

Overview:

The **VRM-CN4** is a quad Fast Ethernet networking interface controller for *CompactPCI*® systems. Any individual RJ45 jack provides for attachment to 10Base-T and 100Base-TX based LANs across a CAT5/6 twisted-pair cable, suitable for distances of up to 105m. Featuring auto-negotiation and full-duplex mode, the maximum data transfer rate is 200Mbps at any port. As a 3U board (single size Eurocard), the **VRM-CN4** replaces up to four single-port Fast Ethernet NICs (Network Interface Controller). Consequently, the **VRM-CN4** occupies four individual MAC-respective IP-addresses. The **VRM-CN4** is suitable for a wide range of applications with need for multiple networking controllers, e.g. firewall, gateway, router, or as a fieldbus data concentrator. High availability systems profit from the redundancy achieved when using several Ethernet ports in parallel. Drivers are available for all popular operating systems (e.g. Windows, Linux).



Features:

- Printed Circuit board dimensions: 3U Eurocard (100x160mm²), front panel 4HP (20.3mm) EMI shielded, ejection lever
- Ethernet Connector, ETH1 – ETH4: 4 x twisted pair RJ45, 8-position, wired as a hostadapter, 1:1 cabling to any hubs, switches, routers, transceivers, cross wiring required for direct connection to a second hostadapter
- Cable Type: Category 5/6, UTP or STP, length up to 105m maximum
- Data Transfer Rate: 10Base-T 10Mbps (20Mbps@ full-duplex), 100Base-TX (Fast-Ethernet) 100Mbps (200Mbps @ full-duplex), auto-negotiation for best performance
- Controller Chip: 4 x Intel 82559ER PCI Ethernet controller, single chip MAC and PHY (Transceiver)
- LED Array: Integrated LEDs (within any of the RJ45 jacks), Activity/Link, 100Mbps
- CPCI Bus, Connector J1: 32-Bit, 33MHz, DMA bus master, PCI-to-PCI bridge between external (backplane) CPCI bus and internal (local) PCI bus
- Power Consumption, Connector J1: +5V±5% 0.05A max. +3.3V ±0.3V 0.85A max. V10 +5V or +3.3V 0.01A max.
- Operating Temperature: 0 -70°C
- Humidity: 5-90% non condensing
- Software Drivers: Implicit supported by recent operation systems (e.g. Linux, Windows-ME), additionally Intel offers drivers for download for most operating systems (e.g. VxWorks).

Ordering Options:

VRM-CN4: 3U CompactPCI board, quad Fast Ethernet NIC
VRM-CR9-ADP: Front panel expansion to 6U, mounting kit