

## Aegis Power Solution

### VME275X

#### VME Power Converter

(Rev A06, 06/08/10)



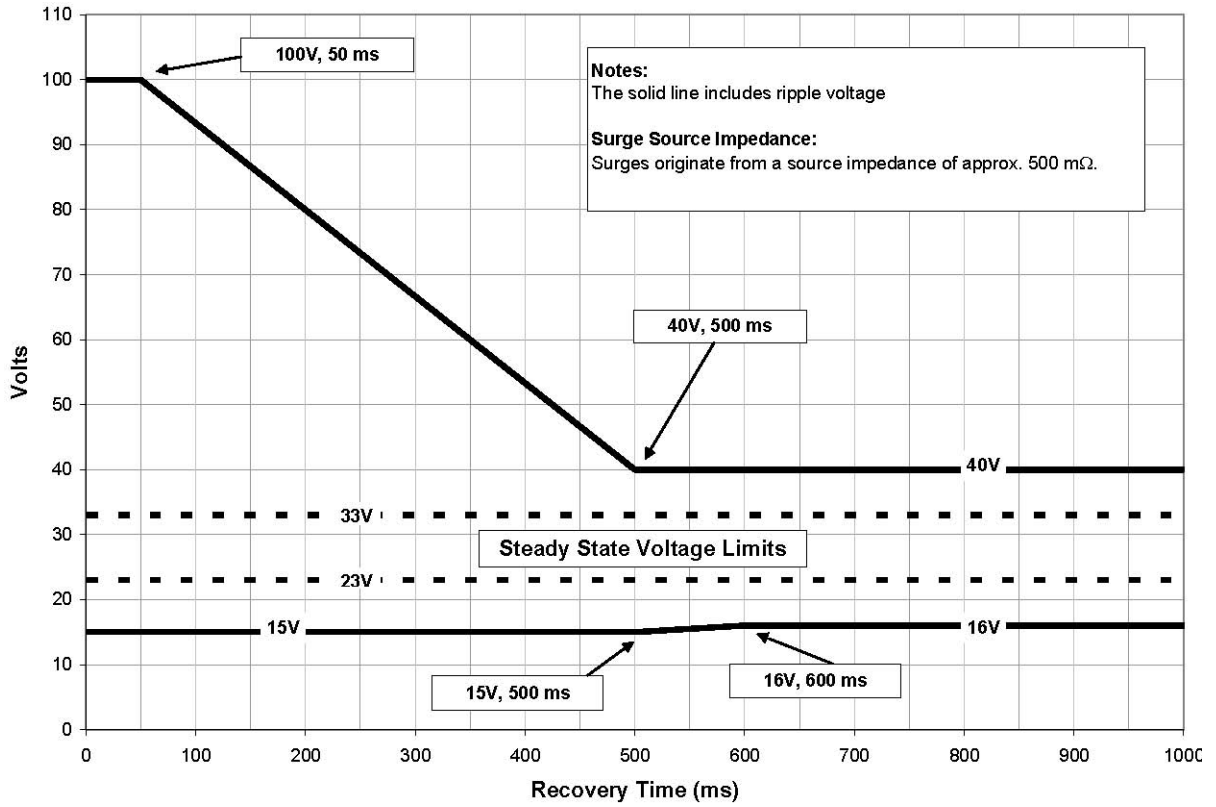
**28VDCin 275W DCout 4 Output Power Card  
with Holdup 10msec/275W or 15msec/185W**

