

**AICSYS**  
ADVANCED INDUSTRIAL COMPUTER SYSTEMS



# 2023 CATALOG



## The Company



**AICSYS** has been manufacturing Industrial Chassis and Specialized Single Board Computers for more than seventeen years and has been a major supplier of OEM/ODM IPC Products to many of the leading IPC companies in Europe, Asia, and North America. Private labeling and behind the scenes support, has been AICSYS' primary function. Recent changes in the global IPC Market has caused AICSYS to re-evaluate its' position. As a direct result, AICSYS has released a line of products which bear the AICSYS name and will focus primarily on Ruggedized Industrial Chassis and a highly focused line of Single Board Computers.

**AICSYS** has expanded its' manufacturing capabilities to include sites in Taiwan and Shen Zhen, China. The Chassis facilities have over 3000 square meters of manufacturing space and house (4) NCT Machines, (9) CNC Machines, and several other automated pieces of

fabrication machinery. With the addition of these facilities, AICSYS has positioned itself as a major player in the IPC Market through cost effective and superior quality products. AICSYS-USA is responsible solely for design & development, while AICSYS-Taipei facilitates all Marketing, Sales Distribution, and Customer Service for the Asian & European Markets, including OEM/ODM products for local vendors.

No matter how many features an SBC may have, without a well-designed Chassis your solution is not impressive at all. AICSYS capitalizes on previous Chassis development experience for the next generation of products, enhancing reliability, durability and safety features. To provide our customers complete solutions, AICSYS has integrated several "Ready-to-Use" products such as, the CYCLOPS Series - 1U LCD/Keyboard Drawers and WEBSTER – All-in-One Servers.

While Industrial Chassis and Systems remain the foundation of the AICSYS product line, OEM/ODM projects allow our R & D Team to shine. Simple modifications such as minor BIOS modifications, changing the color of a chassis, and adding a company logo are just a few services AICSYS offers its customers. AICSYS also provides a complete design service to customers as well. Our team of Design Engineers will manage your project from conception to post production support. At AICSYS we have the unique ability to produce both large and small quantity OEM products.

Producing the highest quality products possible is our number one goal at AICSYS. To compromise the integrity of a product in order to beat the competition to market is something we at AICSYS do not believe in. Rushing a product through a production cycle can result in catastrophic failures, our approach to design, development & production is an extremely cautious one. Each product is rigidly stress tested as well as field tested prior to release. Utilizing state of the art technology to design and manufacture our products ensures our customers receive the highest quality products available. Experience today the advantages of having over seventeen years of manufacturing, engineering, and customer support that AICSYS can bring to your next project.



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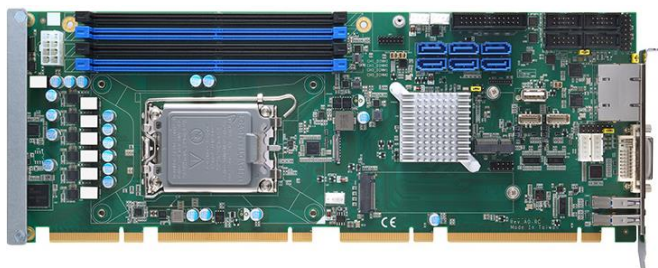
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## PICMG 1.3 Single Board Computer



The Global Choice for Premium Industrial Computer Products

**Industrial Full-size PICMG 1.3 SBC supports 12th Gen. Intel® Core™ Processors with Intel® R680E/H610E PCH, SATA3, M.2 Key, USB 3.2, Dual LAN and DVI-I**



## Features

- Supports Intel 12<sup>th</sup> Gen. Core Processors
- Dual Gigabit Ethernet supported
- (6) SATA-600 with RAID 0/1/5/10 (R680E)
- Watchdog & Hardware Monitor function
- Supports Intel® AMT and vPro (R680E)

## CPU

- LGA1700 for 12<sup>th</sup> Generation Intel® Core™ Processors, up to 125W

## Chipset

- Intel® R680E/H610E

## System Memory

- (4) DDR5 4400 un-buffered DIMM max. up to 128GB (R680E supports ECC)

## Display Interface

- Intel® HD Graphics
- (1) DVI-I, (1) DisplayPort++ (onboard header)

## Ethernet

- 1st port with Intel® i225-LM with AMT and vPro
- 2nd port with Intel® i225-V
- support WOL, PXE Boot ROM

## Audio

- Optional Audio Codec with external module

## TPM

- Optional TPM 2.0 module

## I/O Interface

- (2) RS232 & (2) RS232/422/485 serial ports
- (2) USB 3.2 Gen.2x1 & (4) USB 3.2 Gen.1, (3) USB 2.0 Ports
- R680E: (6) SATA-600 support RAID 0/1/5/10
- H610E: (4) SATA-600
- M.2 Key M 2280, PCIe 4.0 x4 signal
- (1) PS/2 keyboard & (1) PS/2 mouse & (1) LPT

## Expansion Interface

- (1) PCIe x16, Gen. 4
- (1) PCIe x4 or (4) PCIe x1, Gen. 4
- (4) 32 bit PCI bus masters

## Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

## Dimension

- 338mm x 126mm

## Ordering Information

<b>SBC-6512 2GND-R</b>	LGA1700 Socket 12th Generation Intel® Core™ processors, Intel® R680E PCH, USB 3.2, SATA 3.0, Dual LAN, DVI-I
<b>SBC-6512 2GND-H</b>	Intel® H610E PCH
<b>AAC-93242</b>	Optional Audio Kit

Industrial Full-size PICMG 1.3 SBC supports 8/9<sup>th</sup> Gen. Intel® Core™ Processors with Intel® C246/Q370/H310 PCH, SATA3, M.2 Key, USB 3.1, Dual LAN and DVI-I



### Features

- Supports Intel 8/9<sup>th</sup> Gen. Core Processors
- Dual Gigabit Ethernet supported
- (6) SATA-600 with RAID 0/1/5/10 (C246/Q370)
- Watchdog & Hardware Monitor function
- Supports Intel® AMT and vPro (C246/Q370)

### CPU

- LGA1151 for 8/9<sup>th</sup> Generation Intel® Core™ Processors

### Chipset

- Intel® C246/Q370/H310

### System Memory

- (2) 288-pin DDR4 2400/2666 un-buffered DIMM max. up to 32GB (C246 supports ECC)

### Display Interface

- Intel® HD Graphics
- (1) DVI-I

### Ethernet

- 1st port with Intel® i219LM with AMT 11 support
- 2nd port with Intel® i211AT
- support WOL, RPL/PXE Boot ROM

### Audio

- Optional Audio Codec with external module

### TPM

- Optional TPM 2.0 module

### I/O Interface

- (2) RS232 & (2) RS232/422/485 serial ports
- C246/Q370: (2) USB 3.1 Gen.2 & (4) USB 3.1 Gen.1, (4) USB 2.0 Ports
- H310: (4) USB3.1 Gen. 2 & (4) USB 2.0 Ports
- C246/Q370: (6) SATA-600 support RAID 0/1/5/10
- H310: (4) SATA-600
- M.2 Key M 2280, PCIe x4 signal
- (1) PS/2 keyboard & (1) PS/2 mouse & (1) LPT

### Expansion Interface

- Edge Connector A: (1) PCIe x16, Gen. 3 Edge Connector B: (1) PCIe x4 or (4) PCIe x1, Gen. 2 (4) 32 bit PCI bus masters

### Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

### Dimension

- 338mm x 126mm

### Ordering Information

<b>SBC-6511S 2GND-Q</b>	LGA1151 Socket 8/9 <sup>th</sup> Generation Intel® Core™ processors, Intel® Q370 PCH, USB 3.1, SATA 3.0, Dual LAN, DVI-I
<b>SBC-6510S 2GND-C</b>	Intel® C246 PCH
<b>SBC-6510 2GND-H</b>	Intel® H310 PCH
<b>AAC-93242</b>	Optional Audio Kit

**Industrial Full-size PICMG 1.3 SBC supports 6th Generation Intel® Core™ Processors with Intel® Q170 PCH, SATA3, USB 3.0, LAN and DVI-I**



## Features

- Supports Intel 6<sup>th</sup> Gen. Core i3/i5/i7 Processors
- Dual Gigabit Ethernet supported
- (6) SATA-600 with RAID 0/1/5/10
- Watchdog & Hardware Monitor function
- DVI/VGA outputs

## CPU

- LGA1151 for 6th Generation Intel® Core™ Processors, TDP up to 65W vPro Supported

## Chipset

- Intel® Q170

## System Memory

- (2) 240-pin DDR4/-2133 un-buffered DIMM max. up to 16GB

## Display Interface

- Intel® HD Graphics
- (1) DVI-I

## Ethernet

- 1st ports as 10/100/1000Mbps support WOL,RPL/PXE Boot ROM with Intel® i219LM with AMT 9.0 support
- 2nd port as 10/100/1000Mbps support WOL,RPL/PXE Boot ROM with Intel® i211AT

## Audio

- Built-in HD Audio Codec

## TPM

- Infineon TPM 1.2 SLB9635 (optional)

## I/O Interface

- (5) RS232 & (1) RS232/422/485 serial ports
- (2) USB 3.0 and (10) USB 2.0 ports
- (6) SATA-600 support RAID 0/1/5/10
- (1) PS/2 keyboard & (1) PS/2 mouse

## Expansion Interface

- Edge Connector A: 1 x PCIe x16, Gen. 3 Edge Connector B: 1 x PCIe x4 or 4 x PCIe x1, Gen. 2 4 x 32 bit PCI bus masters

## Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

## Dimension

- 338mm x 126mm

## Ordering Information

**SBC-6510A2GI** LGA1151 Socket 6th Generation Intel® Core™ i7/i5/i3 processors, Intel® Q170 PCH, USB 3.0, SATA 3.0, Dual LAN, DVI-I

## Embedded Single Board Computer



The Global Choice for Premium Industrial Computer Products



Industrial 5.25" Embedded SBC with Intel® Core™ i Mobile CPU, Intel® QM77 Express, DDR3 up to 16GB, (6) Giga LAN, (4) USB 3.0, (6) COM, (6) SATA, Mini-PCIe socket



