

# **FEATURES AND BENEFITS**

- Features and Benefits
- VPX, VME, VME64x, VXS, VXI, and CompactPCI compatible
- 8U to 14U height offerings
- .125" aluminum welded construction
- .187" aluminum front panel
- 350-1600 Watt power supply options
- AC input: 85-264 VAC, 47-440 Hz, DC input: 18-36 VDC options
- Shock-isolated card cage
- Removable shock isolated
   drive bays

# **TECHNICAL SPECS**

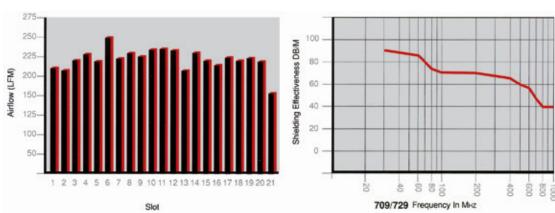
- Temperature: per MIL-STD-810F
- Operating: 0°C to 50°C
- Storage: -20°C to 85°C
- EMI and EMC per MIL-STD-461E
- Altitude: 10,000 feet
- Humidity: less than 95% noncondensing
- Shock: 20g for 11ms
- Vibration: per MIL-STD-167-1





The 709 Series Rugged Rackmount Enclosure from Atrenne is engineered for dependability in some of the most extreme environments involving airborne, shipboard, and ground mobile applications. Designed as a rugged solution to meet a broad spectrum of military standards, the 709 Series Enclosure has a long-standing reputation as a commercialoff-the-shelf (COTS) product that can be easily configured to meet the most challenging deployed applications.

The 709 Series Enclosure is configured as a 19" rackmount system capable of supporting a wide variety of industry bus standards such as VPX, VME, VME64x, VXS, VXI, and CompactPCI, as well as custom bus backplane technologies and application-specific I/O requirements. Available in heights ranging from 8U to 14U, the Enclosure is configurable for either a rigid mount or shock-isolated card cage. The 709 Series Enclosure utilizes an aluminum, welded design incorporating EMI "honeycomb" filters and environmental gaskets on all access panels to meet stringent emissions requirements. Power supply options provide a wide range of inputs from AC single and three-phase to DC and provide output power up to 2400 watts. The internal rack infrastructure is designed to meet IEEE1101.10/.11.



# **709 SERIES**

# RUGGED RACKMOUNT ENCLOSURE

## **DESIGN SPECIFICATIONS:**

#### **Physical**

- 709 Depth = 20.5" (520,7)
- Height see fig.1
- Width 17" (431,8) w/o EIA Ears

#### **System Options**

- · Redundant power supplies
- Hot swap power supplies
- Hot swap backplanes System monitor
- Fan monitor
- High temperature warning

#### Backplanes

- 100% level 3 elec. test
- 100% press-fit construction
- VME, VME64x, cPCI
- · See backplane section for list of options

#### Electrical

- Frequency 47-63 Hz (400 Hz available) • Voltage 90 -132, 180 - 264 VAC
- (auto range available)
- · Front circuit breaker
- Power 350 1000 Watts See power supply current outputs for additional options
- Power factor correction available

#### Cooling

- Triple 90 CFM fans
- 12V DC brushless sealed ball bearing
- Optional particulate filtration
- Current draw 500 mA/fan typ.
- 130 CFM available
- Tach alarm with TR level signal output

#### Structure

- .125" (3,175) 5052-H32 aluminum
- Clear chromate MIL-C-5541 CL3
- · Outside surface painted fed. std.
- 26307 grey
- Anti-vibration fasteners
- Conductive interfaces

#### Reliability

MTTR	MTBF
PSU = .5 hrs	= 100,000 hrs
FAN = .25 hrs	= 50,000 hrs
B/P = 1 hr	= 1,000,000 hrs
Environmental	
<ul> <li>Operating temperating</li> </ul>	erature: 0° to 50°C
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- Storage temperature: -20° to 85°C
- Humidity: less than 95%
- noncondensing
- Acoustical: <45dba Typ.

Height: 709 Number of Slots	9 Peripheral Options V	Enclosure Height Requiered
709VME		
20	None	9U
Up to 20	Dual half heights	
		10U
Up to 20	Dual full heights	
	front access	11U
729VME		
20	None	8U
20	Dual 5-1/4 half h	eight10U

#### 729VXI

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13 (GFB/P)	None	10U
13 (GHB/P)	None	11U
13 (GF)	Dual 5-1/4 half height	10U
13 (GHB/P)	Dual 5-1/4 half height	13U

Peripheral bay .....8U

NOTE 1: All mounting provisions are for 5-1/4" drives - power cabling is included with all drive mounting options.

NOTE 2: Peripheral bays are recessed behind the front panels.



### **Power Supply Current Outputs**

Power Supply	+5V	-5V	+12V	-12V
350 Watts (F)	50A	2A	8/12A	4A
500 Watts (H)	80A	2A	10/16A	10A
750 Watts (K)	120A	2A	12/20A	10A
1000 Watts (W)	150A	10A	20/30A	10A

NOTE: All power supplies are quad output switching power supplies. See appendix for power supply specifications.

#### **VXI Power Supply Current Outputs**

Power Supply	+5V	-5V	+12V	-12V	+24V	-24V	-2V
600 Watts (M)	50A	25A	4A	3A	ЗA	3A	10A
1300 Watts (R)	70A	28A	16A	16A	8A	8A	30A

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## PART NUMBERING / ORDERING INFORMATION:

Denotes: Rackmount	Backplane Type VME:	Options (Consult Factory)
Enclosures	LA= J1	Mounting Provisions
Size:	LT = J2	<b>K</b> = EIA rackmount ears
8 = 8U	HA = Hot swap	<b>C</b> = EIA rackmount ears and mounting
<b>9</b> = 9U	LF = J1/J2	provisions for slides
0 = 10 U	$\mathbf{DF} = J1/J2$ High performance	(slides ordered separately)
A = 11U	VXI:	Construction
<b>B</b> = 12U	$\mathbf{GF} = J1/J2$ , C-size	F = Overlapping bolted
<b>C</b> = 13U	GH = J1/J2/J3, D-size	W = Welded
$\mathbf{D} = 14\mathbf{U}$	VME64x:	
See Fig. 1	$\mathbf{NL} = J1/J0/J2$ , ABG	VME:
Power Supply	Special:	VXI:
F = 350 Watts	□ NO = No backplane	Special
$\mathbf{H} = 500 \text{ Watts}$	<b>SP</b> = Special backplane consult factory (S	
M = 600 Watts	section for details and additional back	(planes) consult factory
$\mathbf{K} = 750$ Watts		·
W = 1000 Watts		
$\mathbf{R} = 1300 \text{ Watts}$		
	outputs for additional options	
*Note: Also available w/ 3		<b>Atrenne</b>

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