

Aegis Power Solution

VME400-01

VME
Power Converter

(Rev A02, 06/08/10)



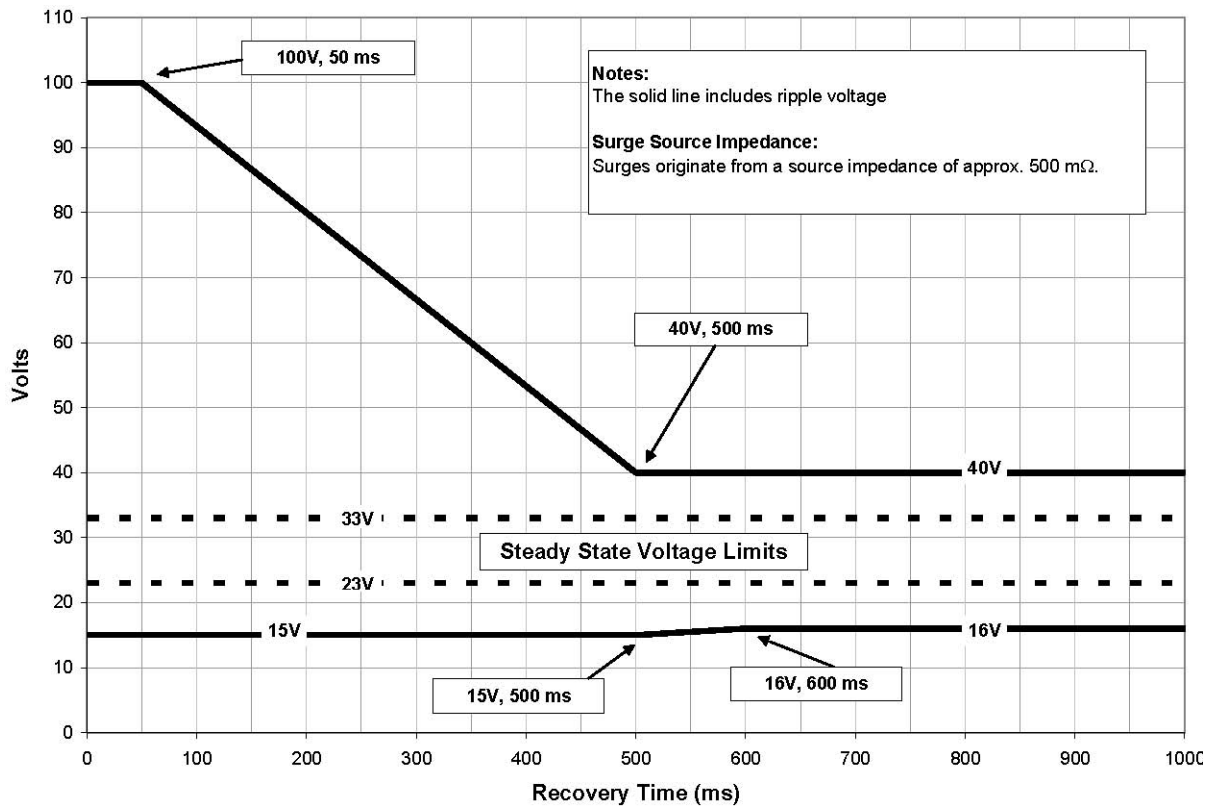
28VDCin, 4 DC Output Power Card

Specifications: *(25°C, nominal line, 100% load unless otherwise specified).*

<u>DC Input Voltage:</u>	18VDC to 36VDC Operating Range. Meets Mil-Std-704E/F and MIL-STD-1275D continuous operation. 22VDC to 33VDC, 28VDC nominal. 100VDC 50msec transient.
<u>DC Input Line Current:</u>	21.41A Max @ 22VDC, 16.82A Typ @ 28VDC (400 Wout.)
<u>Input Power:</u>	471W maximum @ 400 Wout.
<u>Output Power:</u>	400W Max, all outputs combined.
<u>Output Voltages:</u>	+5VDC 22.4A, 112W. +3.3VDC 33.9A, 112W. +12VDC 9.3A, 112W. -12VDC 9.3A, 112W.
<u>Efficiency:</u>	85% Min. 87% Typical.
<u>Startup Time:</u>	500 millisecond Maximum.
<u>Voltage Setpoint,</u>	
<u>Line/Load Regulation:</u>	+/- 2% Vout nominal (for any combination).
<u>Output Ripple:</u>	50mV pk-pk Max. (20MHz BW) all except. +/-12VDC 100mV pk-pk Max. (20MHz BW).
<u>Current Limit:</u>	Short Circuit protected, automatic recovery.
<u>Temperature:</u>	-40°C to +85°C Operating baseplate wedgelocks 400 Wout. -55°C to +100°C Non-operating.
<u>Size:</u>	6U x 160mm x 4hp (0.8").
<u>Weight:</u>	2.7b. nominal.
<u>Connector:</u>	1ea Positronics PCIH47M400A1 or equivalent.
<u>Shock:</u>	Mil-Std-810F, Method 514.5, Procedure I.
<u>Vib:</u>	Mil-Std-810F, Method 516.5, Procedure I, Category 20.
<u>Humidity:</u>	0-95% non-condensing.
<u>EMI:</u>	Mil-Std-461E CE102, CS101.
<u>Options</u>	(add dash # to p/n above, example: VME400-xxx-103). -103 Conformal Coat, per IPC-CCC-830B, Type SR.