## Features

- Intel® Core™ i7/i5/i3 Mobile processor 3<sup>rd</sup> Gen.
- (6) Gigabit Ethernet supported
- (4) SATA2 & (2) SATA3
- Watchdog & Hardware Monitor function
- DVI/VGA/LVDS multiple display outputs

## CPU

- Intel® Core™ i7/i5/i3 Mobile processor 3<sup>rd</sup> Gen.
- Package Type: rPGA988B

## Chipset

- Mobile Intel® QM77 Express chipset

## System Memory

- (2) DDR3 1066/1333/1600 SO-DIMM up to 16 GB

## Display Interface

- Integrated Intel® HD Graphics 4000
- (1) DVI, (1) VGA & (1) LVDS 24 bit dual channel

## Ethernet

- (5) Intel® 82574L Gigabit Ethernet Controllers
- (1) Intel® 82579LM Gigabit Ethernet Controller(Support iAMT8.0)
- Supports Wake-on-LAN, PXE Boot ROM

## Audio

- Built-in HD Audio Codec with Realtek ALC888

## I/O Interface

- (1) RS-232/422/485 & (4) RS-232 serial ports
- (4) USB 2.0 and (2) USB 3.0 ports
- (1) 8-bit digital I/O interface
- (4) SATA2 & (2) SATA3
- (1) IrDA & (1) SMBus

## Onboard Expansion

- (2) Mini-PCIe sockets
- (1) SIM socket

## Power Requirement

- ATX 20-pin & 4-pin connectors
- Standard ATX Power or DC 9-24V input

## Environment Spec

- Operating within 0 ~ 60°C
- Storage within -20 ~ 85°C

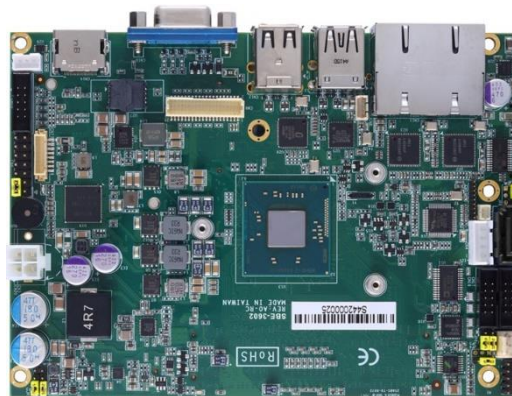
## Dimension

- 203 mm x 146 mm (L x W)

## Ordering Information

<b>SBE-5237A6GNLD</b>	PGA988B+ QM77 Onboard VGA, LVDS, DVI, LAN, USB2.0, USB3.0, HD Audio, SATAII ,SATAIII, SMBUS, LPC,
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## Industrial 3.5" Embedded SBC with onboard Intel® Atom™ Processor E3845, LVDS/ VGA/ HDMI, Dual LANs, Audio



### Features

- onboard Intel® Atom™ processor E3845
- Dual Gigabit Ethernet supported
- (1) SATA-300
- Watchdog & Hardware Monitor function
- HDMI/VGA/LVDS multiple display outputs

### CPU

- Onboard Intel® Atom™ processor E3845 @1.91GHz

### Chipset

- SoC Integrated

### System Memory

- (2) 204-pin SO-DIMM DDR3L-1066/1333 up to 8 GB

### Display Interface

- Integrated Intel® HD Graphics
- (1) HDMI, (1) VGA
- (1) LVDS 24 bit dual channel

### Ethernet

- (2) 10/100/1000Mbps with Intel® i211AT
- Supports Wake-on-LAN, PXE Boot ROM

### Audio

- Built-in HD Audio Codec with Realtek ALC662

### I/O Interface

- (1) RS-232/422/485 with +5V/+12V powered
- (1) RS-232
- (4) USB 2.0 and (1) USB 3.0 ports
- (1) 8-bit digital I/O interface
- (1) SATA-300

### Onboard Expansion

- (1) Full-Size PCI Express Mini Card
- (1) Full-Size PCI Express Mini Card (USB only)

### Power Requirement

- 4-pin connector
- +10V~24V DC-in
- AT Auto Power On function supported

### Environment Spec

- -20°C ~ +70°C (-4°F ~ 158°F) operation
- Operation humidity under 10% ~ 95%

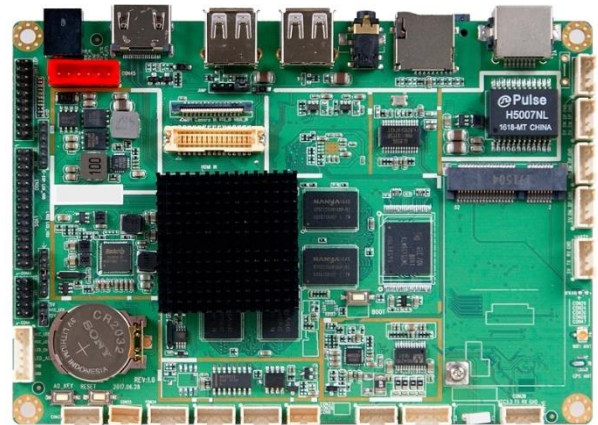
### Dimension

- 146 x 104 x 1.6 mm

### Ordering Information

<b>SBE-3503A2GNL</b>	3.5" Embedded SBC with Intel® Atom™ processor E3845 1.91GHz and VGA/LVDS/HDMI, 2 GbE
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## Industrial 3.5" Embedded SBC with Rock chip ARM Cortex A17 RK3288W, HDMI/LVDS/eDP, USB 2.0, Bluetooth and WIFI



### Features

- Rock chip ARM Cortex A17 RK3288W
- One Gigabit Ethernet and WIFI supported
- Watchdog & Hardware Monitor function
- HDMI/LVDS/eDP multiple outputs
- Supports Android 5.1 & Linux 4.4

### CPU

- Rock chip® ARM Cortex A17 RK3288W Quad-core 1.8GHz SoC Processor

### System Memory

- Onboard 1GB DDR3L 1333MHz, optional up to 4GB

### Display Interface

- Mali-T764 GPU, support AFBC
- (1) HDMI up to 3840 x 2160 @60Hz
- (1) 24-bit dual channel LVDS up to 1920 x 1200 @60Hz
- (1) eDP up to 3840 x 2160 @30Hz

### Ethernet

- (1) Realtek RTL8211E-VB Gigabit Controller
- (1) RTL8723BS WIFI 802.11 b/g/n (2.4G)
- (1) Bluetooth 4.0

### Storage

- Onboard 8GB Flash ROM
- (1) TF card (Micro SD) socket up to 64GB

### I/O Interface

- (4) RS232 serial ports
- (4) USB 2.0 and (1) USB OTG ports
- (1) 8-bit digital I/O interface
- (1) SIM slot

### Onboard Expansion

- (1) Full-size PCI Express mini card

### Power Requirement

- DC 12V input

### Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

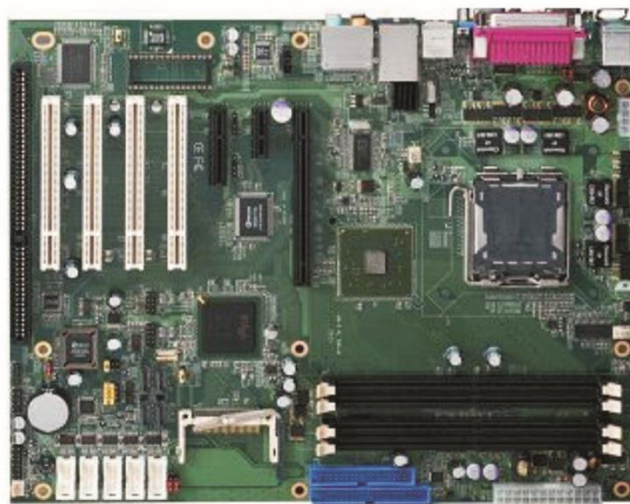
### Dimension

- 148mm x 102mm (5.83" x 4.01")

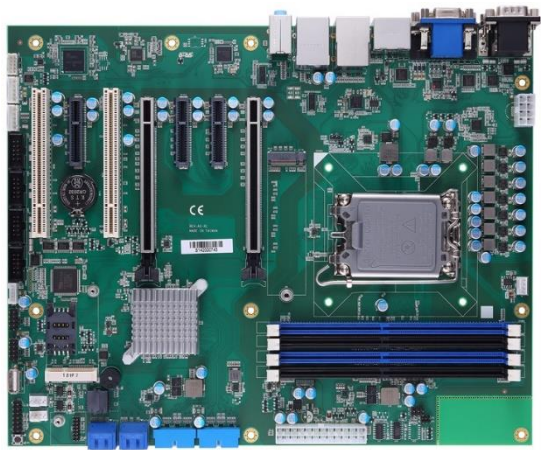
### Ordering Information

<b>SBE-3J01AGHL-18</b>	Rock chip ARM Cortex A17 RK3288W with 1GB DDR3L 1333MHz, 8GB Flash ROM, HDMI/LVDS/eDP, GBE LAN & WIFI & BT4.0
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## Industrial Motherboard Computer



**Industrial ATX Industrial  
Motherboard with LGA1700  
Socket 12th Gen Intel®  
Core™ Processors, Intel®  
R680E, DDR4, USB 3.2, SATA  
RAID, Dual LANs,  
VGA/DVI/DisplayPort/HDMI**



## Features

- Supports Intel 12<sup>th</sup> Gen. Core CPU
- Dual Gigabit Ethernet supported
- (4) SATA-600 with RAID 0, 1, 5, 10
- Supports M.2 Key M 2280
- HDMI/DVI/Display Port/VGA multiple outputs

## CPU

- Socket LGA1700 supports 12<sup>th</sup> Gen. Intel® Core™ i9/i7/i5/i3, Pentium® or Celeron® processors (up to 125W)

