EQIO

RMC-2604

PRODUCT MANUAL

2U Four-Slot CompactPCI Rack Platform with Hot-Swap Fans

Rack-mount CPCI platform · Industrial au...



Application illustration (not a product photo); shipped units may differ.

Measurement and control, made easy.

Easy · Quick · Input · Output

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01 OVERVIEW

2U Four-Slot CompactPCI Rack Platform with Hot-Swap Fans

Rack-mount CPCI platform · Industrial automation · Rack measurement and control · Equipment matching · CompactPCI

RMC-2604 uses 6U 4-slot CompactPCI backplane, provides 1 system slot and 3 expansion slot, integrates 250W AC power and hot-swap fans module, suited used for compact rack in multi board measurement and control system integration.
Left in, right out airflow and independent power slot facilitates organize board cooling and power, front panel provides switch and run indicator. Can combined with system controller and rear I/O board connect measurement and control peripherals, used for cabinet internal data acquisition, communications and automation control.



Application illustration (not a product photo); shipped units may differ.

Key features

- 2U height, 4-slot 6U CompactPCI backplane
- 1 system slot and 3 expansion slot
- 250W AC power module
- Left in, right out airflow
- Hot-swap fans module

02 FUNCTIONS

Functions and engineering value

Compact rack board hosts

2U chassis internal configured with 6U 4-slot CompactPCI backplane, 1 system slot and 3 expansion slot used for combination controller and I/O board. Additional has independent 3U 8HP power slot, suited to cabinet in layout small scale modular system, compute and measurement function must follow selected board confirm.

Side airflow and module maintenance

Left in, right out airflow together with hot-swap fans module, front rear handle facilitates arrangement chassis and fan maintenance operation. Source data lists 12W fan power and not high to 60dB noise conditions, cabinet installation required retain side ventilation space, cooling capability must still per actual board load verify against.

Power and rear I/O matching

Platform configured with 1 250W AC power, system controller solution reference 6U 3rd-generation Intel Core i7 board, USB, network and VGA from matching rear I/O provides. Controller and rear I/O should be treated as system configured with confirm, 250W power capability also requires combined with each voltage rail and board requirement evaluate.

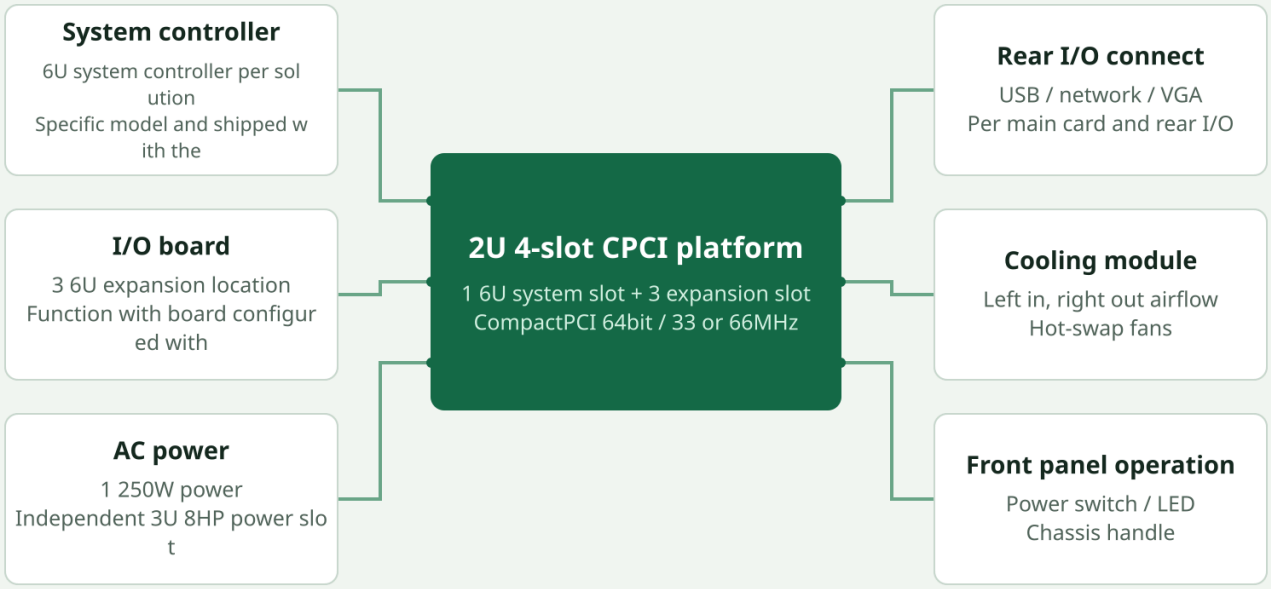
The functional notes explain the product’s role from published configuration. Optional functions, software and peripherals follow the project definition. Chip capability is not the same as implemented I/O.