Ordering Information: AEGIS P/N VME400-01

Transient Immunity

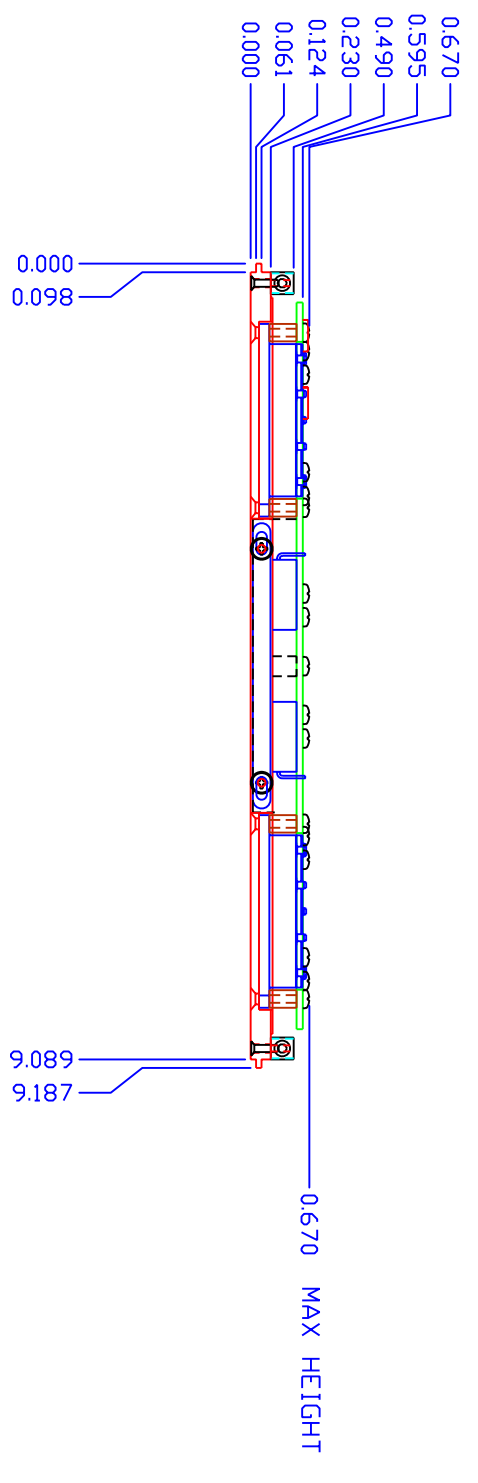
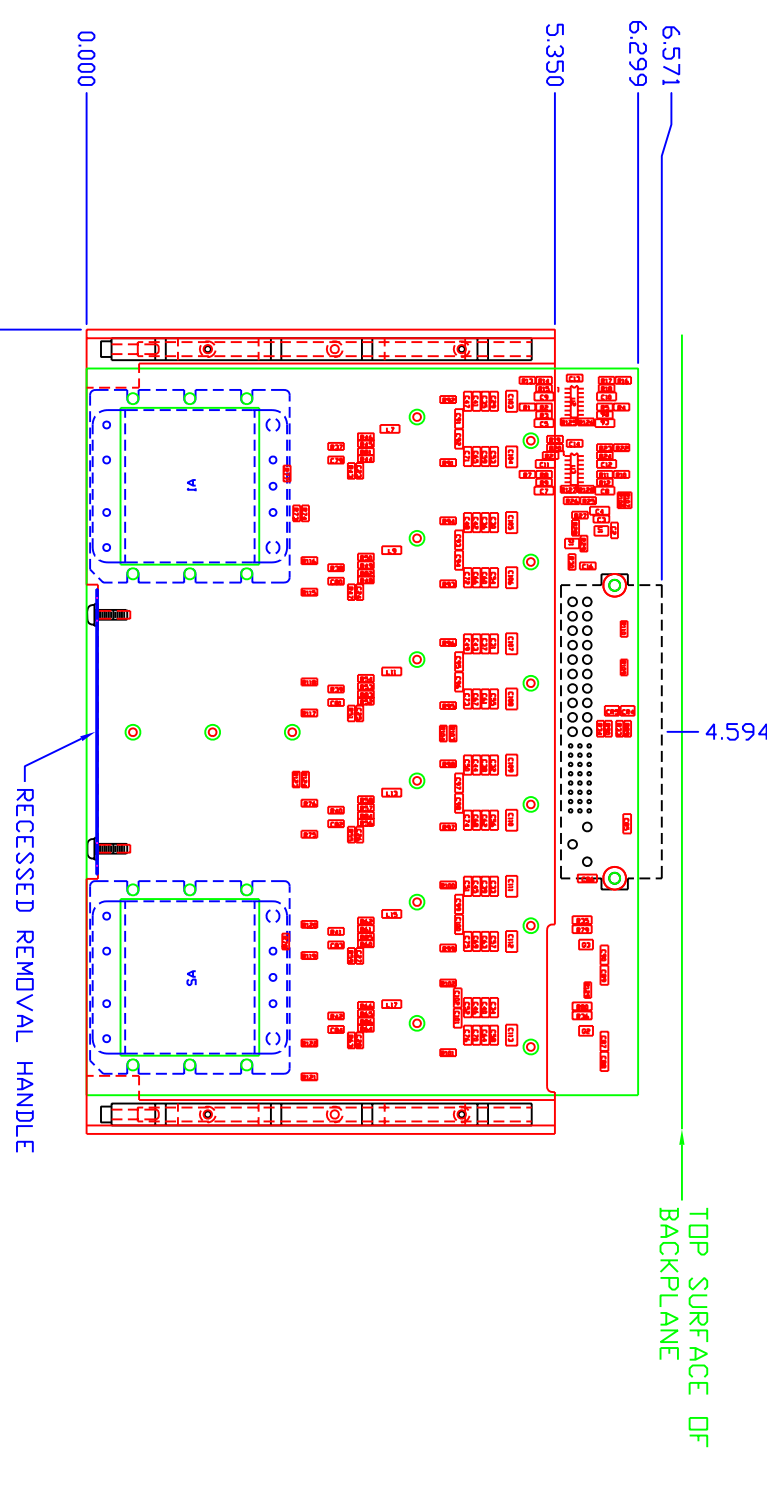
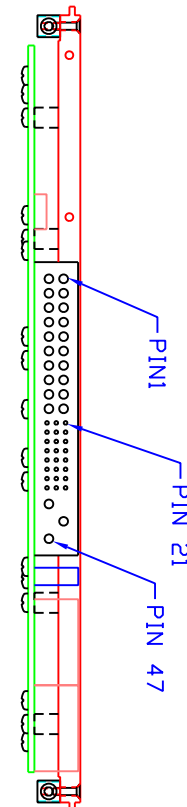