## Chipset

- Intel® R680E

## System Memory

- (4) 288-pin Long-DIMM dual channel DDR4-3200, max. up to 128 GB
- Supports ECC/Non-ECC un-buffered

## Display Interface

- Intel® HD Graphics
- (1) HDMI, (1) VGA, (1) DVI-D and (1) DisplayPort

## Storage

- (4) SATA-600 with RAID 0, 1, 5, 10
- (1) M.2 M Key 2280 supports PCIe x4 via CPU

## Ethernet

- (2) Gigabit LAN with Intel® i255-LM and i211-AT
- supports Wake-on-LAN, PXE Boot ROM

## Audio

- Built-in HD Audio Codec with Realtek ALC888

## I/O Interface

- (4) RS232 & (2) RS232/422/485 serial ports
- (8) USB 3.2 Gen2x1
- (5) USB 2.0 ports (pin header, 180D type A)
- (1) 8-bit digital I/O interface
- (1) PS/2 keyboard (internal box header)
- Optional TPM 2.0 module

## Onboard Expansion

- (2) PCIe Gen4 x16 slot ((1) x16 or (2) x8)
- (2) PCIe x4 slot open ended ((1) Gen3 & (2) Gen4)
- (1) PCIe Mini Card slot
- (2) 32-bit PCI slot, default clock is 33 Mhz

## Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

## Dimension

- 305mm x 244mm

## Ordering Information

**MBC-6524A2GHP-  
R680** LGA1700 Socket 12<sup>th</sup> Gen.  
Intel® Core™ processors,  
Intel® R680E chipset

**Industrial ATX Industrial  
Motherboard with LGA1200  
Socket 10th Gen Intel®  
Core™ Processors, Intel®  
W480E, DDR4, USB 3.2, SATA  
RAID, Dual LANs,  
VGA/DVI/DP/HDMI**



## Features

- Supports Intel 10<sup>th</sup> Gen. Core and Xeon W CPU
- Dual Gigabit Ethernet supported
- (4) SATA-600 with RAID 0, 1, 5, 10
- Supports M.2 Key M 2280 with NVMe
- HDMI/DVI/Display Port/VGA multiple outputs

## CPU

- Socket LGA1200 supports Xeon W, 10<sup>th</sup> Gen. Intel® Core™ i7/i5/i3, Pentium® or Celeron® processors (up to 125W)

## Chipset

- Intel® W480E

## System Memory

- (4) 288-pin Long-DIMM dual channel DDR4-2933, max. up to 128 GB
- Xeon W supports ECC RAM

## Display Interface

- Intel® HD Graphics
- (1) HDMI, (1) VGA, (1) DVI-D and (1) DisplayPort

## Storage

- (4) SATA-600 with RAID 0, 1, 5, 10
- (1) M.2 Key M 2280 (signal: PCIe x4/SATA)

## Ethernet

- (2) Gigabit LAN with Intel® i219LM and i211-AT
- supports Wake-on-LAN, PXE Boot ROM

## Audio

- Built-in HD Audio Codec with Realtek ALC888

## I/O Interface

- (2) RS232 & (2) RS232/422/485 serial ports
- (2) USB 3.2 Gen2 (rear I/O)
- (4) USB 3.2 Gen1 (rear I/O, internal)
- (8) USB 2.0 ports (pin header, 180D type A)
- (1) 8-bit digital I/O interface
- (1) PS/2 keyboard (internal box header)

## Onboard Expansion

- (1) PCIe x16 slot (signal: x16 or x8)
- (1) PCIe x16 slot (signal: x0 or x8)
- (3) PCIe x4 slots
- (1) PCIe x4 slot with x1 signal
- (1) PCI slot

## Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

## Dimension

- 305mm x 244mm

## Ordering Information

**MBC-6522A2GHP-W480** LGA1200 Socket 10<sup>th</sup> Gen. Intel® Core™ processors & Xeon W, Intel® W480E chipset

**Industrial ATX Motherboard supports Intel® 10th Gen. Core™ and Xeon W series, Intel® W480E/Q470E PCH, USB 3.1, SATA 3.0 with RAID, (2) LAN, VGA/DP++/HDMI, Audio**



## Features

- Supports Intel 10<sup>th</sup> Gen. Core and Xeon W CPU
- (2) Gigabit Ethernet supported
- (4) SATA 3.0 with RAID 0/1/5/10
- Watchdog & Hardware Monitor function
- (1) VGA, (1) DisplayPort and (1) HDMI

## CPU

- LGA1200 socket 10th generation Intel® Core™ i9/i7/i5/i3, Xeon W series, Pentium® & Celeron® processors

## Chipset

- Intel® W480E/Q470E PCH

## System Memory

- (4) 288-pin DIMM dual channel DDR4 2666/2933 max. up 128 GB (ECC for Xeon)

## Display Interface

- Intel® HD Gen. 9 Graphics
- (1) VGA, (1) DisplayPort++ and (1) HDMI

## Storage

- (4) SATA 3.0 with RAID 0,1,5,10
- (1) M.2 2242/2260/2280 M key (PCIe Gen3 x4 NVMe/SATA/Intel® Optane Memory/intel RST)
- (1) M.2 2242/2260/2280 M key (PCIe Gen3 x4 NVMe/Intel® Optane Memory/intel RST )

## Ethernet

- (2) Gigabit LAN with Intel® I211AT and i219LM

## Audio

- Built-in HD Audio Codec with Realtek ALC888

## I/O Interface

- (4) RS232 & (2) RS232/422/485 serial ports
- (4) USB 3.2 Gen.2 and (2) USB 3.2 Gen.1 ports
- (6) USB 2.0 ports
- (1) 8-bit digital I/O interface
- (1) LPC & (1) SMBus

## Onboard Expansion

- (2) PCIe x16 (Gen 3) (1 x16 signal or 2 x8 signals)
- (2) PCIe x4 (Gen 3) & (1) PCIe x1 (Gen 3)

## Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

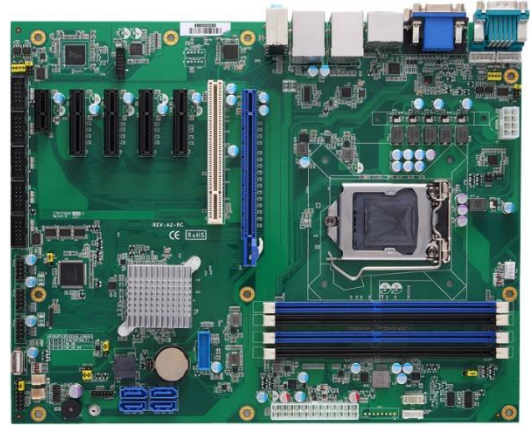
## Dimension

- 305mm x 244mm

## Ordering Information

<b>MBC-6619A2GPR-W480</b>	Intel® Core™ and Xeon W, Intel® W480E PCH, USB 3.2, SATA 3.0, (2) LAN, VGA/DP/HDMI, Audio
<b>MBC-6619A2GPR-Q470</b>	Intel® Core™, Intel® Q470E PCH, USB 3.2, SATA 3.0, (2) LAN, VGA/DP/HDMI, Audio

## Industrial ATX Industrial Motherboard with LGA1151 Socket 8th/9th Gen Intel® Core™ Processors, Intel® Q370/C246, DDR4, USB 3.1, SATA RAID, Dual LANs, VGA/DVI/DisplayPort/HDMI



### Features

- Supports Intel 8<sup>th</sup>/9<sup>th</sup> Gen. Core and Xeon E CPU
- Dual Gigabit Ethernet supported
- (4) SATA-600 with RAID 0, 1, 5, 10
- Watchdog & Hardware Monitor function
- HDMI/DVI/Display Port/VGA multiple outputs

### CPU

- Socket LGA1151 supports Xeon E, 8<sup>th</sup>/9<sup>th</sup> Gen. Intel® Core™ i7/i5/i3, Pentium® or Celeron® processors

### Chipset

- Intel® Q370/C246 PCH

### System Memory

- (4) 288-pin Long-DIMM dual channel DDR4-2666/2400, max. up 128 GB
- C246 with Xeon E supports ECC RAM

### Display Interface

- Intel® HD Graphics
- (1) HDMI, (1) VGA, (1) DVI-D and (1) DisplayPort

### Ethernet

- (2) Gigabit LAN with Intel® i219LM and i211-AT
- supports Wake-on-LAN, PXE Boot ROM

### Audio

- Built-in HD Audio Codec with Realtek ALC662

### I/O Interface

- (4) RS232 & (2) RS232/422/485 serial ports
- (2) USB 3.1 Gen2 (rear I/O)
- (4) USB 3.1 Gen1 (rear I/O, internal)
- (7) USB 2.0 ports (pin header, 180D type A)
- (1) 8-bit digital I/O interface
- (4) SATA-600 with RAID 0, 1, 5, 10
- (1) SMBus

### Onboard Expansion

- (1) PCIe x16 Gen3 slot
- (4) PCIe x4 slots
- (1) PCIe x1 slot
- (1) PCI slot

### Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

### Dimension

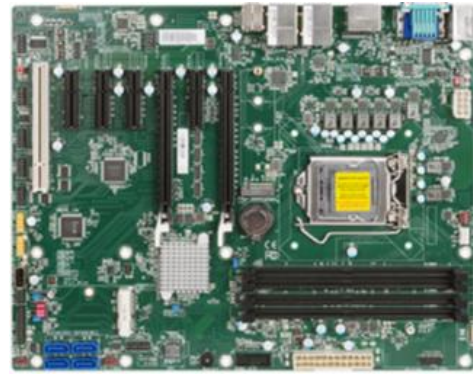
- 305mm x 244mm

### Ordering Information

<b>MBC-6521A2GHP-Q370</b>	LGA1151 Socket 8 <sup>th</sup> /9 <sup>th</sup> Gen. Intel® Core™ processors, Intel® Q370 PCH
<b>MBC-6521A2GHP-C246</b>	LGA1151 Socket Xeon E processors, Intel® C246 PCH



**Industrial ATX Motherboard supports Intel® 9th Gen. Core™ and Xeon E 2200 series, Intel® C246/Q370 PCH, USB 3.1, SATA 3.0 with RAID, (2) LAN, VGA/(2) DP++, Audio**