03 ARCHITECTURE

Product functional architecture

FUNCTIONAL BLOCK DIAGRAM

RMC-2604



Functional relationships · lines do not show internal circuits, pins or dedicated bus topology

From published specification illustrative functional grouping, does not show internal circuits, on-board bus or signal routing; I/O direction actual protocol shall prevail. System controller and rear I/O I/O selected configured with shall prevail; hot-swap not etc.same with electrical replacement claim.

Platform and I/O

This product core is 6U 4-slot CompactPCI backplane and 250W power platform. Data gives 3rd-generation Intel Core i7 system controller configured with reference, but not stated specific CPU model or default shipped with the unit range; should controller selected rear supplement CPU, memory and system parameters.

Reading the diagram

Solid lines show published functional relationships, not on-board buses, bridge chips or connector pins. Optional controllers, radios, storage and software follow the configuration and interface files.

04 SPECIFICATIONS

Technical specifications

Compiled from published product data. Batch, I/O and environmental ratings follow the order confirmation.

Mechanics and system

Front panel	Has power LED power switch, approximately each side 4 screw used for installation and removal front panel
Handle	Front panel both sides chassis handle, rear panel fan module handle
Cooling	Left in, right out airflow design, hot-swap fans module (power 12W, fan noise≤60DB)
Process	Front rear aluminium alloy panel brushed anodized process, surface dual layer paint process

I/O and expansion

Backplane	6U 4C integrated backplane, 1 6U system slot and 3 6U expansion slot, 1 3U 8HP power slot
Backplane bus	CompactPCI®bus, 64bit/33MHz or 66MHz
Controller configuration	6U CompactPCI® 3rd-generation Intel®Core™i7 processor system controller
Standard interfaces	Main board rear IO board provides USB, Ethernet port, VGA display etc.standard interfaces

Mechanical specifications and system requirements

Dimensions / weight	383mm × 482.6mm × 88mm (not including handle), weight≤8.0kg (not including main card)
Environmental ratings	Operating temperature: 0°C~60°C, -20°C~70°C (industrial grade), -40°C~80°C (military-grade), storage temperature: -20°C~85°C
Power configured with	250W AC power; 1 power module

05 APPLICATIONS

From product capability to applications

Rack-mount equipment measurement and control

Can system slot installation compatible controller, 3 expansion slot configured with acquisition, communications or control board card, forms compact measurement and control node. Rear I/O responsible for corresponding external connect, specific measurement channel, accuracy and real-time processing capability all by selected board and software definition.

Industrial automation matching

2U height suited to cabinet space limited automation system, system controller run application, I/O board attach equipment signal. Deployment when check side air stream and adjacent equipment layout, avoid cabinet baffle or dense routing block airflow, and inspection fully populated power and temperature rise.

Can maintenance modular workstation

Board and fan module respectively organize, facilitates maintenance plan in inspection cooling, power and I/O connect. Hot-swap fans and not automatic represent with electrical replacement allow can, maintenance operation, power isolated and spare compatible conditions should per actual chassis and module note actuation.

Integration checks

Board matching	Confirm 6U system controller, 3 expansion slot and rear I/O board compatible relationship and shipped with the unit range.
Airflow space	Left in, right out airflow required retain side airflow and fan module maintenance space.
Power budget	Check 250W power each channel output, boot load and board power consumption.
Temperature version	0–60°C, -20–70°C or -40–80°C different version, not automatic combined and.

06 CONFIGURATION

Configuration, options and selection

Configuration

Can paired with 6U CompactPCI controller and rear I/O board, provides different operating temperature version.

Temperature version	0~60°C / -20~70°C / -40~80°C

Selection guide

Order confirmation	Batch, I/O and environmental ratings follow the order confirmation
Published data	Compiled from published product data; EQIO provides selection and system integration
Configuration talk	Share the application, I/O count, environment and software so a configuration can be proposed

Request a quotation and selection support

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EQIO

Easy · Quick · Input · Output

BRAND

Measurement and control, made easy.



EQIO product family · concept rendering

Brand story

EQIO builds measurement and control products and systems. The name stands for Easy Quick Input Output: Easy is a clear structure that is quick to learn, Quick is a direct path to efficient delivery, and Input / Output is every link between the device under test and the control system.
The soft single-cycle wave inside the Q links the brand to signals, acquisition and I/O. “Measurement and control, made easy” is our promise for every selection, integration and delivery.

What we do

Products

Data acquisition, test instruments, control and I/O, modular platforms, software, cables

Systems

Configured to the measurand, channels, accuracy and software, from design to commissioning

Support

Selection advice, training, maintenance and calibration

How we deliver

01
Requirements

02
Solution design

03
Build & integration

04
Factory test

05
Delivery & training

06
Ongoing support

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