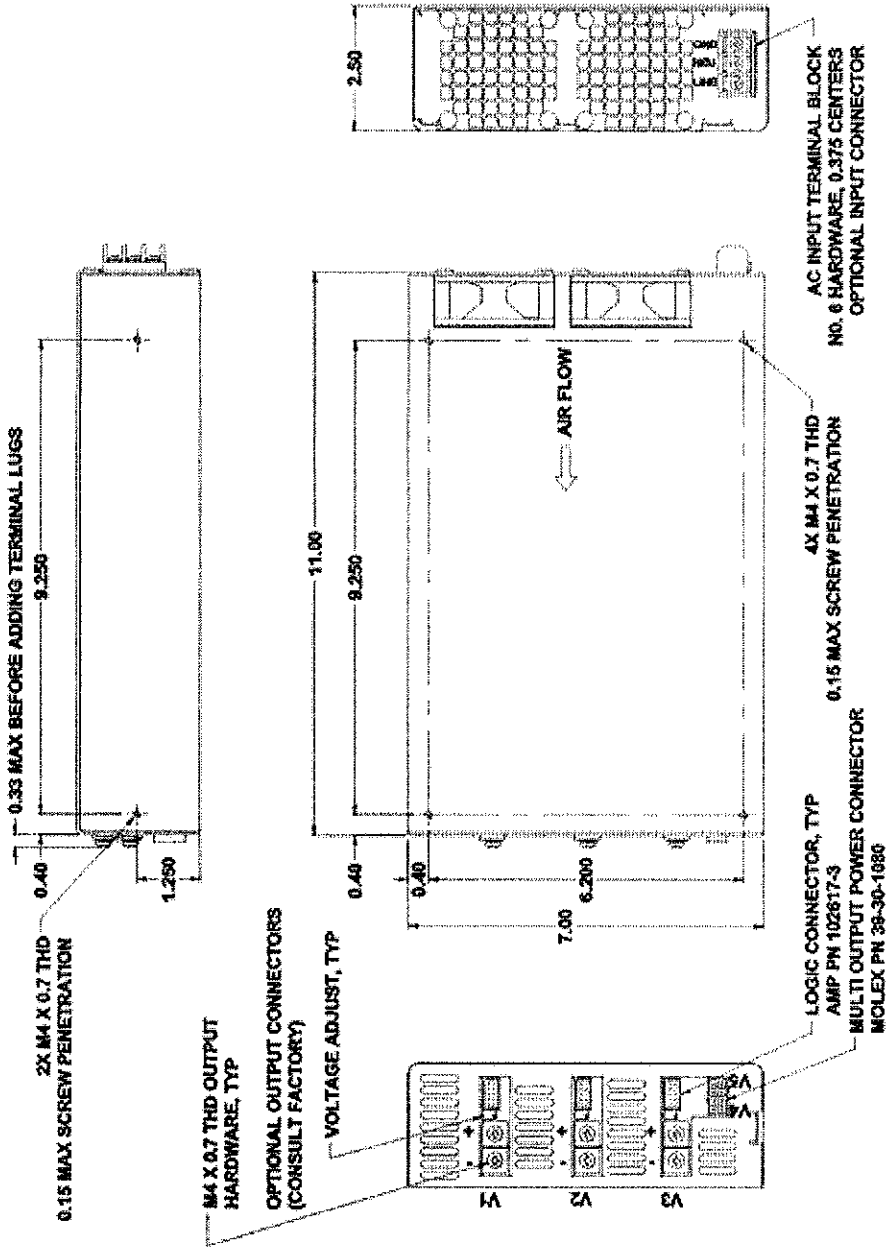


SYNERGY Modular Power Supplies

www.ssi4power.com



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 @ 10A A6 24V @ 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 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	Single Output	Dual Output	Single Output	Single Output	Dual Output	Triple Output	Single Output
Mating Plug: AMP PN 87G31-5 Contact, 20-24 AWG: AMP PN 1-87523-6	Mating Plug: Molex PN 39-01-2080 Contact, 18-24 AWG: Molex PN 39-00-0056	Mating Plug: Molex PN 39-01-2080 Contact, 18-24 AWG: Molex PN 39-00-0056	Mating Plug: Molex PN 39-01-2080 Contact, 18-24 AWG: Molex PN 39-00-0056	Mating Plug: Molex PN 39-01-2080 Contact, 18-24 AWG: Molex PN 39-00-0056	Mating Plug: Molex PN 39-01-2080 Contact, 18-24 AWG: Molex PN 39-00-0056	Mating Plug: Molex PN 39-01-2080 Contact, 18-24 AWG: Molex PN 39-00-0056	Mating Plug: Molex PN 39-01-2080 Contact, 18-24 AWG: Molex PN 39-00-0056
PIN FUNCTION	PIN FUNCTION	PIN FUNCTION	PIN FUNCTION	PIN FUNCTION	PIN FUNCTION	PIN FUNCTION	PIN FUNCTION
1 NOT USED	1 +SENSE	1 OUTPUT 1 RTN	1 +SENSE	1 +SENSE	1 +SENSE	1 OUTPUT 3 RETURN	1 +SENSE
2 OUTPUT 2 - SENSE	2 -SENSE	2 OUTPUT 1	2 -SENSE	2 -SENSE	2 -SENSE	2 NOT USED	2 SENSE
3 NOT USED	3 NOT USED	3 OUTPUT 2 RTN	3 NOT USED	3 NOT USED	3 NOT USED	3 NOT USED	3 NOT USED
4 NOT USED	4 CURRENT SHARE	4 OUTPUT 2	4 CURRENT SHARE	4 CURRENT SHARE	4 CURRENT SHARE	4 OUTPUT 2 RETURN	4 CURRENT SHARE
5 NOT USED	5 NOT USED		5 NOT USED	5 NOT USED	5 NOT USED	5 OUTPUT 3+	5 NOT USED
