TYPE 39, MicroTCA 3U MicroSlim Shelf

**FEATURES**

- 19” rackmount, low profile MicroTCA chassis
- Accommodates 12 AMCs (single/mid size), 4 HDD with SATA connectivity, 2 PMs (600W), 2 MCHs, 1 JSM, and 3 spare slots
- Redundant push/pull managed Cooling Units (CUs) – pluggable
- CU’s feature 42 CFM of airflow each with hotswap switch, fan fail indicator, and ergonomic handles
- Separately removable filter tray with 45 PPI NEBS grade filter
- Dual ESD jacks in front

The 3U MicroSlim chassis is the 2nd in the line of low-profile MicroTCA enclosures. The unit offers impressive performance in a horizontally-mounted 3U height. The side-to-side airflow features two powerful Cooling Units with 4 individual fans each in a pull/pull configuration. The pluggable fans offer 42 CFM of airflow each with LEDs for hotswap and fanfail. Thermal simulation confirms excellent cooling performance.

The chassis features full redundancy and pluggability. This includes the Cooling Units, MCH's, ESD Jacks, and Power Modules. The 3U MicroSlim is powered with two 600W power modules. Other features include accommodations for a JTAG Switch Module, NEBS-grade filters, and an attractive painted finish.

**CHASSIS CONFIGURATION**

![Diagram of Chassis Configuration]

**MicroTCA MicroSlim BACKPLANE**

- 24 layer MicroTCA backplane
- Slots for 12 AMCs (single/mid size), 4 HDD with SATA connectivity, 2 PMs (600W), 2 MCHs, 1 JSM, and 3 spare
- 5.072” high x 17.539” wide
- PCB .185” thick
- Optimized via signal integrity studies
TYPE 39, MicroTCA 3U MicroSlim Shelf

Line Drawings

Environmental Specifications

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

Order Information

<table>
<thead>
<tr>
<th>Description</th>
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<tr>
<td>Type 39M, MicroTCA MicroSlim Shelf</td>
<td>39M12S4L372HMXXXR</td>
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<tr>
<td>• 3U H x 87HP W x 210mm D</td>
<td></td>
</tr>
<tr>
<td>• 12 AMC slots (mid-size/single)</td>
<td></td>
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<tr>
<td>• 2x 600W, 48VDC input Power Modules</td>
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<td>• System Management and Diagnostics: 1 MCH, 1 JSM</td>
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<td>Dual Star MicroSlim Backplane</td>
<td>69-12DL-6-2-2??</td>
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<td>• Complies to PICMG MicroTCA.0 Rev. 1.0</td>
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</tr>
<tr>
<td>• 5.072&quot; high x 17.539&quot; wide</td>
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<tr>
<td>• Compression style connector</td>
<td></td>
</tr>
<tr>
<td>• Connectors for cooling units</td>
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1,2) Num. of AMC Slots
- Examp.: 01 = 1, 10 = 10

3) Module Width
- S = Single Module
- D = Double Module
- Z = Combination
- X = Not installed

4) Module Height (Pitch)
- 3 = Compact (3 HP)
- 4 = Mid-size (4 HP)
- 6 = Full-size (6 HP)
- Z = Combination

5) Fabric Topology
- H = Mesh
- J = Redundant Mesh
- K = Single Star
- L = Dual Star
- N = Non Redundant
- X = Not installed
- Z = Custom

6) Height
- 3 = 3U

7) Width
- 7 = 87T

8) Depth
- 2 = 200mm-299mm

9) Card Orientation
- V = Vertical (Default STD)
- H = Horizontal or custom

10) PSU Input
- C = 90-230VAC (Fixed)
- H = 48VDC plug in
- M = Dual 48VDC plug in
- P = 90-230VAC(2 x HS, N+1)
- X = No PSU
- Y = 24V Plug in
- Z = Dual 24V plug in

11) PSU Output
- Note: Not all PSU combinations available
- 2 = 200-299 watt
- 3 = 300-399 watt
- 4 = 400-499 watt
- 5 = 500-599 watt
- X = Not installed

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

13) JSM
- Y = Installed
- X = Not installed

13) Cooling
- P = Push cooling
- R = Redundant Push-Pull
- X = Not installed

* Note 1: 1x MCH supports 12 AMC slots
** Note 2: All slot counts are based on total number of available AMC slots (single, double or single stacked).