## Features

- Supports Intel 9<sup>th</sup> Gen. Core and Xeon E CPU
- (2) Gigabit Ethernet supported
- (4) SATA 3.0 with RAID 0/1/5/10
- Watchdog & Hardware Monitor function
- (1) VGA and (2) DisplayPort

## CPU

- LGA1151 socket 9th generation Intel® Core™ i9/i7/i5/i3, Xeon E 2278GE/2226GE, Pentium® & Celeron® processor

## Chipset

- Intel® C246/Q370 PCH

## System Memory

- (4) 288-pin DIMM dual channel DDR4 2400/2666 max. up 128 GB (ECC for Xeon)

## Display Interface

- Intel® HD Gen. 9 Graphics
- (1) VGA, (2) DisplayPort++

## Storage

- (4) SATA 3.0 (1 SATA shared with mini PCIe (SATA), default at mini PCIe) with RAID 0,1,5,10
- (1) M.2 2242/2260/2280 M key (PCIe Gen3 x4 NVMe)

## Ethernet

- (2) Gigabit LAN with Intel® I211AT and i219LM

## Audio

- Built-in HD Audio Codec with Realtek ALC888

## I/O Interface

- (4) RS232 & (2) RS232/422/485 serial ports
- (2) USB 3.1 Gen.2 and (4) USB 3.1 Gen.1 ports
- (6) USB 2.0 ports
- (1) 8-bit digital I/O interface
- (1) LPC & (1) SMBus

## Onboard Expansion

- (2) PCIe x16 (Gen 3) (1 x16 signal or 2 x8 signals)
- (3) PCIe x4 (Gen 3) & (1) PCIe x1 (Gen 3)

## Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

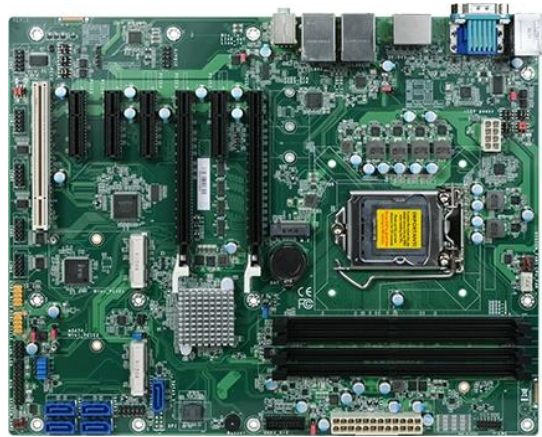
## Dimension

- 305mm x 244mm

## Ordering Information

<b>MBC-6615A2GPR-C246</b>	Intel® Core™ and Xeon E, Intel® C246 PCH, USB 3.1, SATA 3.0, (2) LAN, VGA/DP, Audio
<b>MBC-6615A2GPR-Q370</b>	Intel® Core™, Intel® Q370 PCH, USB 3.1, SATA 3.0, (2) LAN, VGA/DP, Audio

Industrial ATX Motherboard supports Intel® 8th Gen. Core™ and Xeon E 2100 series, Intel® C246/Q370 PCH, USB 3.1, SATA 3.0 with RAID, (2) LAN, VGA/(2) DP++, Audio



## Features

- Supports Intel 8<sup>th</sup> Gen. Core and Xeon E CPU
- (2) Gigabit Ethernet supported
- (5) SATA 3.0 with RAID 0/1/5/10
- Watchdog & Hardware Monitor function
- (1) VGA and (2) DisplayPort

## CPU

- LGA1151 socket 8th generation Intel® Core™ i7/i5/i3, Xeon E 2124G/2176G, Pentium® & Celeron® processor

## Chipset

- Intel® C246/Q370 PCH

## System Memory

- (4) 288-pin DIMM dual channel DDR4 2400/2666 max. up 64 GB (ECC for Xeon)

## Display Interface

- Intel® HD Gen. 9 Graphics
- (1) VGA, (2) DisplayPort

## Storage

- (5) SATA 3.0 (1 SATA shared with mini PCIe (SATA), default at mini PCIe) with RAID 0,1,5,10
- (1) M.2 2242/2260/2280 M key (PCIe Gen3 x 2 NVMe)

## Ethernet

- (2) Gigabit LAN with Intel® I211AT and i219LM

## Audio

- Built-in HD Audio Codec with Realtek ALC888

## I/O Interface

- (4) RS232 & (2) RS232/422/485 serial ports
- (6) USB 3.1 and (6) USB 2.0 ports
- (1) 8-bit digital I/O interface
- (1) LPC & (1) SMBus

## Onboard Expansion

- (2) PCIe x16 (Gen 3) (1 x16 signal or 2 x8 signals)
- (3) PCIe x4 (Gen 3)
- (1) PCIe x1 (Gen 3)

## Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

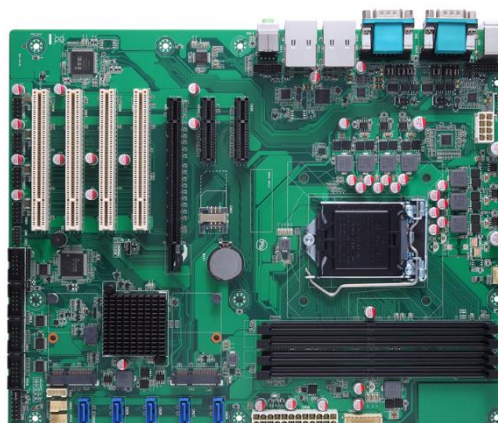
## Dimension

- 305mm x 244mm

## Ordering Information

<b>MBC-6612A2GPR-C246</b>	Intel® Core™ and Xeon E, Intel® C246 PCH, USB 3.1, SATA 3.0, (2) LAN, VGA/DP, Audio
<b>MBC-6612A2GPR-Q370</b>	Intel® Core™, Intel® Q370 PCH, USB 3.1, SATA 3.0, (2) LAN, VGA/DP, Audio

**ATX Industrial Motherboard supports 6th Generation Intel® Core™ i7/i5/i3 Processor, Intel® Q170, DDR4, USB 3.0, SATA 3.0, Dual LANs, VGA/DP/HDMI and mSATA**



## Features

- Supports Intel 6th Gen. Core i3/i5/i7 Processors
- Dual Gigabit Ethernet supported
- (5) SATA-600 with RAID 0, 1, 5, 10
- Watchdog & Hardware Monitor function
- HDMI/Display Port/VGA multiple outputs

## CPU

- LGA1151 socket supports 6th generation Intel® Core™ i7/i5/i3, Pentium® & Celeron®

## Chipset

- Intel® Q170 PCH

## System Memory

- (4) 288-pin DIMM DDR4-2133 up to 64 GB

## Display Interface

- Intel® HD Graphics 530/510
- (1) HDMI, (1)VGA and (1) DisplayPort

## Ethernet

- LAN1 with 10/100/1000 Mbps supports Wake-on-LAN, PXE Boot ROM, iAMT with Intel® i219LM
- LAN2 with 10/100/1000 Mbps supports Wake-on-LAN, PXE Boot ROM with Intel® i210

## Audio

- Built-in HD Audio Codec with Realtek ALC662

## I/O Interface

- (4) RS232 & (2) RS232/422/485 serial ports
- (4) USB 3.0 and (8) USB 2.0 ports
- (1) 8-bit digital I/O interface
- (5) SATA-600 support RAID 0/1/5/10
- (1) mSATA socket
- (1) SMBus

## Onboard Expansion

- (1) PCIe x16
- (2) PCIe x4
- (4) PCI slots
- (1) PCIe Mini Card
- (1) SIM socket

## Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

## Dimension

- 305mm x 244mm

## Ordering Information

MBC-6513A2GPR	LGA1151 Socket 6th Generation Intel® Core™ i7/i5/i3 processors, Intel® Q170 PCH, USB 3.0, SATA 3.0,
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**Industrial Micro-ATX  
Motherboard supports Intel®  
9th Gen. Core™ and Xeon E  
2200 series, Intel®  
C246/Q370 PCH, SATA 3.0  
with RAID, (2) LAN,  
DP++/DVI-D/HDMI, USB3.1,  
Audio**



## Features

- Supports Intel 9<sup>th</sup> Gen. Core and Xeon E CPU
- (2) Gigabit Ethernet supported
- (4) SATA 3.0 with RAID 0/1/5/10
- Watchdog & Hardware Monitor function
- (1) HDMI, (1) DisplayPort and (1) DVI-D

## CPU

- LGA1151 socket 9th generation Intel® Core™ i9/i7/i5/i3, Xeon E 2278GE/2226GE, Pentium® & Celeron® processor

## Chipset

- Intel® C246/Q370 PCH

## System Memory

- (4) 288-pin DIMM dual channel DDR4 2400/2666 max. up 128 GB (ECC for Xeon)

## Display Interface

- Intel® HD Gen. 9 Graphics
- (1) HDMI, (1) DisplayPort and (1) DVI-D

## Storage

- (6) SATA 3.0 with RAID 0,1,5,10
- (1) M.2 2230 E key (PCIe x1/USB2.0/intel CNVi)
- (1) M.2 2242/2260/2280 M key (PCIe Gen3 x 4 NVMe)

## Ethernet

- (2) Gigabit LAN with Intel® I211AT and i219LM

## Audio

- Built-in HD Audio Codec with Realtek ALC888

## I/O Interface

- (2) RS232 & (2) RS232/422/485 serial ports
- (4) USB 3.1 Gen.2 and (2) USB 3.1 Gen.1 ports
- (6) USB 2.0 ports
- (1) 8-bit digital I/O interface
- (1) LPC & (1) SMBus

## Onboard Expansion

- (2) PCIe x16 (Gen 3) (1 x16 signal or 2 x8 signals)

## Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

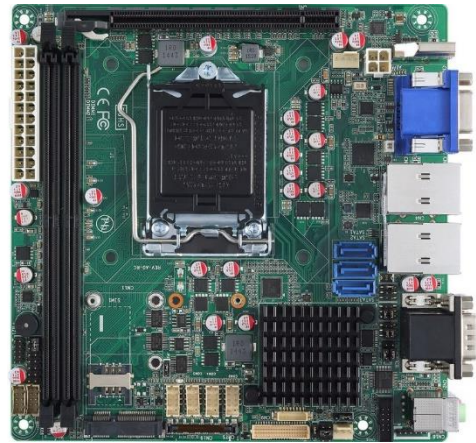
## Dimension

- 244mm x 244mm

## Ordering Information

<b>MBC-6620A2GPR-C246</b>	Intel® Core™ and Xeon E, Intel® C246 PCH, USB 3.1, SATA 3.0, (2) LAN, HDMI/DP/DVI, Audio
<b>MBC-6620A2GPR-Q370</b>	Intel® Core™, Intel® Q370 PCH, USB 3.1, SATA 3.0, (2)

**Industrial Mini-ITX  
Motherboard supports  
LGA1151 Intel® Core™ i7/ i5/  
i3 Intel® H110 PCH, USB 3.0,  
SATA 3.0, Dual LAN,  
DisplayPort/VGA/HDMI**



## Features

- Supports Intel 6<sup>th</sup> Gen. Core i3/i5/i7 Processors
- Dual Gigabit Ethernet supported
- (3) SATA-600 & (1) mSATA
- Watchdog & Hardware Monitor function
- HDMI/Display Port/VGA/LVDS multiple outputs

## CPU

- LGA1151 socket 6<sup>th</sup> generation Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor

## Chipset

- Intel® H110 PCH

## System Memory

- (2) 288-pin Long-DIMM dual channel DDR4-2133, max. up 32 GB

## Display Interface

- Intel® HD Graphics 530/510
- (1) HDMI, (1) VGA and (1) DisplayPort
- (1) LVDS

## Ethernet

- (2) Gigabit LAN with Intel® i219LM and i211AT
- Supports Wake-on-LAN, PXE Boot ROM

## Audio

- Built-in HD Audio Codec

## I/O Interface

- (5) RS232 & (1) RS232/422/485 serial ports
- (4) USB 3.0 and (4) USB 2.0 ports
- (1) 8-bit digital I/O interface
- (3) SATA-600 & (1) mSATA
- (1) SIM slot

## Onboard Expansion

- (1) PCIe x16 Gen3
- (1) PCI Express mini card

## Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

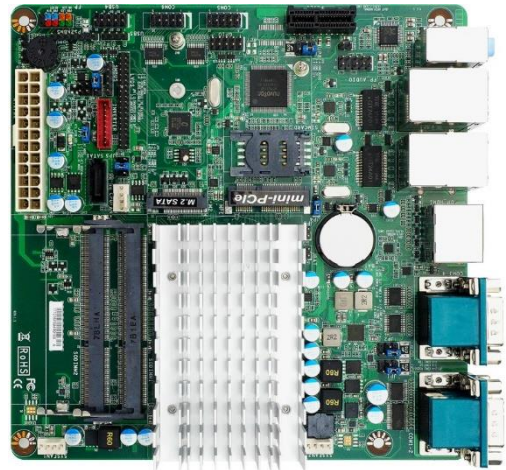
## Dimension

- 170mm x 170mm

## Ordering Information

**MBC-6514A2GPLR** LGA1151 Socket 6<sup>th</sup>  
Generation Intel® Core™ i7/  
i5/ i3 processors, Intel® H110  
PCH, USB 3.0, SATA 3.0, Dual

LGA1155 Socket Intel®  
Core™ i7/ i5/ i3/ Celeron®  
Mini ITX SBC with Intel® Q77  
PCH, HDMI/DVI-I/LVDS, Dual  
LANs and USB 3.0



## Features

- Intel® Apollo Lake processor
- Dual Gigabit Ethernet supported
- (1) SATA3 & (1) M.2 Socket
- Watchdog & Hardware Monitor function
- VGA/LVDS/HDMI multiple outputs

## CPU

- Intel® Pentium® processor N4200 (up to 2.24 GHz) quad core SoC (Apollo Lake)
- Intel® Celeron® Processor N3350 (up to 2.4GHz) Dual Core SoC (Apollo Lake)

## System Memory

- (2) 204-pin SO-DIMM dual channel DDR3L-1866, Max up to 8 GB

## Display Interface

- Intel® HD Graphics
- (1) HDMI 1.4 & (1) LVDS & (1)DP

## Ethernet

- (2) Realtek 8111H Gigabit Ethernet Controllers

## Audio

- HD Audio with Realtek ALC662

## Storage

- (1) SATA3 with 6.0Gb/s
- (1) M.2 Key 2242/2260

## I/O Interface

- (5) RS232 & (1) RS232/422/485 serial ports
- (4) USB 3.0 and (3) USB 2.0 ports
- (1) 8-bit digital I/O interface
- (1) SIM slot, (1) SMBus

## Onboard Expansion

- (1) Full-size PCI Express mini card

## Power Requirement

- Standard ATX power supply

## Environment Spec

- 0 ~ 60°C operation temperature
- Operation humidity under 10% ~ 95%

## Dimension

- 170mm x 170mm

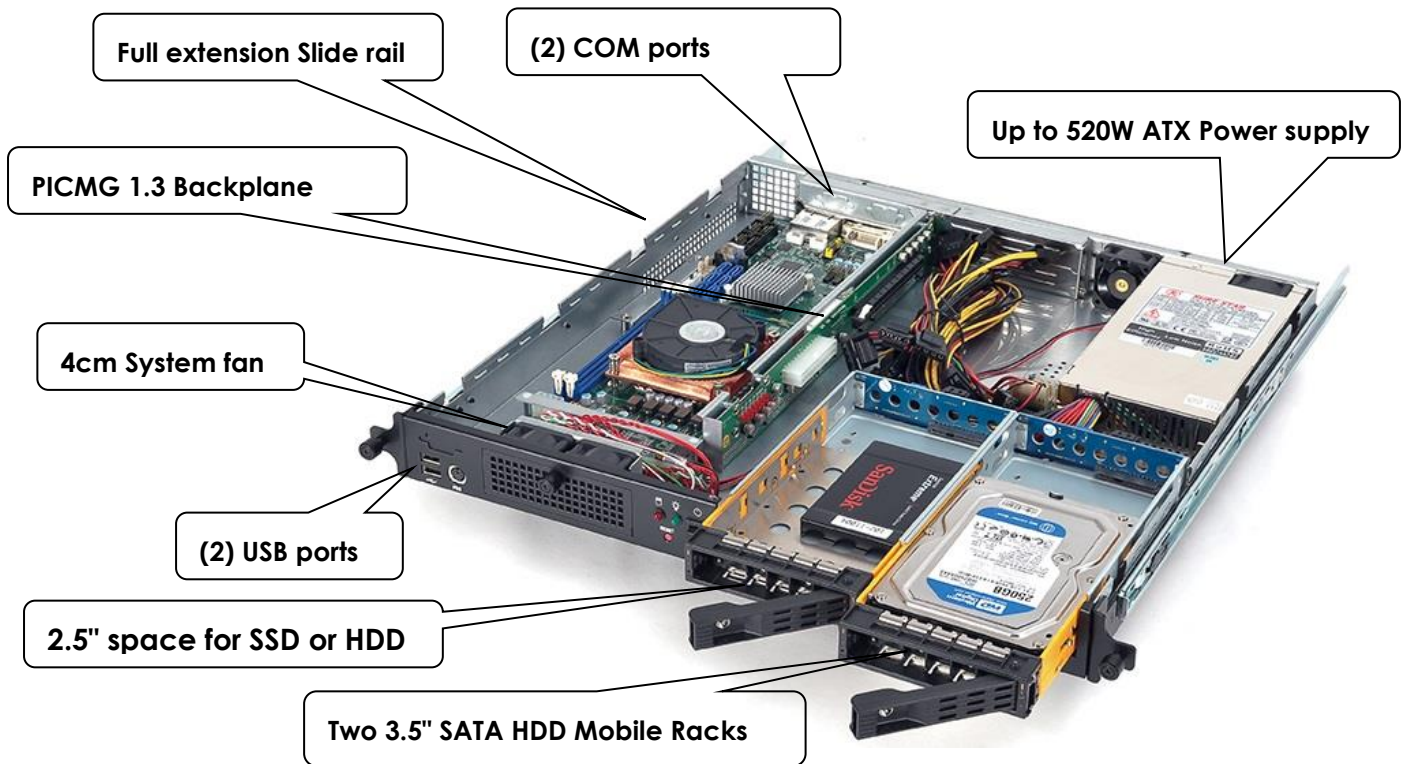
## Ordering Information

<b>MBC-4J03A2GHL-N4200</b>	Intel® Pentium® N4200 mini ITX SBC, HDMI/ LVDS/DP, Dual GbE LAN, SATA3, USB 3.0, PCI, PCI express mini card and HD Audio
<b>MBC-4J03A2GHL-</b>	Onboard Intel® Celeron®

