

### CompactPCI Systems



**7U, 8 slot**  
 Order No. see page 40  
 For backplanes see pages 61-78

#### Applications

Configuration of 482.6 mm (19") industrial computer systems to the CompactPCI specifications for

- Telecommunications
- Automation

#### Design Features

- 482.6 mm (19") rack-mounted system for vertical installation of Euroboards/double Euroboards
- 7U, 405 mm deep
- Clear chromated aluminum
- Including backplane and power supply unit
- Fully assembled, wired and tested
- Installation space for plug-in boards: 8 slots
- Configuration for CompactPCI boards to CompactPCI Spec. 2.0 Rev. 3.0
- 6U x 160 mm front boards



#### User Benefits

- Vertical installation of double Euroboards
- EMC and ESD protection
- Fully assembled, wired and tested
- Targeted air routing from front to rear
- Keyable guide rails
- Complies with CompactPCI spec. 2.0 Rev. 3.0, IEC 60 297-3 and IEEE 1101.1/1101.10

### CompactPCI Systems



**9U, 12 slot with RiCool and Rear I/O**  
 Order No. see page 44  
 For backplanes see pages 61-78

#### Applications

Configuration of 482.6 mm (19") industrial computer systems to the CompactPCI specifications for

- Telecommunications
- Automation
- Medical

#### Design Features

- 482.6 mm (19") rack-mounted system for vertical installation of double Euroboards
- 9U, 290.5 mm deep, with rear I/O modules
- Clear chromated aluminum
- Including backplane, power supply unit and 2 radial fans
- Fully assembled, wired and tested
- Installation space for plug-in boards: 8 slots
- Configuration for CompactPCI boards to CompactPCI Spec. 2.0 Rev. 3.0



#### User Benefits

- Vertical installation of double Euroboards
- EMC and ESD protection
- Fully assembled, wired and tested
- Targeted air routing
- Rear I/O transition modules
- Keyable guide rails
- Effective ventilation with two RiCool blowers (204 m3/h)
- Complies with CompactPCI spec. 2.0 Rev. 3.0, IEC 60 297-3 and IEEE 1101.1/1101.10

### CompactPCI, "Compact-I"



**10U, 17 slot with RiCool and Rear I/O**  
 Order information see page 52  
 For backplanes see page 61-78

#### Applications

Configuration of 482.6 mm (19") industrial computer systems to the CompactPCI specifications for

- Telecommunications
- Automation
- Data communications
- Computer telephony

#### Design Features

- 482.6 mm (19") rack-mounted system for vertical installation of double Euroboards
- Outer enclosure made from 1 mm sheet steel
- Pull-out interior enclosure made from aluminum
- Customer-specific configuration
- Front boards 6U x 160 mm
- Rear RTM 6U x 80 mm

#### User Benefits

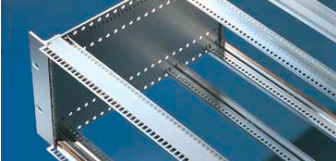
- Customized system production
- Cost-effective production of large quantities

## In Detail: Systems For CompactPCI

Based on the PCI bus architecture, the CompactPCI bus was developed as an industry-compatible version for tough industrial applications. It uses the tried-and-trusted single and double-Euroboard format. The mechanical requirements conform to IEEE 1101.1/10/11, which means simple insertion and withdrawal of connectors with a large number of pins, an ESD concept, as well as coding of the board-type plug in units.

Based on the Ripac subrack system, Kaparel/Rittal offers complete standardized systems, including power supply unit and backplane, fully assembled, wired and tested. In addition to the preassembled systems shown here, individual solutions can also be configured to suit specific requirements. We will be happy to assist you at every stage of the process, from consultancy and development right through to production.

### 1 Design Features



**Side Panels And Flanges** of clear chromated aluminum



**10 mm Pitch Pattern** of holes in the side panels facilitates individual system configuration



**Keyable Red Guide Rails** for defined positioning of the CPU

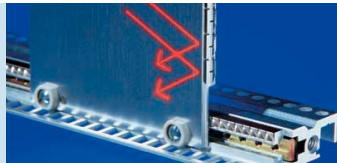


**Horizontal Rails** with 10 mm extension for injector/extractor handles

### 2 EMC Measures



**Conductive Surface Finish** of all system components.



**EMC Gaskets** of stainless steel make contact with the individual components.



**EMC Front Panels** with EMC gaskets ensure reliable contact.

### 3 ESD Protection



**ESD Protection**  
ESD pin (C) and ESD contact in the guide rail (A) to discharge static charges before making contact with the board type plug-in unit.