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

<b><u>DC Input Voltage:</u></b>	18VDC to 36VDC operating Range. Meets Mil-Std-704A/E/F and Mil-Std-1275D Continuous Operation. 22VDC to 36VDC, 28VDC nominal. 100VDC 50msec transient See attached Transient Immunity Curve.
<b><u>DC Input Line Current:</u></b>	13.2A Typical @ 28VDC input, 75°C.
<b><u>Input Power:</u></b>	372W Typical.
<b><u>Output Power:</u></b>	275W Maximum, all outputs combined, 75°C at wedgelocks. 225W Maximum, all outputs combined, 85°C at wedgelocks.
<b><u>Output Voltages:</u></b>	+5VDC 22.4A 112W. +3.3VDC 33.9A 112W. +12VDC 2.92A 35W. -12VDC 1.25A 15W.
<b><u>Efficiency:</u></b>	74% Typical.
<b><u>Startup Time:</u></b>	500 millisecond Maximum.
<b><u>Holdup Time:</u></b>	10 millisecond at 275W out 15 millisecond at 185W out or less.
<b><u>Voltage Setpoint, Line, Load Regulation:</u></b>	+/- 2% Vout nominal (for any combination).
<b><u>Temperature Regulation:</u></b>	+/-0.01% per °C.
<b><u>Output Ripple:</u></b>	100mV pk-pk typical (20MHz BW).
<b><u>Overvoltage Protection:</u></b>	Recycle input power to reset (1minute off).
<b><u>Current Limit:</u></b>	Short Circuit protected, automatic recovery.
<b><u>Temperature:</u></b>	-40°C to +75°C Operating Wedgelocks, 275W. -40°C to +85°C Operating Wedgelocks, 225W. -40°C to +85°C Operating Wedgelocks, 185W. -55°C to +100°C Non-operating.
<b><u>Size:</u></b>	6U" x 4hp(.8") x 160mm (TBD dwg).
<b><u>Weight:</u></b>	2.5lb estimate.
<b><u>Connector:</u></b>	47 pin Positronics(TBD dwg).
<b><u>Vibration:</u></b>	MIL-STD-810F, Method 514.5, Procedure 1.
<b><u>Shock:</u></b>	MIL-STD-810F, Method 516.5, Procedure 1.
<b><u>Humidity:</u></b>	0-95% non-condensing.
<b><u>EMI:</u></b>	MIL-STD-461E/F CE102 and CS101.

