



Overview:

The **VRM-CA2-X** is a 3U CompactPCI to PCI Triple Slot Adapter/Bridge. The **VRM-CA2-X** provides a new generation PCI bridge, therefore being as well electrically and mechanically a perfectly smooth interface between the worlds of PCI and CPCI. The adapter **VRM-CA2-X** is available in three different versions. The **VRM-CA2-1** is suitable to carry a single PCI card with dimensions up to 160x57mm. The PCI card is mounted in parallel to the **VRM-CA2-1** base board (slot 1b), which is provided with a 8HP (40.6mm) front panel to cover both boards. (*Before ordering the CA2-1, be sure to have checked whether your PCI card fits into this limited space.* The CA2-2 version, allows up to three PCI short cards with maximum dimensions of 160x106.68mm, to be mounted in a right angle to the carrier board (slots 1a,2,3). This solution needs up to 24HP rack mounting width, dependent of the height of the PCI cards. It is therefore recommended to use the outmost right slot of the systems backplane for the **VRM-CA2-X** whenever possible (this slot may not be the system slot then). The CA2-3 version is similar to the CA2-2 with respect to the orientation of the add-on PCI boards to be used with it, but provides a 28HP front panel, completely covering and fixing the PCI cards. Custom specific front panels are available for all CA2 versions. A major goal to be solved was the fastening of the PCI cards on the **VRM-CA2-X** carrier board in a reliable manner, withstanding mechanical shock and vibrations. (*Before mounted onto the VRM-CA2-X, the metal brackets of the PCI cards have to be shortened (CA2-1) or totally removed (CA2-2).* This treatment is not necessary for the CA2-3. In order to fully comply with both, PCI and CompactPCI® specifications, the **VRM-CA2-X** is provided with a latest generation PCI 32-bit bridge chip. By its built-in buffers, the bridge can speed up system data transfer rates compared to the individual PCI board in use. From the CPCI system controllers view, the **VRM-CA2-X** is a PCI sub-bus with 3 slots. Some competitor's products do not provide a PCI bridge, thus reducing adapter costs (by tolerating a violation of the PCI specs). Overall PCI compatibility however is a must in order to achieve total system reliability. Use of the **VRM-CA2-X** adapter for embedding standard PCI boards into a CompactPCI® system is both a smooth technical solution, and a smart economical decision. Save the effort of designing and manufacturing a new CPCI board by using the **VRM-CA2-X**, whenever time to market counts, or the number of systems to be built is limited, or the function to be implemented underlies fast innovation cycles.

Features:

- 3U Eurocard (100x160mm²), front panel width 8HP (CA2-1), 4HP (CA2-2), 28HP (CA2-3, 4HP mounting space needed left to the CA2-3 slot, 24HP needed to the right side), or custom specific design, front panel EMC shielded, ejection lever
 - PCI Bus (local): General, 32bit, 33MHz (133MBps), 5V interface
 - Slot 1b: (CA2-1) 90° right angle connector (horizontal mounting of a single PCI board with respect to the CA2 PCB), PCI Card max. 160x57mm
 - Slots 1a, 2,3: (CA2-2 and CA2-3) 180° connectors (vertical mounting of up to three PCI boards with respect to the CA2 PCB), PCI Short Cards max. 160x106.68mm
 - CompactPCI® Bus (external): Connector J1: 32bit, 33MHz (133MBps), DMA Bus Master, 3.3V or 5V interface
 - Power Requirements: Connector J1: +5V ±5% (required for local PCI cards only), +3.3V ±0.3V 0.2A max., _Vio 3.3V/5V 0.1A max., +12V ±5% (required for local PCI cards only), power consumption of local PCI boards not included
 - Operating Temperature: 0-70°C (Commercial Grade version)
- Relative Humidity: 5-90%, non-condensing
(Subject to technical change without notice)



Ordering Options:

- VRM-CA2-1:** 3U CompactPCI to PCI adapter, 1 PCI slot suitable for a single PCI Card max. dim. 160x57mm (horizontal mounting), front panel 8HP
- VRM-CA2-2:** 3U CompactPCI to PCI adapter, 3 PCI slots suitable for PCI short cards max. dim. 160x106.68mm (vertical mounting), front panel 4HP
- VRM-CA2-3:** 3U CompactPCI to PCI adapter, 3 PCI slots suitable for PCI short cards max. dim. 160x106.68mm (vertical mounting), front panel 28HP