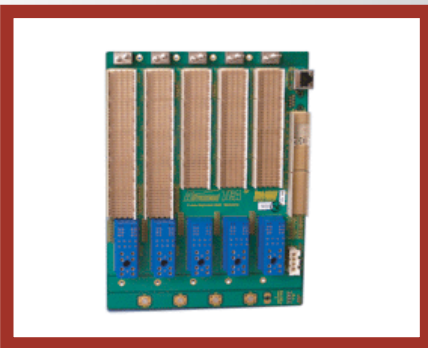




## FEATURES

- Compliant to PICMG 3.0 specification
- 4U x 444mm x 385mm (H x W x D)
- 5 slot replicated mesh backplane
- Cooling side to side ( 2 x 170 CFM fans)
- Plug removable fan tray
- Dual-48VDC input terminals
- Front and rear ESD jack
- Shelf manager optional
- Customization available

Elma offers AC and DC horizontal enclosures in 2U and 5U heights and a DC-only version in 4U height. They include a wide range of backplane, shelf management, and other options. Cooling is achieved via 2 x 170 CFM fans in a side-to-side airflow configuration. The fan tray and fan filter are separately removeable. The units have been optimized via backplane signal integrity studies and chassis thermal simulation



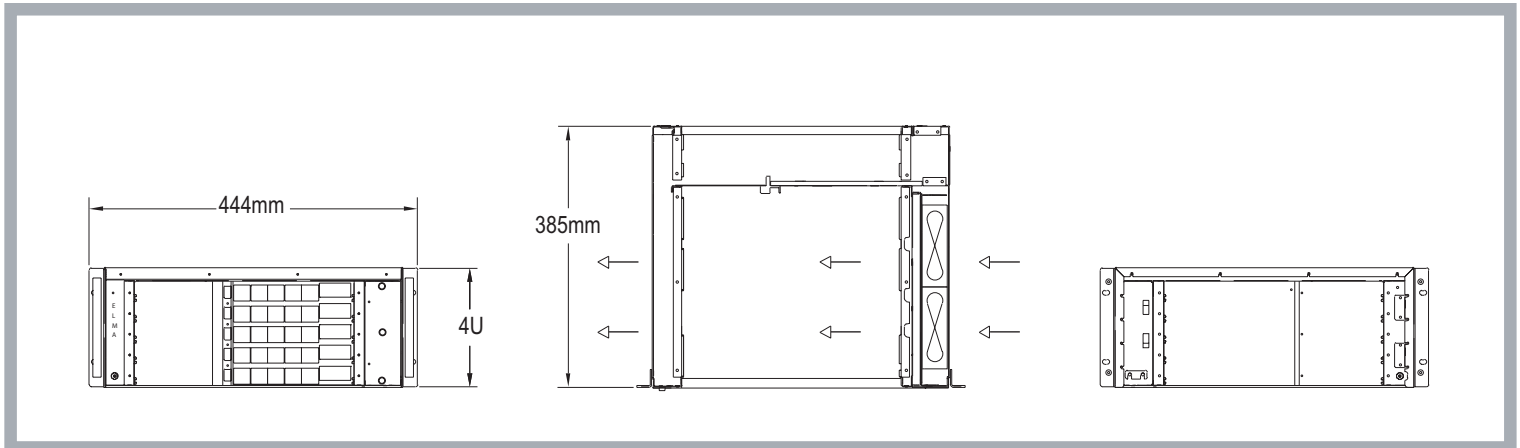
## ATCA MESH BACKPLANE

- Compliant to PICMG 3.0 Rev. 1.0 specification
- 3x Replicated Mesh topology
- Dual Star can be implementable
- Gigabyte/Terabyte per second bandwidth per shelf
- Connections to IPM Sentry shelf manager
- Controlled impedance stripline design
- Pluggable shelf manager option
- 18-layer board
- Signal integrity characterization confirms high performance

The 5-slot has a 3X Replicated Mesh topology. Dual Star and Full Mesh topologies are implementable. There are connectors for optional plugging of the IPM Sentry Shelf Manager. Simulation/characterization studies confirm excellent signal integrity and performance.

# AdvancedTCA 4U SYSTEM PLATFORM

## Line Drawings



## Environmental Specifications

	Operating	Storage/Transit
Temperature:	0°C to +50°C	-20°C to +70°C
Altitude:	6000 ft. (1,829m)	50,000 ft. (15,240m)
Humidity:	5% to 95% Non condensing	5% to 95% Non condensing
Shock:	10 G's @ 11ms	15 G's @ 11ms (per ASTM 0775)
Vibration:	1.0 G's @ 10 to 330 Hz	1.2 G's @ 5 to 330 Hz
Agencies:	Designed to meet UL 1950, FCC, A, B, CE	

## Order Information

Description	Model Number
<b>ATCA 4U System</b> <ul style="list-style-type: none"> <li>• 4U H x 444mm W x 385mm D</li> <li>• 5 slot, 8U x 280mm, front</li> <li>• 5 slot, 8U x 70mm, rear I/O</li> <li>• PICMG 3.0 Replicated Mesh backplane</li> <li>• Dual 170 CFM Fans</li> <li>• Dual 48VDC input</li> <li>• Shelf Manager not installed</li> </ul>	11A05GJX48Y4HMXX
<b>5-slot Mesh Backplane</b> <ul style="list-style-type: none"> <li>• Compliant to PICMG 3.0 Rev. 1.0 specification</li> <li>• 3 x Replicated Mesh topology</li> <li>• Connections to IPM Sentry shelf manager</li> <li>• 18-layer stripline design</li> <li>• Optimized via signal integrity studies</li> </ul>	CAE009010

11A \_\_\_\_\_  
1    2    3    4    5    6    7    8    9    10   11   12   13

## 1,2) Num. of Slots BP

00-21: Single BP AY-YA: Split  
• 05 = 5 slot

## 3) BP Bare board

- E = 1 x SM
- F = 2 x SM (Bussed IPMB)
- G = 2 x SM (Radial IPMB)\*
- Z = Custom

## 4) Fabric Architecture

- F = Star
- G = Dual Star
- H = Mesh
- J = Replicated Mesh
- Z = Custom

## 5) Cooling

- A = 1 x Tray (plug in)
- B = 2 x Tray (plug in)
- C = 3 x Tray (Plug in)
- Z = Custom

## 6) Height

- 4 = 4U

## 7) Width

- 8 = 84T

## 8) Rear I/O

- N = No
- Y = Yes

## 9) Depth

- 4 = 400mm-499mm

## 10) Card Orientation

- V = Vertical
- H = Horizontal

## 11) PSU Input

- C = 90-230VAC (Fixed)
- G = 90-230VAC (Plug In)
- H = 48VDC
- M = Dual 48VDC
- P = 90-230VAC(2 x HS, N+1)
- Q = 90-230VAC(3 x HS, N+1)
- X = No PSU

## 12) PSU Output (Note: Not all PSU combinations available)

- 4 = 400-599 watt
- 6 = 600-799 watt
- 8 = 800-999 watt
- A = 1000-1199 watt
- B = 1200 watt
- C = 1600-1799 watt
- D = 1800-1999 watt
- E = 2000-2199 watt
- F = 2200-2399 watt
- G = 2400-2599 watt
- H = 2600-2799 watt
- X = Not installed

## 13) Shelf Manager (Installed)

- S= 1 x Plug in
- D = 2 x Plug in
- X = Not installed

\* Elma's radial IPMB signals are radially connected across the backplane to the Shelf Manager Carrier Card. The Shmm 500 IPM module resides on the carrier card where these connections are bussed.