

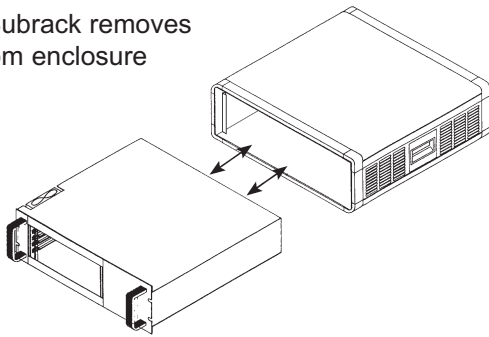


Model 710 Two Piece (Subrack, Enclosure) shown with 5 Slot backplane and lighted System Reset



Model 720 Removable Internal Subrack

Model 710: Subrack removes completely from enclosure

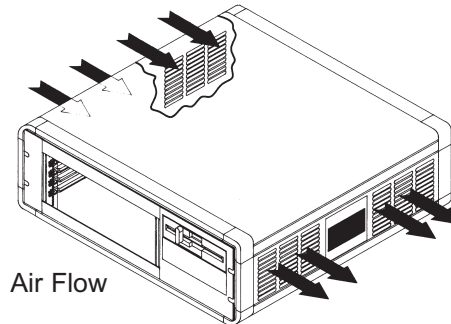


**Series 710 / 720  
6U Horizontal Cards**

19.0" internal subrack slides in/out on metal tracks for maximum accessibility. Subrack assembly includes backplane, power supply and fans; it may be rack mounted separately (Model 720). Horizontal cards and space for up to three 3.5" drive bays. Two rear I/O ports, many power options (Page 9)



Rear View showing 2 slot rear I/O



Air Flow

**Attractive & Extremely Rugged Benchtop/Desktop Outer Enclosures**

VectorPak™ outer enclosures are available in many standard sizes and colors. They are designed to house standard 19"W or similar rack devices including VectorPak™ subracks and fan trays. They were developed for rugged military applications and are constructed of formed sheet and extruded aluminum. Protective rubber feet and rack mount hardware included. Recessed pocket or strap handles.



SE 1322D-01



SE 1588  
4U for 8.4"W Subrack

SE 1322 3U x 22"D for 19"W Subrack

Rack Unit	Height		Width		Depth		Internal Size
Part Number	Inside Dim.	Outside Dim.	Inside Dim.	Outside Dim.	Inside Dim.	Outside Dim.	
SE132216	5.20"	6.40"	17.80"	20.20"	16.00"	17.60"	3U X 19" W
SE1322	5.20"	6.40"	17.80"	20.20"	22.00"	23.60"	3U X 19" W
SE1422	5.20"	6.40"	17.80"	20.20"	16.00"	17.60"	3U X 19" W
SE1522	6.97"	8.57"	17.80"	20.20"	22.00"	23.60"	5U X 19" W
SE162216	10.47"	12.07"	17.80"	20.20"	16.00"	17.60"	6U X 19" W
SE1722	12.22"	13.82"	17.80"	20.20"	22.00"	23.60"	7U X 19" W

## Series 730

### 6U Horizontal Cards

Series 730 accommodates VME and VME64X systems for horizontal loaded PC cards. There are three sizes accommodating backplanes with 2 slots to 12 slots. This ruggedized series allows you to customize the enclosure for front and rear covers with special punching, front or rear mounted sub-racks, painting and and/or screening.

#### Features:

- Low profile enclosures for horizontal mounted cards
- Ruggedized 19" rackmount enclosures 2U to 7U
- Accommodates any 6U backplane
- Cooling: side to side (push/pull) - 4 ea 89 cfm axial 12VDC fans
- Front mounted Power and Reset switches with safety guards
- Painted Sandtex white or choice of many factory colors
- EMI/RFI power input filter and fuse
- Rear panel removable for custom I/O connector punching without expensive customization
- Designed to meet UL, CSA & TUV requirements



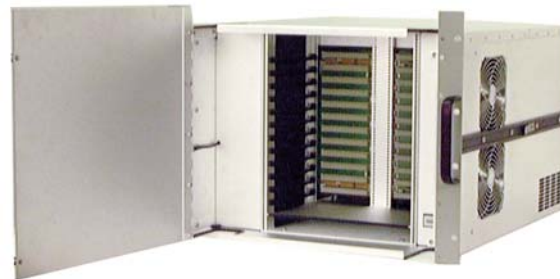
732 - 2U chassis shown front and back



732 - 3U chassis shown front and back



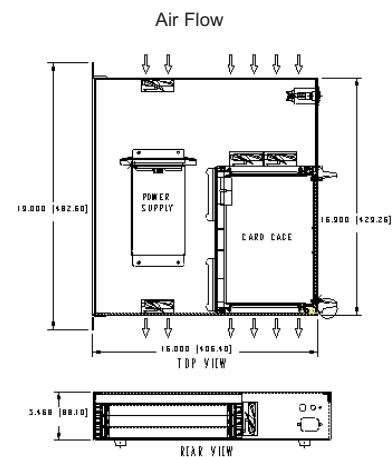
733 - 3U chassis with front removable door panel



