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Data Sheet

August 15, 2026

ADVANTECH

Advantech IPC-610B Industrial PC Chassis

The Advantech IPC-610B is a 4U rackmount industrial PC chassis with deployment in demanding operational environments. Built for shock, vibration, dust, and temperature extremes, it has a flexible platform supporting multiple motherboard form factors and extensive expansion capabilities. The chassis integrates dual filtered cooling fans with positive pressure architecture, accommodates up to three 5.25" and one 3.5" storage drives, and accepts 15 expansion cards across configurable PCI and PCIe slots. Compatibility & Integration The IPC-610B accepts standard ATX power supplies and supports both traditional and embedded single board computers. Drive configuration flexibility and multi-slot expansion architecture enable integration with legacy ISA/PCI infrastructure alongside contemporary PCIe peripherals. Aumictech offers NIST-traceable calibration and repair for the Advantech IPC-610



MODEL

Advantech IPC-610B

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

IPC-610B

LISTING

<https://aumictechlabs.com/products/ipc-610b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Advantech IPC-610B is a 4U rackmount industrial PC chassis with deployment in demanding operational environments. Built for shock, vibration, dust, and temperature extremes, it has a flexible platform supporting multiple motherboard form factors and extensive expansion capabilities. The chassis integrates dual filtered cooling fans with positive pressure architecture,

accommodates up to three 5.25" and one 3.5" storage drives, and accepts 15 expansion cards across configurable PCI and PCIe slots. Technical Specifications Chassis & Form Factor 4U rackmount configuration Supports ATX, Baby AT, MicroATX, and PICMG 1.0/1.3 motherboards Accommodates full-size and half-size single board computers (SBCs) 14-slot PC-bus compatible passive backplane (optional ATX M/B variant) Supports up to 12 full-length slots or 12" × 9.6" form factor motherboards Storage & Drive Architecture Three 5.25" drive bays plus one 3.5" bay Shock-resistant drive bay design with lockable protective door Optional 40GB IDE 3.5" HDD configurations Expansion & Connectivity Up to 15 expansion card slots Configurations include 5 PCI slots, 1 PCIe x16 slot, and 1 PCIe x4 slot (IPC-610L example) Thermal Management Dual filtered push-pull cooling fans with positive pressure dust exclusion Single 120mm × 120mm ball bearing fan option with guiding structures 85 CFM filtered cooling fan with tool-free cartridge replacement Power Supply Compatible with ATX switching power supplies: 250W PFC and 300W variants Optional PS/2 single or redundant supply configurations Supports DPS-300AB-70A 300W power supplies Environmental Performance Operating temperature: 0°C to 50°C (32°F to 122°F); 0°C to 40°C for IPC-610F; 0°C to 60°C for specific CPU boards Storage temperature: -20°C to 60°C (-4°F to 140°F); -40°C to 60°C for specific CPU boards Relative humidity: 10% to 95% @ 40°C non-condensing; 20% to 95% for specific CPU boards Vibration (operating): 5–17 Hz at 0.1" double amplitude displacement; 17–500 Hz at 1.5 g peak acceleration Shock (operating): 10 g peak acceleration over 11 ms duration Physical Dimensions 428.9mm (W) × 473.9mm (D) × 170mm (H) excluding handles (IPC-610L reference) Key Features Positive-pressure filtered fan architecture prevents dust and contaminant ingress Lockable drive bay door secures storage and front-panel components Modular expansion supports legacy PCI and modern PCIe interface standards Wide thermal operating range accommodates industrial facility temperature swings High shock and vibration tolerance meets mobile and fixed-installation demands Typical Applications Factory automation and process control systems Transportation and railway infrastructure computing Telecommunications network appliances Energy distribution and grid management platforms Compatibility & Integration The IPC-610B accepts standard ATX power supplies and supports both traditional and embedded single board computers. Drive configuration flexibility and multi-slot expansion architecture enable integration with legacy ISA/PCI infrastructure alongside contemporary PCIe peripherals.

IPC610B Characteristics / Specifications

PARAMETER	VALUE
Model	IPC-610B
Also Known As	IPC-610 / IPC-610-F
Instrument Type	4U rackmount industrial PC chassis
Rack Height	4U 19 inch
Card Slots	up to 14 or 15 (backplane) or ATX motherboard
Drive Bay Five Two Five	3 external 5.25 inch
Drive Bay Three Five External	1 front-accessible 3.5 inch
Drive Bay Three Five Internal	1 internal 3.5 inch
Cooling Fan	1 × 12 cm 85 CFM hot-swappable
Air Filter	yes front-accessible
Front Usb	2
Front Ps	1
Leds	power, HDD, keyboard lock
Controls	power, system reset, keyboard lock
Operating Temperature	0 to 40 C (32 to 104 F)
Storage Temperature	minus 20 to 60 C
Humidity Operating	10 to 85 percent at 40 C non-condensing
Vibration Operating	1 Grms 5 to 500 Hz
Shock Operating	10 G 11 ms half sine
Dimensions Backplane	482 × 177 × 449 mm (19 × 7 × 17.8 in) IPC-610BP
Dimensions Motherboard	482 × 177 × 499 mm (19 × 7 × 19.6 in) IPC-610MB
Mass	16.2 kg (35.6 lb)
Psu Three Hundred	300 W ATX AC 100 to 240 V
Psu Four Hundred	400 W ATX AC 100 to 240 V
Psu Dc	300 W DC minus 48 V option

PARAMETER	VALUE
Manufacturer	Advantech
Humidity	Operating: 10 to 85 percent at 40 C non-condensing

IPC610B Specifications

PARAMETER	VALUE
Applications	Mission-critical 19-inch rack industrial PCs hosting PICMG CPU cards such as PCA-6178 or ATX motherboards.
Key Features	4U 19-inch rack up to 15 cards
Lockable front door	300/400 W ATX or redundant PSU options
Technical Specifications	Model: IPC-610B

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
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Operating temperature	0 to 40 C (32 to 104 F)
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Psu Four Hundred	400 W ATX AC 100 to 240 V
Psu Dc	300 W DC minus 48 V option
Manufacturer	Advantech Notes From Advantech IPC-610-F Classic 4U 15-Slot Rackmount Chassis datasheet. B versus F/L door and PSU population is unit-specific; confirm backplane versus motherboard version.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Manufacturer	Advantech

Notes

From Advantech IPC-610-F Classic 4U 15-Slot Rackmount Chassis datasheet. B versus F/L door and PSU population is unit-specific; confirm backplane versus motherboard version.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.