## 1U Ruggedized Industrial Chassis



The Global Choice for Premium Industrial Computer Products



## Introduction

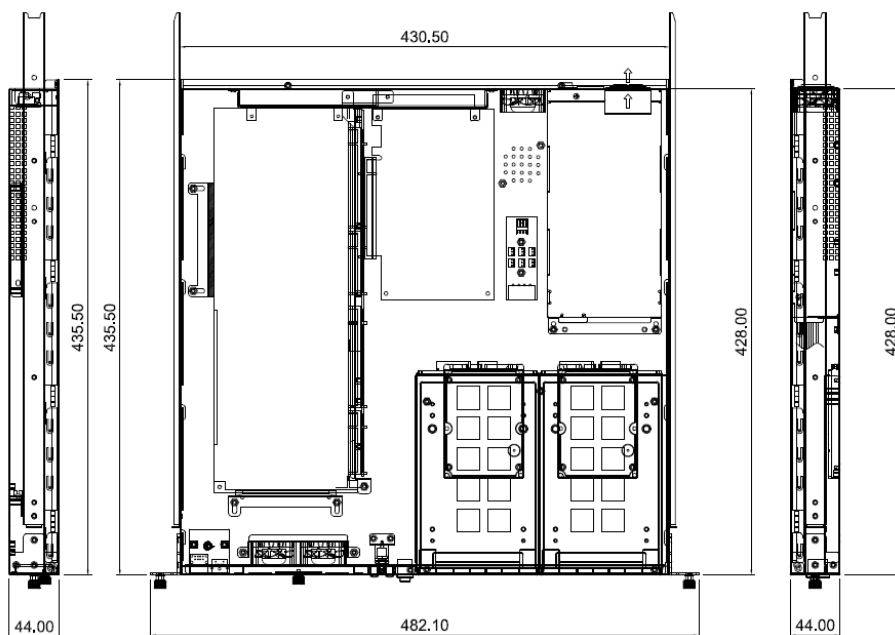
The **RCK-103B2** is an extended version of RCK103BR with a depth of only 435.5mm, it provides an ideal solution for those applications where depth can make or break a project. The chassis is designed to support a PICMG 1.3 Backplane and SBC, the **RCK-103BR2** proves to be a perfect choice for sub-racks and short rack cabinets. The **RCK-103BR2** can support (2) hot swap 3.5"/2.5" and (2) 2.5" SATA drives. Additional I/O expansion can be easily configured through the (1) PCIe or (3) PCI slots on the PICMG backplane. Total of three 4cm ball-bearing fans ensure excellent airflow when faced with a heat sensitive application. The **RCK-103BR2** provides a robust solution to Firewall Server, Proxy Server, and VPN Gateway while still remaining compact.

## Features

- Heavy-duty Steel construction with only 435.5mm in depth
- Supports full-size SCB through PICMG1.3 butterfly backplane
- (2) 3.5"/2.5" SATA mobile racks, (2) int. space for 2.5" HDD/SSD
- (2) USB and (1) PS/2 ports
- RS-232 port on front and rear panel
- (3) 4cm ball-bearing fans with replaceable air filter
- Support up to 520W 1U PSU
- Full extension Slide rail included



## Mechanical Drawing



## Construction

- Heavy duty steel

## Color

- Black

## Board Support

- Single Board Computer

## Drive Bays

- (2) 3.5"/2.5" SATA Mobile racks
- (2) internal space for 2.5" HDD/SSD

## Expansion

- PICMG 1.3 backplane with 1 PCIe x16 slot

## Power Supply

- 300/460/520W ATX Power supply

## Cooling System

- Three 4cm ball-bearing fans

## I/O Port

- (2) USB 2.0 port
- (1) front and (2) rear RS-232 port

## Switches

- On/Off Switch and Reset Switch

## Indicators

- Power On/Off LED and HDD LED

## Dimensions

- 430.5 (W) x 435.5 (D) x 44 (H) mm
- 17 (W) x 17.15 (D) x 1.74 (H) inches

## Operating Temperature

- 0~55 °C

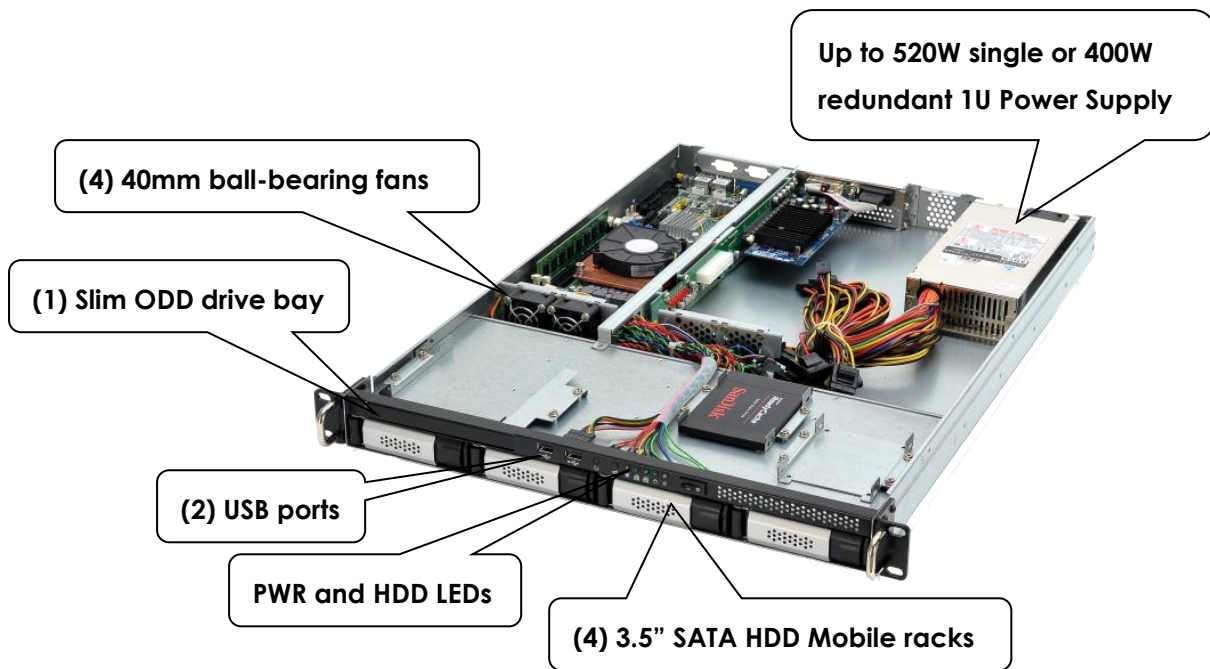
## Gross Weight

- 8.8kg / 19.4lbs

## Ordering Information

<b>RCK-103BR2-201E-BLK</b>	1U chassis for SBC board with BPE-201E backplane
<b>RCK-103BR2-201E-300W-BLK</b>	1U chassis for SBC board with BPE-201E backplane and 300W PSU
<b>RCK-103BR2-201E-460W-BLK</b>	1U chassis for SBC board with BPE-201E backplane and 460W PSU

## RCK-107BR



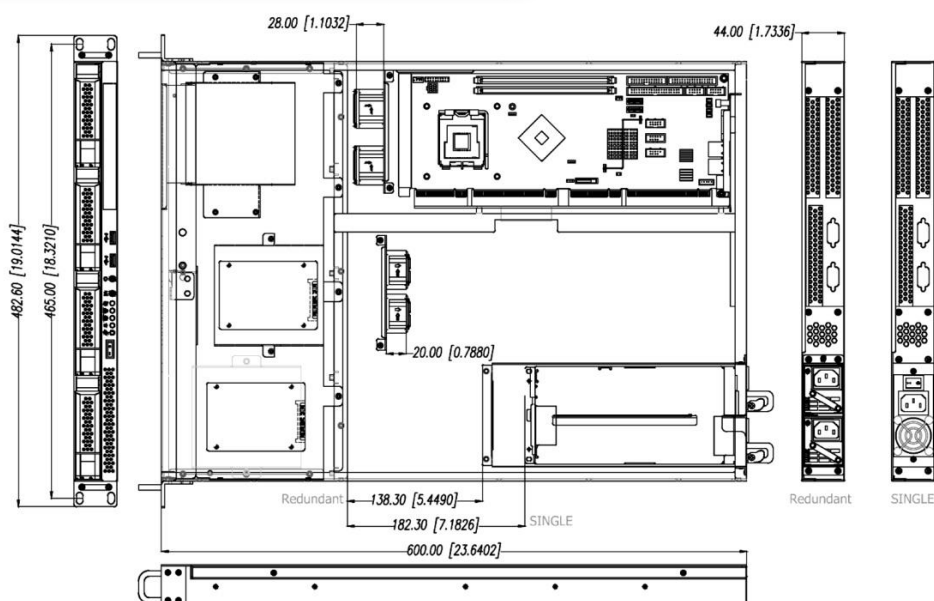
### Introduction

The **RCK-107BR** is a rugged 1U server chassis with a depth of 600mm (23.62"), and 4 HDD mobile racks, providing an ideal solution for critical applications such as Data Center, Storage, Cloud solution. Designed to support a PICMG 1.3 Backplane and SBC board, the RCK-107BR proves to be a perfect choice for Server cabinets. Additional I/O expansion can be easily configured through the PCI3 x16 slot found on the PICMG 1.3 backplane. Total of four 4cm ball-bearing fans ensure excellent airflow when faced with a heat sensitive application. The RCK-107BR provides a robust solution to Firewall Server, Proxy Server, VPN Gateway.

### Features

- Heavy-duty steel construction with 600mm in depth
- Support Full-size SBC through PICMG 1.3 backplane with 1x PCIe x16 slot
- (4) 3.5" SATA HDD mobile racks,
- (1) Slim ODD drive bay
- (2) 2.5" space for SSD or HDD
- (2) USB ports on front panel
- LED indicators
- (4) 40mm ball-bearing fans
- Supports 1U power supply:
  - Up to 520W single PSU, or
  - 400W redundant PSU
- Optional ball-bearing slide rail

## Mechanical Drawing



### Construction

- Heavy duty steel

### Color

- Black front panel with silver color chassis

### Board Support

- Single Board Computer

### Drive Bays

- (4) 3.5" SATA HDD mobile racks
- (1) Slim ODD drive bay
- (2) Space for 2.5" SDD or HDD drives