7U Model 12 Slot VME with hinged enlarged custom cover, chassis slides & 4" recessed cableway



4U, 7-slot 64x shown with hinged cover



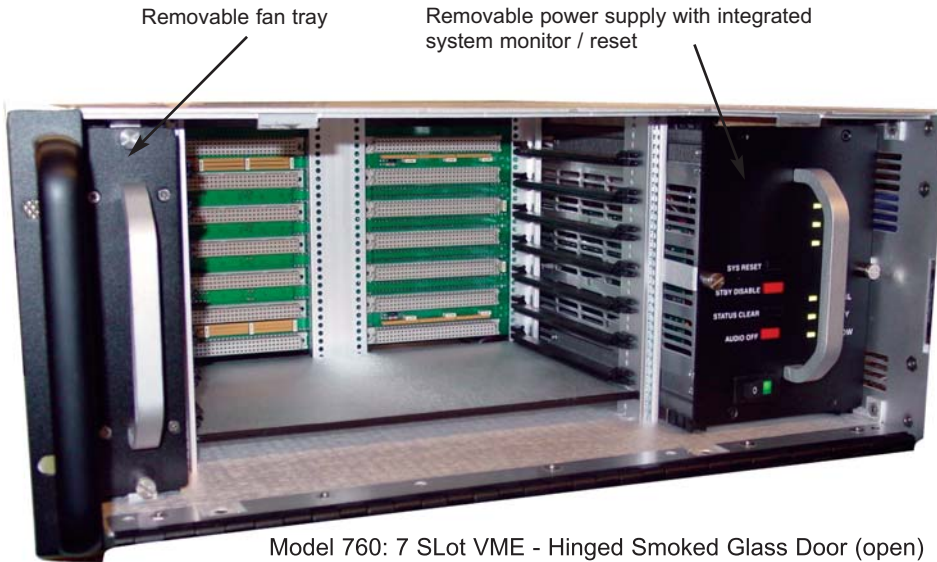
With customized Rear Panel



Series 760

6U Horizontal Cards

Chassis



Model 760: 7 Slot VME - Hinged Smoked Glass Door (open)



Vector System Monitor Integrated into removable power supply assembly

Additional Features:

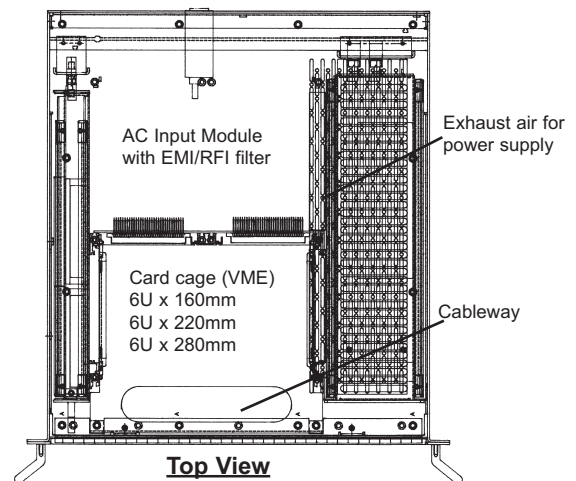
- High reliability-Low MTTR with track mounted, removable Fan Tray & Power Modules
- 7 Slot VME or VXI
- Cableway under card cage from front to rear
- 250 watt Power Supply standard, up to 600 watt available
- Power Supply Module has voltage Monitor Panel with tri-state LEDs for reporting in range voltages on +5V, +/- 12V
- Front Panels are painted black
- EMI/RFI suppression techniques employed throughout enclosure
- Handsome Lexan door, bottom hinged, top secured by two sturdy stainless steel latches - EMI/RFI shielding optional
- Track mounted Fan & Power modules align precisely with Din H-11 & 15 pin Connectors
- Up to 280mm card depth



Model 760: 7 slot VME - Hinged Lexan door, closed

Environmental Specifications

Cooling Model 760	1 ea., 60 CFM fan for subrack 1 45 CFM fan for power supply
Operating Temp	0° - 50°C (32° - 110°F)
Storage Temp	-20° - 85°C (-4° to 185°F)
Humidity:	<95% Non-condensing



# VectorPak™ Chassis / System Enclosures Ruggedized VME/cPCI



## Series 790 6U Horizontal Cards

Chassis



Ruggedized Series 792 with EMI/RFI shielded removable panel



Ruggedized Series 790 Front view with door removed



Ruggedized Series 790 Front view with door

The Series 790 is a ruggedized version of the Series 730. It has been designed and tested to MIL-STD 461D for harsh environmental conditions. RFI/EMI frequency protection at high and very low bandwidth interference, condensing humidity and rigorous shake and drop tests are the strong points of this design. A removable rear panel section allows custom I/O connector panelization at minimum cost. This series is also available at a much lower cost than competitive units with the same features.

