

Overview:

The **VRM-CN5-X** is a Gigabit Ethernet networking interface controller (NIC) for CompactPCI® systems. The 3U board is equipped with a new generation single-chip controller. Attachment to the local network across the RJ-45 jack requires an ordinary CAT5/6 twisted-pair copper cable only, which is suitable for distances up to 100m. While providing the 1000Base-T standard for fastest data transfer rates, compatibility is maintained to 100Base-TX and even 10Base-T based hubs and switches. Gigabit Ethernet has been designed to use existing cabling and equipment, hence simplifying the migration process. Integrating the 1000Mbps **VRM-CN5-X** NIC into any CPCI system not only allows for remarkable higher data throughput, but also reduces the network load considerably due to shortened transfer times. The **VRM-CN5-X** is provided with a 32/64-bit CPCI interface, and can operate either at 33MHz or 66MHz bus clock. While being compatible to all CPCI systems, the optimum performance will be achieved within a 64-bit/66MHz system. The design of the **VRM-CN5-X** is based on a modern single-chip integrated MAC and PHY, thus minimizing the power consumption. The board is provided with a 128kx8 Flash EPROM, suitable for an extended BIOS (booting over network). The **VRM-CN5-X** can be integrated smoothly into any existing networking environment. In order to profit from its Gigabit Ethernet capability, a Gigabit switch must be used accordingly for attachment. Existing facility cabling must provide strapping of all 8-pin positions of the RJ-45 jack. The **VRM-CN5-X** is a 3U (single size) Eurocard. For 6U CPCI systems, a mounting kit (VRM-CR9-ADP) is available, which expands the front panel to 6U height.



Features:

- 3U Eurocard (100x160mm²), front panel 4HP (20.3mm) EMI shielded, ejection lever
- Ethernet Connector: twisted pair RJ-45, 8-position, suitable for direct attachment to any hubs, switches, routers, transceivers
- Category 5/6, UTP or STP cable, length up to 105m maximum
- 10Base-T 10Mbps (20Mbps @ full-duplex), 100Base-TX (Fast Ethernet) 100Mbps (200Mbps @ full-duplex), auto-negotiation for best performance, 1000Base-T (Gigabit Ethernet) 1000Mbps
- PCI Gigabit Ethernet controller, integrated single chip MAC and PHY (transceiver)
- 8-fold LED array in the front panel, 10/100/1000Mbps, link, Rx, Tx, power, special function
- 32/64-bit, 33/66MHz, DMA bus master 3.3V or 5V interface
- +5V ±5% 0.5A max. / 3.3V ±0.3V 0.85A max. / VIO (5V/3.3V) ±0.01A max.
- 0-55°C Operating temperature
- 5-90% non condensing Humidity

Ordering Options:

VRM-CN5-1: 3U CompactPCI Gigabit Ethernet NIC

VRM-CN5-2: 3U CompactPCI Gigabit Ethernet NIC 32Bits PCI interface/Only J1 Connector

VRM-CR9-ADP: Front panel expansion to 6U, mounting kit.