6 INHIBIT	6 INHIBIT		6 INHIBIT	6 INHIBIT	6 INHIBIT	6 NOT USED	6 INHIBIT
7 OUTPUT 1 - SENSE	7 NOT USED		7 NOT USED	7 NOT USED	7 NOT USED	7 NOT USED	7 NOT USED
8 POWER VALID	8 POWER VALID	Does Not Include Logic Connector	8 POWER VALID	8 POWER VALID	8 POWER VALID	8 POWER VALID	8 POWER VALID
9 GROUND FOR PVP/VP	9 NOT USED		9 NOT USED	9 NOT USED	9 NOT USED	9 NOT USED	9 NOT USED
10 POWER FAIL	10 POWER FAIL		10 POWER FAIL	10 POWER FAIL	10 POWER FAIL	10 POWER FAIL	10 POWER FAIL



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Synergy MP² Modular Connector Matrix



<i>Power Platforms</i>	Input Terminal Block Screw Size	Input Connector Type	Contact	Connector Mfg. Website	SSI Part # Prototype connector pack
F3 (A/C input)	-	Molex 09-91-0500	Molex 08-05-0106	www.molex.com	10000274
FF (A/C input)	-	Molex 09-91-0500	Molex 08-05-0106	www.molex.com	10000274
F4 (A/C input)	#6	-	-	-	10000273
F6 (A/C input)	#6	-	-	-	10000273
F8 (A/C input)	#6	-	-	-	10000275
FX (A/C input)	#6	-	-	-	10000275

<i>Output Modules</i>	Main Output Terminal Block Screw Size	Aux. Output Connector Type	Contact	Connector Mfg. Website	
A (output)	#6	-	-	-	-
B (output)	M4	-	-	-	-
C1 - C3 (output)	1/4"	-	-	-	-
C6 - C9 (output)	M4	-	-	-	-
D (output)	-	Molex 39-01-2080	Molex 39-00-0056	www.molex.com	-
E (output)	M4	Molex 39-01-2080	Molex 39-00-0056	www.molex.com	-
G (output)	#6	-	-	-	-
H (output)	#6	-	-	-	-

Logic Connector	-	AMP 87631-5	AMP 1-87309-4	www.amp.com	-
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