26 Port 1/10 Gigabit managed Layer 2 & 3 CompactPCI® / VME Ethernet Switch

» Fully managed layer 2 & 3 switching and routing
» Air or Conduction Cooled Version
» Versatile, complete rear I/O and uplink support
» DHCP server & boot media support
CP6924
26 Port 1/10 Gigabit managed non-blocking Layer 2 & 3 CompactPCI®/VME Ethernet Switch

The Kontron CP6924 is a non blocking fully managed L2/L3 10Gb Ethernet Switch and provides rich and versatile feature support by using highest integration of Ethernet switch silicon.

**Bandwidth**
The CP6924 is designed for future oriented applications requiring outstanding bandwidth and communication features. Up to 2 SFP+ front ports running at 10Gb/s full line speed and 4 Gigabit/s copper ports at the front gives flexibility and an intrinsic value for todays investments. The front copper ports can be switched to the backplane in a PICMG 2.16 arrangement. 20 additional rear ports according PICMG2.16 and VITA31.1 fulfill the requirement of CompactPCI® and VME systems with highest computing performance.

**Reliability**
The robust design features including hardware hot swap as well as complete SNMP management support sets the foundation for robust and reliable systems. Built-In test capabilities enable effective switch maintenance.

**Management**
The CP6924 can be monitored via SNMP, which also allows access to the devices connected to the backplane. A comprehensive command line interface provides easy management and remote configuration by either serial or network interface. Support for features like IP forwarding & multicast, routing & switching, Quality of Service, VLANs it is an ideal Switch for CompactPCI® and VME systems according PICMG2.16 and VITA31.1.
## Technical Information

### Compliancy
- CompactPCI® Core Specification PICMG 2.0 Rev. 3.0
- CompactPCI® HotSwap Specification PICMG 2.1 R 2.0
- CompactPCI® System Management PICMG 2.09R1.0
- CompactPCI® Packet Switching Backplane PICMG 2.16 R. 1.0
- VNE64x Packet Switching Backplane VITA 31.1
- Intelligent Platform Management Interface Specification V1.5
- ANSI/VITA 47-2005
- IEC 60068-2-6, IEC 60068-2-27, IEC 60068-2-29
- EN 60950, UL60950, LVD 73/23/EEC, Denan Law compliant

### Interfaces
- **CP6924-RA-OC:**
  - 2x 10GBase-X uplinks for SFP+ optical transceivers

- **CP6924-SA-OC-V:**
  - 2x 1GBase-X uplinks (SFP connector cages) for SFP optical transceivers

Common on CP6924-RA-OC/CP6924-SA-OC-V:
- 4x front Panel RJ45 connectors with 10/100/1000BASE-T support, switchable to rear IO according PICMG2.16/VITA31.1
- 20x 10/100/1000 Base-T link ports on backplane or RTM according PICMG2.16 / VITA31.1
- 1x 10/100Base-T for Management (RJ45 connector)
- 1x RS232 for Management (RJ45 connector and backplane)

**Reset Switch**

**Status LEDs**

- **CP6924-RC:**
  - 24x 10/100/1000 Base-T link ports on backplane or RTM according PICMG2.16 / VITA31.1
  - 1x 10/100Base-T for Management (RJ45 connector)
  - 1x RS232 for Management on rear IO

**Reset Switch**

**Status LEDs**

### Controller and Switch
- Broadcom BCM56334 Ethernet Switch
- PowerPC APM PPC405Ex with 512MB RAM
- NXP uController for IPMI

### Management
- **Management via SNMP, Command Line (Telnet, SSH)**
  - **In-band**
  - **Out of band via Ethernet or RS232**
  - **IPMI version 1.5, Power On Self Test**
  - **DHCP server, relay and Boot media support**
  - **Reliable software, field upgradable**
  - **Dual boot images with roll-back capabilities**
  - **Advanced management monitoring features**
  - **Ethernet/Bridging protocols include**
    - **Link aggregation (802.3ad)**
    - **VLANs (802.1Q)**
    - **QoS (IEEE 802.1p)**
    - **Spanning tree (802.1D, 802.1w)**
    - **Flow control (802.3x)**
    - **GARP/GVRP, GMRP**
    - **ARP, ICMP, OSPF, RIP, VRRP, DVMRP**

  - **Enhanced Features are**
    - **Egress ACLs, IP ACL support**
    - **Auto VoIP**
    - **IGMP snooping & proxy support**
    - **Startup configuration configurable**
    - **Watchdog**
    - **Cable test**

### General
- **Power Consumption**
  - Max. 60W

- **Dimensions**
  - 233.5 mm x 160 mm, 6U

- **Weight**
  - Approx. 800gr.

- **MTBF**
  - tbd.

### Environment
- **CP6924-SA-OC-V**
  - IEC 60068-2-6, IEC 60068-2-27, IEC 61131-2, 0°C to +55°C, forced air cooling required

- **CP6924-RA-OC VITA 47, class EAC6, V2, -40°C to +85°C, forced air cooling required**

- **CP6924-RC VITA 47, class ECC4, V3, -40°C to +85°C, conduction cooling required**

High shock and vibration levels can be achieved when installed in a ruggedized system

- **Humidity**
  - 93% RH at 40 °C, non-condensing (acc. to IEC 60068-2-78)
### Article Description

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<tr>
<th>Article</th>
<th>Description</th>
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<tbody>
<tr>
<td>CP6924-SA-OC-V</td>
<td>6U, single slot Gigabit Ethernet Switch with complete L2 management, 20x rear 1GbE, 4x front 1GbE switchable to rear I/O and 2x 1GbE SFP Uplinks, Forced Air Cooled, 0°C to +60°C</td>
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<tr>
<td>CP6924-RA-OC</td>
<td>6U, single slot Gigabit Ethernet Switch with complete L2/L3 management, 20x rear 1GbE, 4x front 1GbE switchable to rear I/O and 2x 10GbE SFP+ Uplinks, Forced Air Cooled, -40°C to +85°C</td>
</tr>
<tr>
<td>CP6924-RC-C</td>
<td>6U, single slot Gigabit Ethernet Switch with complete L2/L3 management, 24x rear 1GbE, Rugged Conduction Cooled, -40°C to +85°C, Coating</td>
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<tr>
<td>CP-R106-923-12</td>
<td>6U, 4HP, rear transition module for PICMG2.16 switch, 12 ports (ports 12 to 23), RJ45, RS232 on RJ45</td>
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<tr>
<td>CP-R106-923-24</td>
<td>6U, 8HP, rear transition module for PICMG2.16 switch, 24 ports (ports F. 1 to 23), RJ45, RS232 on RJ45</td>
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