### Expansion

- Backplane with one PCI slot or PCIe x16 slot

### Power Supply

- Up to 520W single or 400W 1U redundant Power supply

### Cooling System

- Three 4cm ball bearing fans

### Audio

- One 8Ω system buzzer

### Switches

- On/Off Switch and Reset Switch

### Indicators

- Power On/Off LED and HDD LED

### Dimensions

- 432(W) x 600(D) x 44(H) mm
- 17 (W) x 23.62(D) x 1.73 (H) inches

### Operating Temperature

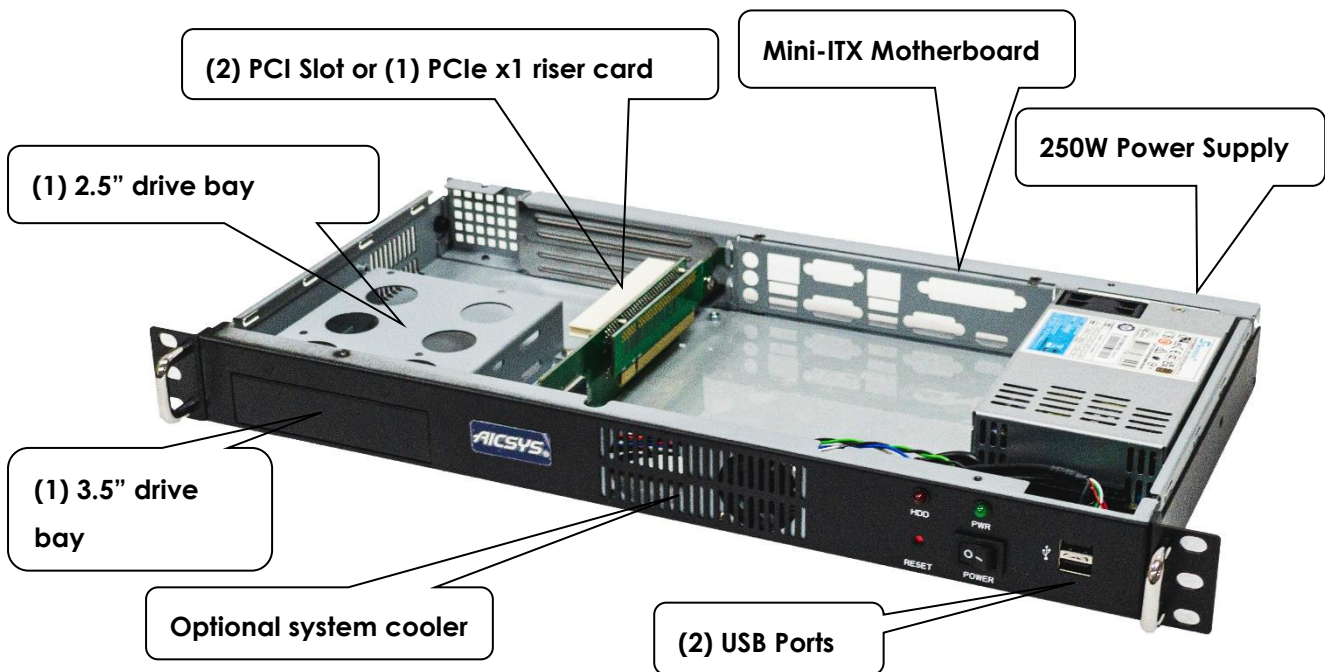
- 0~45 °C

### Gross Weight

- 7.2kg

### Ordering Information

RCK-107BR-201E	1U Server chassis with (1) PICMG 1.3 & (1) PCIe x16 Slots backplane
RCK-107BR-201E-300W	1U Server chassis with PICMG 1.3 backplane and 300W PSU
RCK-107BR-201E-460W	1U Server chassis with PICMG 1.3 backplane and 460W PSU
RCK-107BR-201E-520W	1U Server chassis with PICMG 1.3 backplane and 520W PSU
RCK-107BR-201E-400WR	1U Server chassis with PICMG 1.3 backplane and 400W redundant PSU



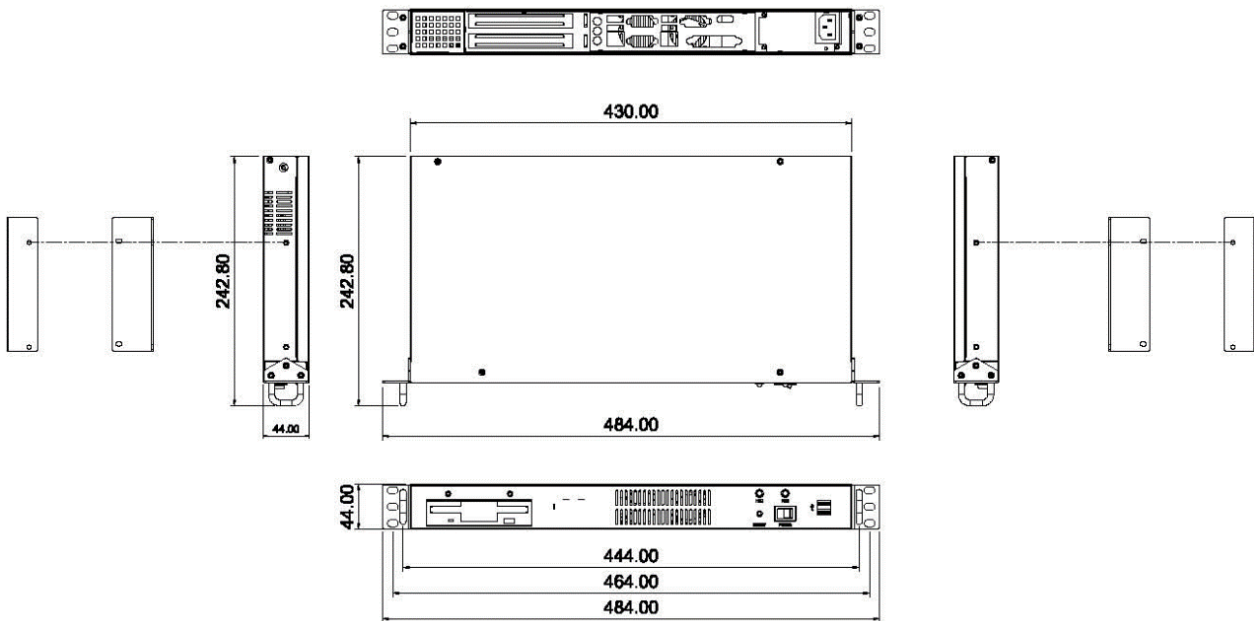
## Introduction

The **NDS-102M2** chassis is ultra compact 1U chassis made of heavy-duty steel with up to 250 watt 1U industrial power supply, designed for standard 19" rack cabinet, supports Mini-ITX motherboard. With its compact size, the chassis still remains up to 2 PCI or 1 PCIe expansions through riser card and supports up to 2 HDD drives. The front panel provides two USB 2.0 ports and one 40mm fans for high performance system. The **NDS-102M2** also provides rackmount kit and wallmount kit; users can change the mounting type for different applications. It is the ideal platform for an almost unlimited variety of applications like servers, digital signage system, Set Top Box, entertainment center or other industrial PC designs.

## Features

- EIA RS-310C 19" Rackmount Standard 1U height
- Heavy-Duty Steel
- Supports Mini-ITX motherboard
- (1) 3.5" and (1) 2.5" Drive bays
- (2) 2.0 USB ports on front panel
- Optional (2) system fans
- Up to 250W PFC Power Supply
- Wallmount and Rackmount kit

## Mechanical Drawing



### Construction

- Heavy Duty Steel

### Color

- Black

### Board Support

- Mini-ITX motherboard

### Drive Bays

- (1) 3.5" and (1) 2.5" Drive bays
- Supports one 3.5" mobile rack with (2) 2.5" HDD

### Expansion

- PCI-201D: Riser card with (2) PCI slot, or
- PCIE-101D-50: Riser card with (1) PCIe x1

