EQIO

CPCIS-1506G

PRODUCT MANUAL

15.6-inch 6U CompactPCI Portable Computing Platform

Portable card platform · Mobile measurem...



Appearance reference (generated from product photos); shipped units may differ.

Measurement and control, made easy.

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Easy · Quick · Input · Output

01 OVERVIEW

15.6-inch 6U CompactPCI Portable Computing Platform

Portable card platform · Mobile measurement and control · Multi-channel data acquisition · Equipment system integration · CompactPCI · Intel

CPCIS-1506G uses 6U CompactPCI 6-slot structure and dual aluminium-alloy layer housing, integrates 15.6-inch display, portable operation component and power module, provides multi I/O board and rear I/O expansion space, used for mobile measurement and control and multi-channel data acquisition.

5 expansion slot occupancy and 4 rear I/O location facilitates assign acquisition, communications and control module, network, serial, USB and VGA used for external connect. Platform display operation and card-cage space centralized layout, suited to mobile test and equipment bring-up.



Multi-angle reference (generated from product photos); shipped units may differ.

Key features

- 6U CompactPCI 6-slot structure
- 5 expansion slot occupancy, 4 rear I/O position
- 15.6-inch display
- 64-bitCompactPCI bus
- Network, serial, USB and VGA

02 FUNCTIONS

Functions and engineering value

6U multi board portable platform

Platform uses 6U CompactPCI 6-slot structure, provides 5 expansion slot occupancy and 4 rear I/O location, system controller single independent configured with. Can acquisition, communications and control function per board combination to the same portable housing in, system function and performance from main card and each expansion board together determines.

Display operation and I/O collect

15.6-inch 1024 × 768 display, portable operation component and network, serial, USB and VGA I/O facilitates field used. Rear I/O location can help organize rear part wiring, actual brought out I/O and slot occupancy occupancy should and selected controller, rear I/O board and expansion card item by item match.

Power and environment version selection

Standard AC220V/400W power, optional select DC28V solution, two kinds of power per configured with respectively select. Commercial and expansion temperature version required combined with system controller and function card determine, CompactPCI bus 64bit/33MHz or 66MHz, operation frequency complete system compatible configured with shall prevail.

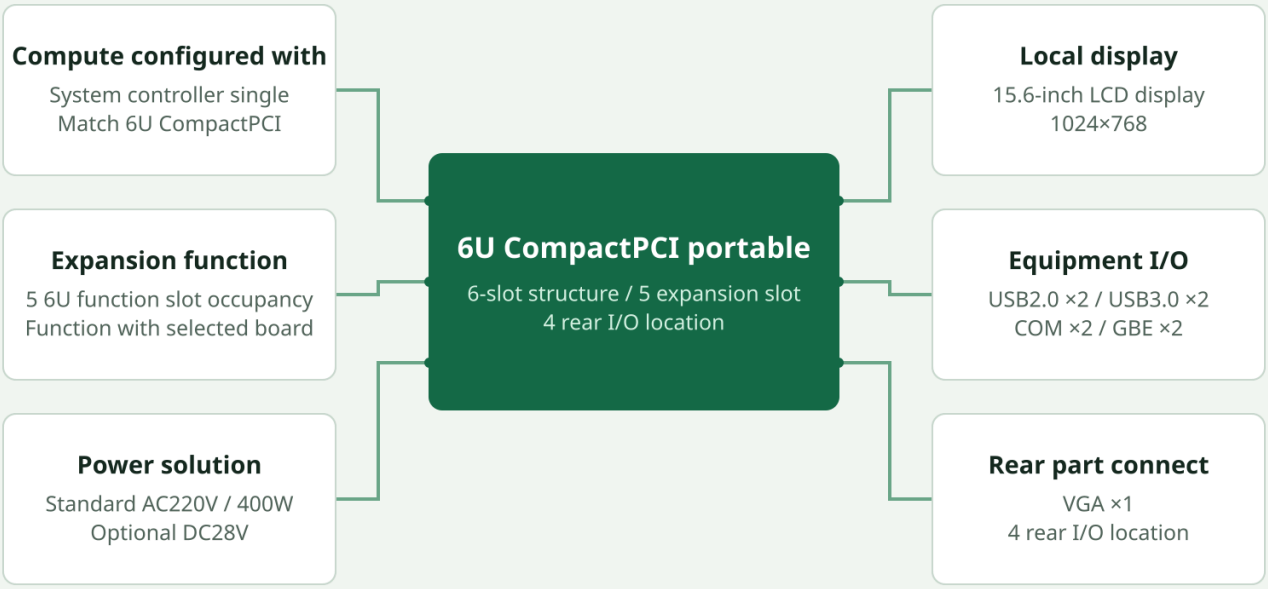
The functional notes explain the product’s role from published configuration. Optional functions, software and peripherals follow the project definition. Chip capability is not the same as implemented I/O.