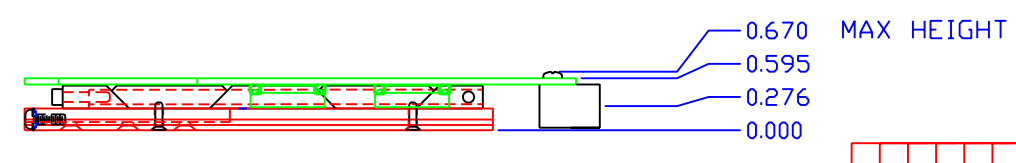
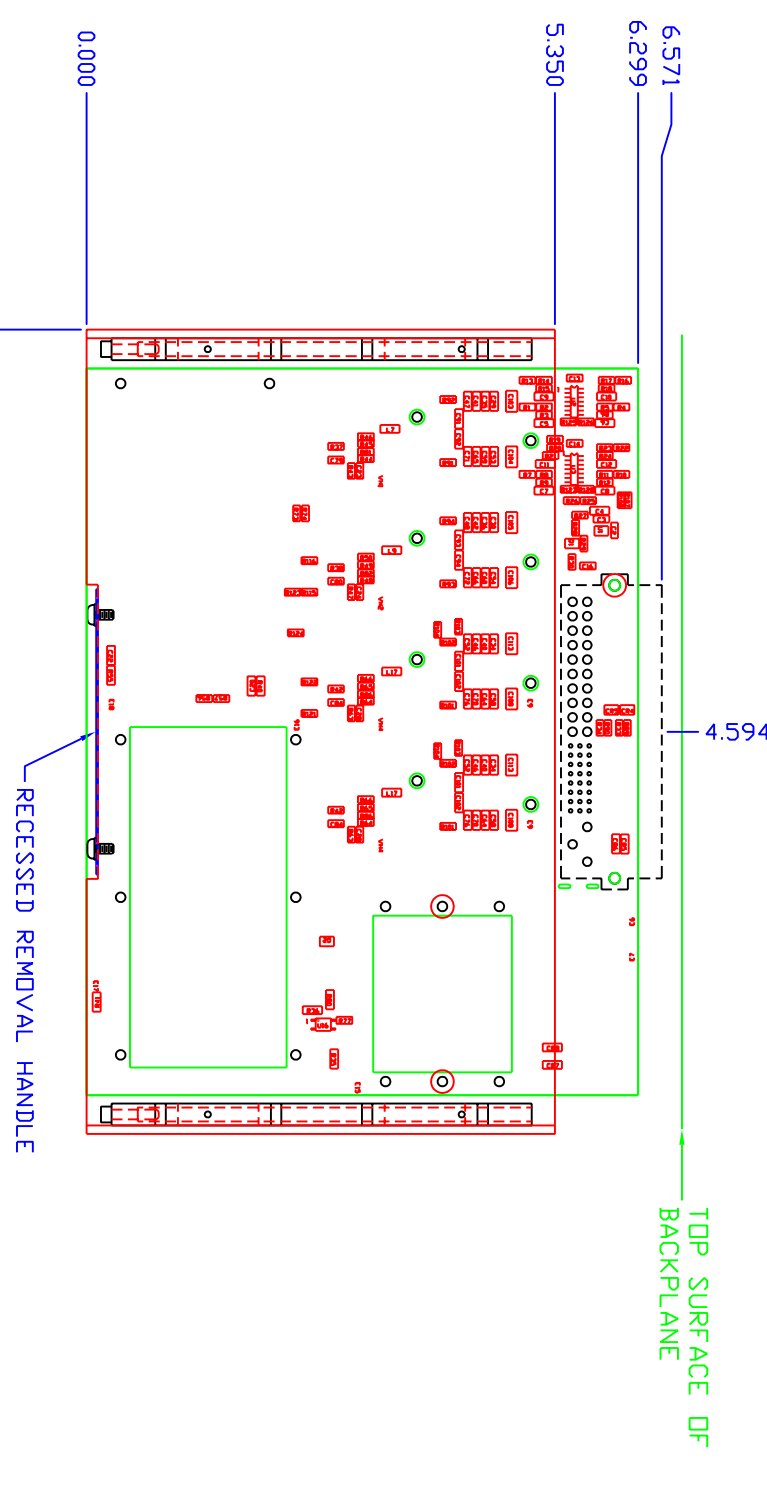
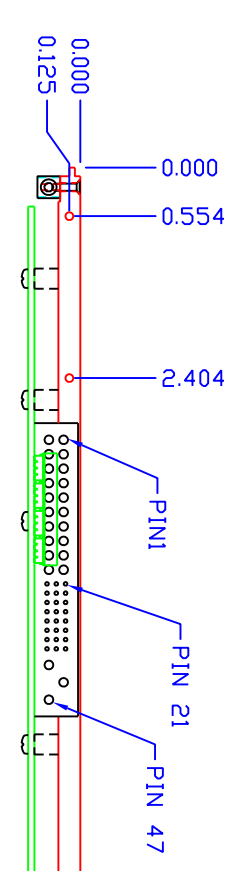
Ordering Information: AEGIS Part Number. **VME275X-001**