Unit ride through 15V, 500ms @ 450W max. output power
Unit shut down below 15V input, automatic restart

VME400-01 Backplane Connector Pin-out

Pin	Description
1	+5V Out
2	+5V Out
3	+5V Out
4	+5V Out
5	RTN
6	RTN
7	RTN
8	RTN
9	RTN
10	RTN
11	RTN
12	RTN
13	+3.3V Out
14	+3.3V Out
15	+3.3V Out
16	+3.3V Out
17	+12V Out
18	RTN
19	-12V Out
20	RTN
21	(AEGIS reserved – no connection on backplane)
22	POWER OK RTN
23	(AEGIS reserved – no connection on backplane)
24	(AEGIS reserved – no connection on backplane)
25	(AEGIS reserved – no connection on backplane)
26	(AEGIS reserved – no connection on backplane)
27	(AEGIS reserved – no connection on backplane)
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29	(AEGIS reserved – no connection on backplane)
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34	(AEGIS reserved – no connection on backplane)
35	(AEGIS reserved – no connection on backplane)
36	(AEGIS reserved – no connection on backplane)
37	(AEGIS reserved – no connection on backplane)
38	(AEGIS reserved – no connection on backplane)
39	INHIBIT
40	(AEGIS reserved – no connection on backplane)
41	(AEGIS reserved – no connection on backplane)
42	POWER OK
43	(AEGIS reserved – no connection on backplane)
44	(AEGIS reserved – no connection on backplane)
45	CHASSIS GROUND
46	POSITIVE INPUT
47	NEGATIVE INPUT

NOTES: UNLESS OTHERWISE SPECIFIED
 1. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M-1994.
 2. MATERIAL:
 3. FINISH:



0.670 MAX HEIGHT
 0.595
 0.276
 0.000

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

ZONE	REV	DESCRIPTION	DATE	APPROVED
A01		INITIAL RELEASE		JFS
A02		RECESSED HANDLE, P/N NAME CHG	03/05/07	JFS
A03		UPDATED TO SHOW INPUT INDUCTORS	07/03/07	JFS
A04		MOVED ONE KEYING HOLE LOCATION	07/25/07	JFS
A05		ADDED KEYING BLOCK	11/18/08	MVS
C01		UPDATED FOR REV C01 PWB	01/14/09	MVS

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. FRACTIONS ARE DECIMALS. TOLERANCES ARE: DECIMALS: .5
 * N/A * .02 * .5
 * .005 * .005 * .005
 MATERIAL: SEE NOTE 2
 FINISH: SEE NOTE 3
 DO NOT SCALE DRAWING

CONTRACT NO.		AEGIS POWER SYSTEMS	
APPROVALS		MURPHY, NORTH CAROLINA	
DRAWN	DATE	TITLE	
JFS	07/03/07	VME450 MECH LAYOUT	
CHECKED		AEGIS P/N: VME450	
PROJ. ENG.		SIZE	DWG NO.
WFL		D	VME450-M00
QUALITY		SCALE	SHEET 1 OF 1
			REV
			C01