03 ARCHITECTURE

Product functional architecture

FUNCTIONAL BLOCK DIAGRAM

CPCIS-1506G



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. Peripheral I/O required and controller and rear I/O configured with match; AC and DC different power solution.

Platform and I/O

This product is 6U CompactPCI portable platform, system controller single independent configured with. I7-3517UE only relationship optional reference, not cannot be used as platform unified standard CPU; processor, memory, system and actual bus operation frequency all should follow main card and expansion card configured with confirm.

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.

Core system

Display	15.6-inch LCD display, resolution 1024 × 768
System controller configured with	System controller single independent configured with

Mechanical specifications and system requirements

Dimensions / weight	431mm × 235mm × 365mm (not including handle height, error±2mm),weight≤18kg
Environmental ratings	Operating temperature: (commercial grade) 0~55°C, (military-grade ET version) -30°C ~ 65°C, storage temperature: -30°C~65°C
Power	4 core circular socket, standard AC220V/400W; DC28V power (optional)

I/O and expansion

Peripheral I/O	2 USB2.0, 2 USB3.0, 2 COM, 2 GBE, 1 VGA
Serial/bus	CompactPCI bus, 64bit/33MHz or 66MHz
Expansion capability	5 6U CompactPCI expansion card slot + 4 rear IO card slot

05 COMPONENTS

Processor and device specifications

Device figures come from vendor publications and describe the chip or module. The implemented product follows the specification tables. Optional devices are supplied with the selected configuration.

Intel i7-3517UE (Optional)

Micro architecture codename	Ivy Bridge
Manufacturing process	22 nm
CPU core number	2
CPU threads number	4
Processor rated base frequency	1.70 GHz
Up to turbo	2.80 GHz
Shared cache	4 MB Intel® Smart Cache
Thermal design power consumption	17 W
CPU memory controller capacity upper limit	16 GB

Intel i7-3517UE (Optional) (continued)

CPU memory controller supports type	DDR3/DDR3L 1333/1600
Memory channel number	2
Memory controller maximum bandwidth	25.6 GB/s
CPU ECC supports	Supports
Integrates graphics unit	Intel® HD Graphics 4000
IGPU basic frequency	350 MHz
IGPU up to dynamic frequency	1.00 GHz
Chip supports display quantity upper limit	3

05 COMPONENTS

Processor and device specifications (continued)

Intel i7-3517UE (Optional) (continued)

Chip display output protocol	eDP/DP/HDMI/SDVO/CRT
CPU PCIe version	3.0
CPU PCIe channel configured with	1x16 2x8 1x8 2x4
CPU PCIe channel upper limit	16
Package	FCBGA1023
Package dimensions	31mm x 24mm
VT-x virtualization	Supports
VT-d directional I/O virtualization	Supports
Quick Sync video acceleration	Supports
Command width	64-bit

Sources: Intel, Intel i7-3517UE Processor Specifications.