# VME275X Transient Immunity

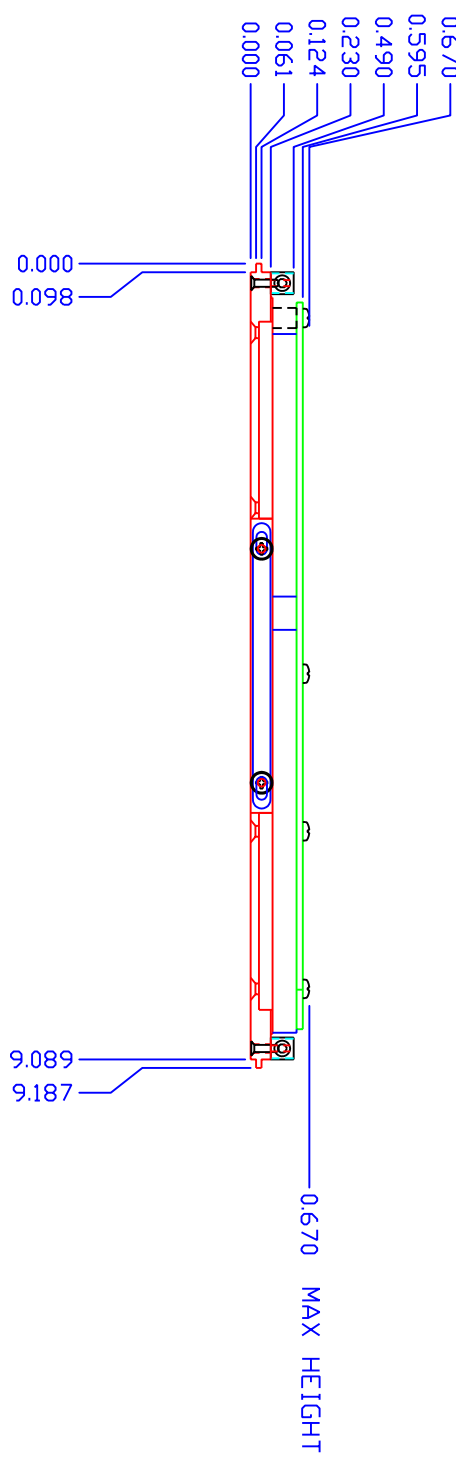


Unit ride through 15V, 500ms @ 275W max. output power  
Unit shut down below 15V input, automatic restart

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



CONNECTOR POSITRONIC P/N PCIH47M400A1, DR EQ.  
 PINS 1, 2, 3: V1 DUT  
 PINS 4, 5, 6, 7, 8, 10: V DUT RTN (COMMON)  
 PINS 9, 11, 12: V2 DUT  
 PINS 13, 14: V3 DUT  
 PINS 15, 16, 17, 18: V DUT RTN (COMMON)  
 PINS 19, 20: V4 DUT  
 PIN 21: INHIBIT #2 (CONNECTED TO NEG INPUT = DISABLED)  
 PIN 22 - SIGNAL RTN (COMMON)  
 PINS 23 THRU 38: NC  
 PIN 30 - NC  
 PIN 31 - NC  
 PIN 32 - NC  
 PIN 33, 34, 35, 36, 37, 38 - NC  
 PIN 39 - INHIBIT #1 (CONNECTED TO NEG INPUT = DISABLED)  
 PINS 40, 41 - NC  
 PIN 42 - POWER OK. (OPEN COLLECTOR = FAIL)  
 PINS 43, 44 - NC  
 PIN 45 - CHASSIS GND  
 PIN 46 - POSITIVE INPUT  
 PIN 47 - NEGATIVE INPUT



REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A01		INITIAL RELEASE	08/03/09	MRA

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

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. FRACTIONS DECIMALS DECIMALS  
 \* N/A \* 02 \* .5  
 \* N/A \* .005 \* .5

DRAWN		DATE		TITLE	
APPROVALS		JFS 07/03/07		AEGIS POWER SYSTEMS MURPHY, NORTH CAROLINA	
MATERIAL		SEE NOTE 2		AEGIS P/N: VME275X-XXX	
FINISH		SEE NOTE 3		VME275X MECH LAYOUT	
NEXT ASSY		USED ON		SIZE / PROJ. NO. / Dwg. NO.	
APPLICATION		DO NOT SCALE DRAWING		D / 06ES8 / VME275X-M00	
				SCALE 1/1 / SHEET 1 OF 1	

8 7 6 5 4 3 2 1