Polaris System Chassis

4U Hot Swap & High Availability

- Perfectly suited for space-sensitive applications
- Designed with hot swap components for high availability
- Robust design is well suited to NEBS & ETSI applications or EMI/RFI requirements
- System design accommodates a variety of configurations.

Features:
- Compact, 4U chassis
- Six standard or segmented CompactPCI slots
- Available with PICMG 2.16 compliant backplane
- Dual redundant, N+1 hot swap compliant power supplies
- Dual fan modules, hot swap compliant, with front to rear air flow
- Alarm card monitors multiple functions
- Available with or without a choice of CPU architectures - SPARC, PowerPC, or Pentium on 6U CompactPCI boards
  - Choice of on-board PMCs according to slot availability and requirements
  - Rear I/O transition modules with PIMs (PMC Interface Modules) for maximum system configurability
- System is fully configured, assembled, and tested per your unique application configuration requirements
- Designed for a wide variety of communications applications
- Compliance: NEBS, ETSI, FCC, CSA, ICES and CE.

Order Information

CGP-4U-Nx-2ppn-A

- # of Slots in Chassis: 1 through 6
- Backplane Version:
  - T = H.110 (CompactPCI)
  - F = Fabric / IP Switch (2.16)
  - S = Segmented slots
  - X = no backplane
- # of Power Supplies in System:
  - 0 = None
  - 1 = One
  - 2 = Two (redundant)
- Power Input:
  - 1 = Single
  - 2 = Dual
- Power Type:
  - AC
  - DC
- Alarm Card:
  - A = included
  - no "A" = none
- Regulatory Compliance:
The Polaris family of systems meets the requirements of the European Telecom Standard (ETSI) including:
- Equipment Engineering (EE): Environmental conditions and environmental tests for telecommunications equipment, ETS 300 019-1-3
- Storage: ETS 300 019-1-1, for Class 1.2E equipment
- Transportation: ETS 300 019-1-2 for Class 2.3 equipment

Other Regulatory Compliance:
ACT/Technico’s configured systems meet or exceed the following:
- EMC: U.S.: FCC Part 15, Subpart B, Class A
- Canada: ICES-003, Class A
- Europe: CE Mark per European EMC Directive 89/336/EEC with Amendments; Emissions: EN55022 Class A; Immunity: EN50082-1
**Compact, 4U Chassis**
Dimensions: 4U (7”H x 19”W x 15”D)

**Standard or segmented CompactPCI backplane**
6 slots with front and top access service to backplane.

**Dual Power Supplies**
250 Watt, N+1 redundant and front accessible.

**Dual Fan Modules**
Hot swap compliant and removable from the front. Air intake filter is easily accessible and removable for replacement.

**6U CompactPCI SBCs**
Currently supported: SPARC, PowerPC, and Pentium

**PCI Mezzanine Cards (PMCs):**
Each SBC is capable of hosting one or more PMC modules.

**Rear I/O Transition Modules**
80 mm boards with PIMs (PMC Interface Modules).

**Power Inlet Module**
Installed in the rear of the chassis. Supports single or multiple AC and DC power sources.

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**Standard Features**

- **Alarm Module**
  Provides alarm control, reporting and front panel fault indication. Hot swappable, with two serial ports for interface to monitoring host CPU.

- **System Integration**
  System comes fully installed and wired with a single bundled part number.

- **Operating System(s)**
  VxWorks, Solaris, and Linux operating systems are supported on the mentioned SBC’s. Visit our website or contact your local sales representative for up to date OS support.

**Ordering Information:**
See page 4 for full ordering details.
For customized configurations, please contact your local ACT/Technico sales office.

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**Specifications**

**Compact, 4U Chassis**
The Polaris chassis has been designed to fit into space constrained telecommunications environments. Dimensions: 4U (7”H x 19”W x 15”D)

**Standard or Segmented CompactPCI Backplane**
Supports standard six-slot CompactPCI backplane with H.110 option, or non-bussed individual slots (other backplane configurations available on request). Top access service to backplane via a removable panel.

**Power Supply Specifications**

<table>
<thead>
<tr>
<th>DC Output</th>
<th>Max Load</th>
<th>Regulation</th>
<th>Ripple</th>
</tr>
</thead>
<tbody>
<tr>
<td>+5.0 V</td>
<td>25 A</td>
<td>2%</td>
<td>1% pp</td>
</tr>
<tr>
<td>+3.3 V</td>
<td>30 A</td>
<td>2%</td>
<td>1% pp</td>
</tr>
<tr>
<td>+12.0 V</td>
<td>5 A</td>
<td>2%</td>
<td>1% pp</td>
</tr>
</tbody>
</table>

**Alarm Module**
The Alarm Module connects to the backplane and provides alarm control, reporting and front panel fault indication. The Alarm Module provides two serial ports for interface to monitoring host CPU. Hot swappable, it monitors multiple functions:

- Fan speed
- Exhaust air temperature
- Slot healthy status
- Controls resets of each board independently
- Power supply status

**System Integration**
The system comes fully integrated and wired, including installation of the CPUs, power supplies, alarm card, fan modules, and all necessary PMCs and Transition Modules with PIMs. The Polaris chassis can be installed and wired into an equipment rack as well.

**Operating Systems**
The Polaris can be supplied with most major real time operating systems as well as Solaris®, Linux® and Windows®. For more information on Operating Systems vendors who support ACT/Technico CompactPCI boards, please visit our website at http://www.acttechnico.com.

**Complete Specifications:**
For more complete information on specific CPU architecture and specifications, please contact your local ACT/Technico sales office or go to our website at http://www.acttechnico.com.