- MIL STD 461D compliant & certified
- Low Cost
- Withstands high humidity, shock & vibration in storage or transport
- EMI/RFI Gasketed removable front door
- 300 Watt embedded power supply, conditioned for high humidity
- 6U Monolithic 7 Slot Backplane (other slot sizes available, Pages 16 - 23)
- Painted with Federal Standard Grey
- Wall mounted fans for Push/Pull (4 fans, 12VDC, 89 cfm), side to side air flow
- Rear Panel removable for custom I/O connector punching
- Light weight
- Field tested

### Chassis Environmental Specifications

Cooling	4 ea. 89 cfm DC axial fans side wall mounted, push/pull
Operating Temp	0° - 50°C
Storage Temp	-28.8°C - 85°C
Humidity - Storage or Transport	>95%, condensing, specially conditioned
Humidity - operating	30% to 70%
Shock & Vibration	MIL STD 810E
EMI/RFI	Per MIL STD 461

### Environmental Test Specification - MIL STD 461D Standard

Testing Frequency Range	30 Hz 18 GHz
Conducted Susceptibility (MIL STD 462, CS101)	30 to 15 kHz
Radiated Emissions test (RS103)	30 mHz to 2 GHz; 1 GHz to 18 GHz
Altitude Test to MIL STD 810E, Proc. 1&2	To 15,000 ft.
High Temperature testing (MIL STD 501.3, Proc 2)	
Low Temperature to MIL STD 501.3, Proc. 1&2	-28.8°C
Humidity testing to MIL STD 810E 507.3, Proc. 3	
Vibration & Shock	MIL STD 810E Method 514.4, Category I

### Physical Specifications

Rear Panel	Power Input 4A fuse Removable panel for custom I/O conn. Cutouts
Door, Fixed	8 thumb screws hold door on EMI/RFI gasketed edges
Weight	34 lbs., typ



# VME or VXI System Monitor Specifications Power Supply Specifications



Chassis

Vector offers a system monitor to report electrical and air temperature conditions within our Series 400 and 760 VME or VXI enclosures. The Power Monitor has four functions:

Detection and Reset of SYSFAIL. A remote reporting capability can be provided via a DIN connector on the back of the enclosure.

+5V SBY indication and battery backup and recharge control circuits

Monitoring of primary voltages, +5V; +12V and -12V. Tri-color LED's report a voltage level within specification. When an interruption or spike occurs, LED's change from GREEN to RED and an audible alarm will sound. When a normal state resumes, the LED's change to AMBER and the audible alarm will go silent. The STATUS CLEAR switch will clear the amber indicator and reset to green.

The normal ranges measured are:

Nominal VDC	Min Limit	Max Limit	Bus
+5V	4.87	5.25	VME
+12	11.64	12.60	VME
-12	-11.64	-12.60	VME
-5VSBY	4.87	5.25	VME & VXI
-2	-1.90	-2.10	VXI
-5.2	-5.04	-5.46	VXI
+24	23.28	25.20	VXI
-24	-23.28	-25.20	VXI



760 Monitor Panel

Air Temperature Monitor:

A thermocouple circuit is placed at the exhaust fan(s) or other specific slot location(s) At 100 degreesF the circuit will send a signal to the system monitor panel activating a RED Air Temp indicator and sounding an audible alarm.

## POWER SUPPLY SPECIFICATIONS

Standard universal 85 to 264VAC power input embedded power supplies currently offered (subject to change). Please contact Vector for more options or special requirements.

Total Power Maximum	DC outputs	Minimum Load
1000W	<a href="#">5V@70A</a> ; <a href="#">3.3V@35A</a> ; <a href="#">+12V@16.6A</a> ; <a href="#">-12V@16.6A</a>	None
800W	<a href="#">5V@70A</a> ; <a href="#">3.3V@35A</a> ; <a href="#">+12V@16.6A</a> ; <a href="#">-12V@16.6A</a>	None
600W	<a href="#">5V@70A</a> ; <a href="#">3.3V@40A</a> ; <a href="#">+12V@16.6A</a> <a href="#">-12V@16.6A</a>	None
400W	<a href="#">5V@20A</a> <a href="#">3.3V@20A</a> ; <a href="#">+12V@8.3A</a> <a href="#">-12V@8.3A</a>	None
250W	<a href="#">5V@40A</a> ; <a href="#">3.3V@20A</a> <a href="#">+12V@4A</a> <a href="#">-12V@1.0A</a>	10% on +5V



AC to DC Plug-In, Hot Swap

The following 90-264 VAC input, 3U, 200W plug-in, hot-swappable power supplies, n+1 redundant, active current share power supplies PICMG 2.11 compliant and can be used in cPCI, VME or VME64x applications. No minimum load required. DC outputs of [5V@25A](#); [3.3V@35A](#) [+12V@8.0A](#); [-12V@1.5A](#).

DC to DC Plug-In, Hot Swap

The following 18-28 or 36-72 VDC input, 3U, 200W plug-in, hot-swappable power supplies, n+1 redundant, active current share power supplies PICMG 2.11 compliant and can be used in cPCI, VME or VME64x applications. No minimum load required. DC outputs of [5V@25A](#); [3.3V@30A](#) [+12V@6.0A](#); [-12V@0.5A](#).