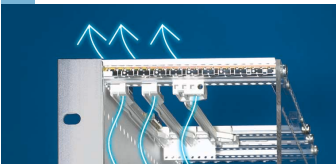


**ESD Contact**  
in the PCB guide (B) ensures permanent, direct discharge via the PCB.

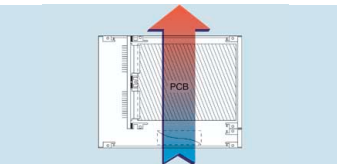


**Safety Ground**  
provides a single earth ground contact per rear I/O module. Parts are UL recognized.

### 4 Climate Control



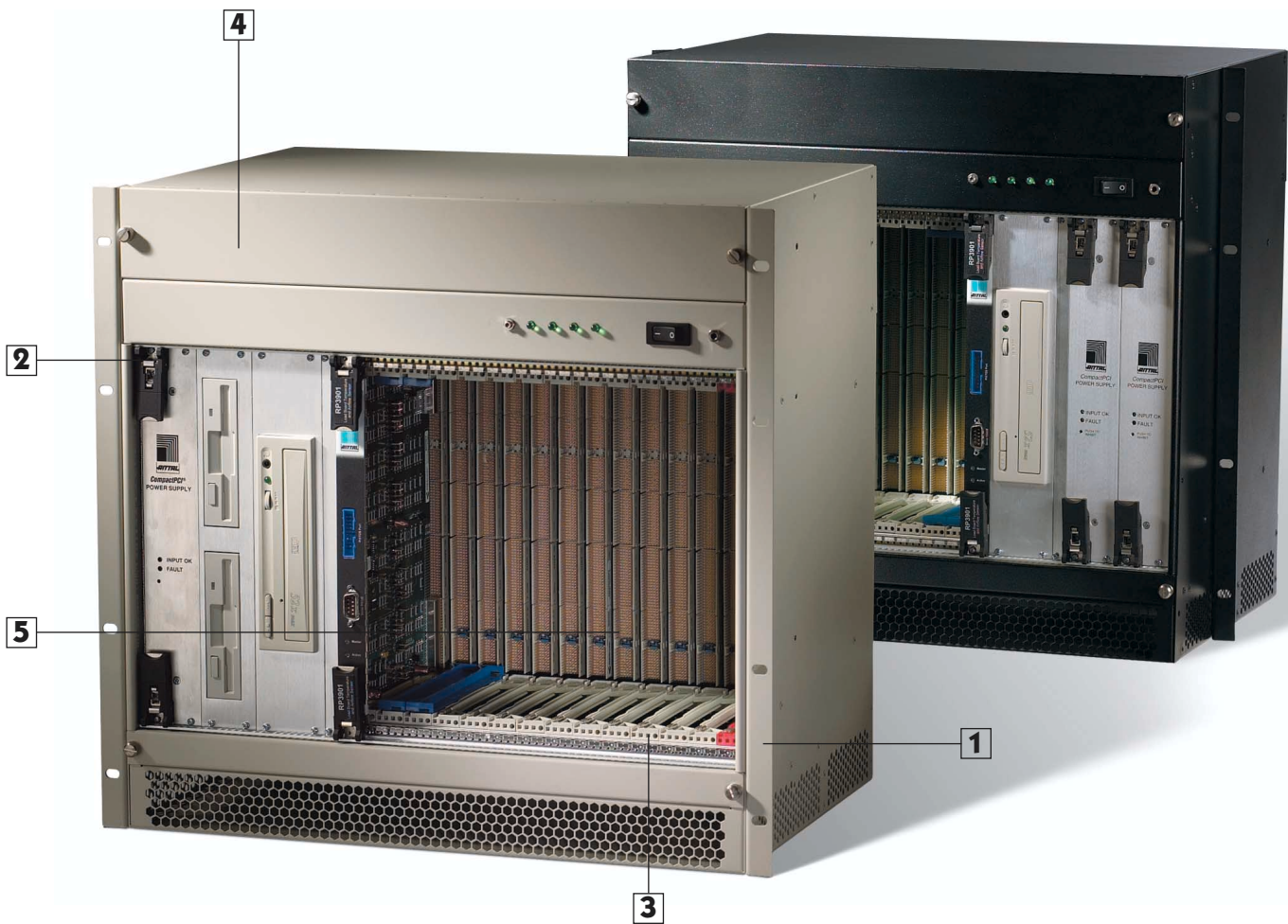
**Maximum Airflow** due to the narrow design of the guide rails and horizontal rails.



**Individual Airflow Management** ensures controlled airflow and optimum heat dissipation, optionally from bottom to top or from front to rear.



**RiCool Flat-Pack Blower** ensures optimum ventilation. 1U, hotswap-compatible, 204 m³/h, including speed control and fault alarm signal.

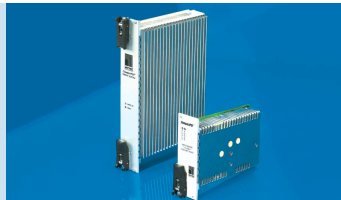


- Systems for the configuration of industrial computers to the CompactPCI specification
- Fully assembled, wired and tested, including backplane and power supply unit
- Individual cooling concepts
- Conforms to IEC 60 297-3 and IEEE 1101.1/10/11, as well as CompactPCI PICMG 2.0

## 5 System Configuration



**Backplanes** High-speed CompactPCI backplanes. Optionally with H.110 and connectors for bridges.



**Power Supply Units** various inputs/outputs, plug-type or open frame.



**Insertion/Extraction Handles** to reliably overcome high insertion/extraction forces.



**Live Insertion** Microswitches in the insertion/extraction handles de-activate the board type plug-in unit before starting the disconnection process, and activate during insertion.