06 GALLERY

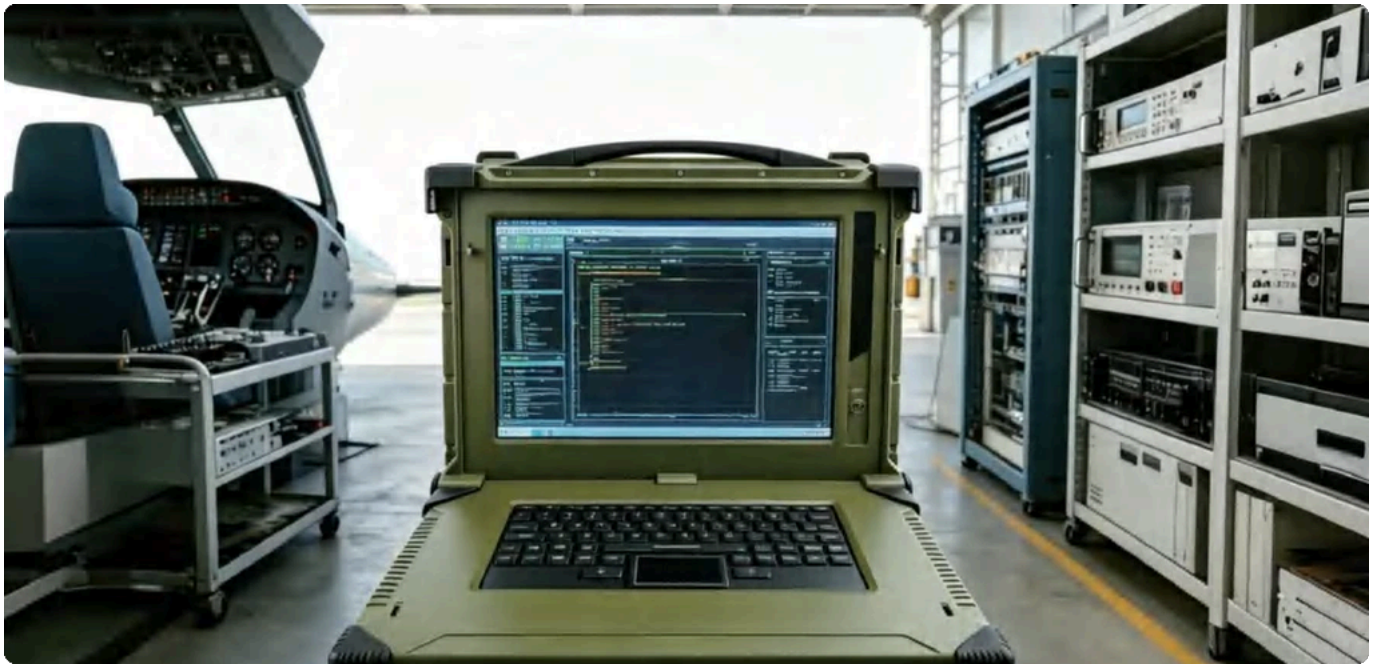
Appearance and scene

Reference views



Product appearance reference; shipped units may differ.

Scene



Application illustration (not a product photo).

07 APPLICATIONS

From product capability to applications

Mobile multi-channel acquisition system

5 6U expansion location can used for configured with different acquisition or communications board card, system controller run task software, built-in display used for operation and result view. Acquisition channel number, accuracy, synchronous method and data rate from selected board definition, not cannot only per slot quantity determine.

Equipment field bring-up platform

Can controller, I/O card and rear I/O board centralized installation, via network, serial or USB attach to be adjusted equipment, VGA connect auxiliary display. Rear I/O location facilitates per equipment cables organize connect, deployment should first inspection board depth, connector space and bus configured with.

Multi workstation portable test

Platform display, card-cage space and power centralized to housing, suited to different equipment workstation between move used. Based on field power selection AC220V or DC28V version, and not including handle outline and no more than 18kg weight include carry, support and installation planning.

Integration checks

Controller and board	System controller single independent configured with, check 6U board outline, backplane bus and 5 expansion location.
Rear I/O match	4 rear I/O location required check selected main card, function card connector and brought out relationship.
Power solution	AC220V/400W standard solution, DC28V required additional select and confirm power capability.
Temperature and bus	Temperature version and 33/66MHz operation configured with must from complete set board together meets.

08 CONFIGURATION

Configuration, options and selection

Configuration

Standard AC220V/400W power, optional select DC28V solution, provides commercial temperature and expansion temperature version.

Power	AC220V/400W; optional DC28V; two kinds of power configured with must separately selection
Temperature version	0~55°C / ET version-30~65°C; per product and selected system controller version configured with

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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