### Power Supply

- Up to 250W Flex ATX

### Cooling System

- (1) 4cm fan
- (1) Extra space for additional 4cm fan

### Ports

- (2) USB 2.0 connectors

### Switches

- Power ON/OFF, Safety System Reset

### Indicators

- One power on/off LED and one HDD LED

### Dimensions

- 430 (W) x 221 (D) x 44.2 (H) mm
- 16.9 (W) x 8.7 (D) x 1.74 (H) inches

### Operating Temperature

- 0~55 °C

### Net/Gross Weight

- 2.6Kgs/3.8Kgs

## Ordering Information

**NDS-102M2**

1U chassis for Mini-ITX motherboard with 250W ATX power supply

## 2U Ruggedized Industrial Chassis

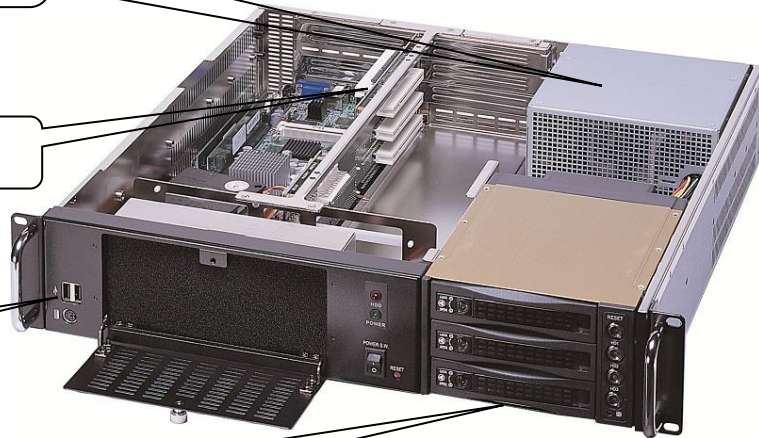


**Single or redundant Power Supply**

**PICMG1.0 /1.3 Backplane**

**(2) USB & PS/2**

**(2) 5.25" bays or (3) HDD mobile rack**



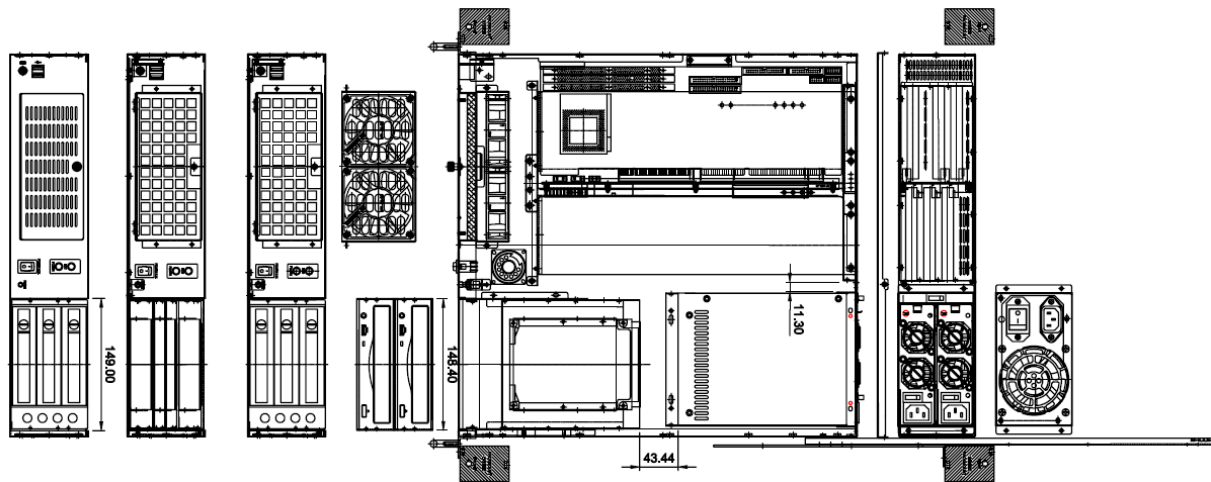
### Introduction

The **RCK-202B** boasts a depth of only 450mm (17"), thus it provides an ideal solution for those applications where depth can make or break a project. Designed to support a PICMG Backplane and Full-Size SBC, the RCK-202B proves to be a perfect choice for any DVR or storage application. The RCK-202B can support up to three drive bays, (2) 5.25" or (3) 3.5" internal drives. Additional I/O expansion can be easily configured through the optional 2 or 4-PCI slots found on the PICMG backplane. Two 8cm ball bearing fans ensure excellent airflow when faced with a heat sensitive application. The **RCK-202B** provides a robust solution to any server application, while still remaining compact.

### Features

- EIA RS-310C 19" Rackmount Standard Heavy Duty Steel with Ni Plating
- Supports Full Size SBC
- Supports Full Length PCI Expansion
- Supports PICMG1.0/1.3 Backplane with optional 2 or 4 PCI slots for expansion
- Supports (2) 5.25" bays or (3) HDD mobile rack
- Slide Rail applicable
- Lockable front door and replaceable air filter
- 2 x 8cm Replaceable High-speed ball bearing fans for better ventilation
- PS/2 or Hot Swap Redundant Power Supply

## Mechanical Drawing



## Construction

- Heavy duty steel with Ni plating

## Color

- Black

## Board Support

- Full Size Single Board Computer

## Drive Bays

- (2) 5.25" bays or (3) HDD mobile rack

## Expansion

- PICMG1.0/1.3 Backplane with optional 2 or 4 PCI slots for expansion

## Power Supply

- 400W/600W PS/2 ATX power supply (80PLUS) or 400W Hot Swap Redundant Power Supply

## Cooling System

- (2) 8 cm ball bearing fans and replaceable air filter

## Switches

- On/Off Switch and Reset Switch

## Indicators

- Power On/Off LED and HDD LED

## Front Panel Connectors

- (2)USB 2.0 ports, and PS/2 connector

## Dimensions

- 434 (W) x 450 (D) x 88 (H) mm
- 17 (W) x 17.7 (D) x 3.5 (H) inches

## Operating Temperature

- 0~55 °C

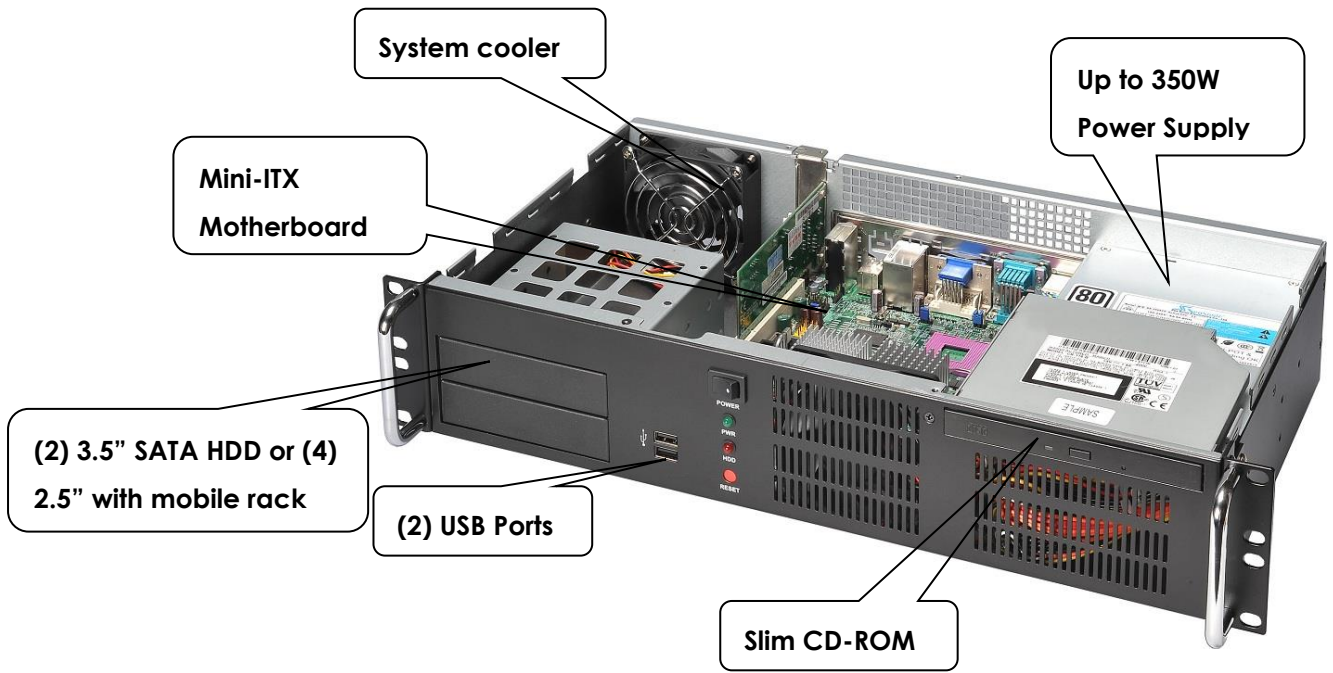
## Net/Gross Weight

- 7.6Kg/11.3kg

## Ordering Information

<b>RCK-202B-0604P-400W</b>	RCK-202B with (4PCI, 2PICMG1.0) butterfly backplane and 400W 80PLUS ATX PS/2 power supply
<b>RCK-202B-0502P-400W</b>	RCK-202B with (2PCI, PICMG1.3) butterfly backplane and 400W 80PLUS ATX PS/2 power supply
<b>MR-K22C3</b>	Mobile Rack with (3) Drive Bays for 3.5" SATA HDD
<b>MT-SR120</b>	Slide Rail





## Introduction

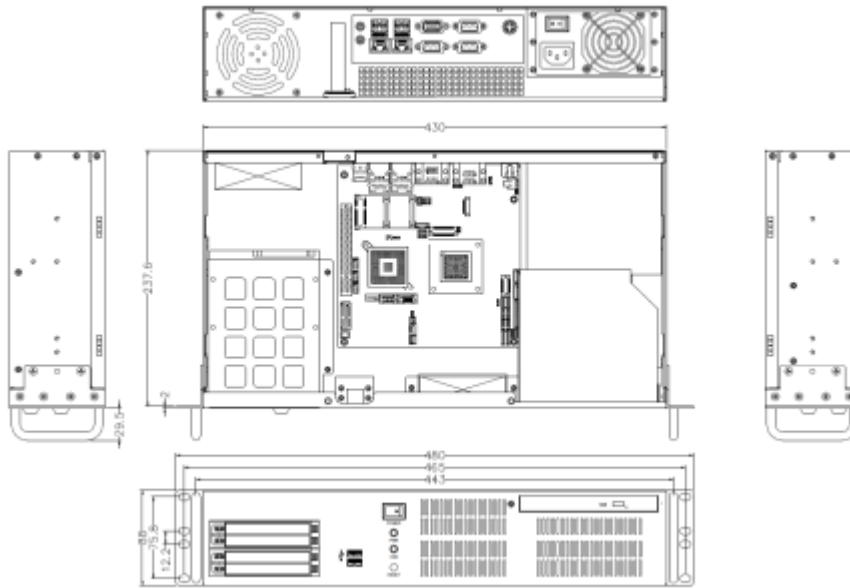
The **NDS-203M** chassis is ultra compact 2U rackmount chassis made of heavy-duty steel with up to 350W power supply, designed for standard 19" rack cabinet, supports Mini-ITX motherboards (17cm x 17cm). With its compact size, the chassis supports (1) slim optical drive and (2) 3.5" SATA HDD. The front panel provides two USB 2.0 ports and optional two system fans for high performance system.

The **NDS-203M** is the ideal platform for an almost unlimited variety of applications like servers, digital signage system, Set Top Box, entertainment center or other industrial PC designs.

## Features

- EIA RS-310C 19" Rackmount Standard 2U height
- Heavy-Duty Steel
- Supports Mini-ITX motherboard
- Supports up to (4) HDD with mobile rack
- (2) 2.0 USB ports on front panel
- Optional (2) system fans

## Mechanical Drawing



### Construction

- Heavy Duty Steel

### Color

- Black

### Board Support

- Mini-ITX motherboard

### Drive Bays

- (2) 3.5" SATA HDD
- Optional (4) 2.5" SATA HDD with mobile rack
- (1) slim optical drive bay

### Power Supply

- Up to 350W micro-ATX power supply

### Cooling System

- Optional (2) System Fans

### Ports

- (2) USB 2.0 connectors

### Switches

- Power ON/OFF, Safety System Reset

### Indicators

- One power on/off LED and one HDD LED

### Expansion Slot

- One low profile expansion slot

### Dimensions

- 430 (W) x 239.6 (D) x 88 (H) mm
- 16.9 (W) x 9.4 (D) x 3.5 (H) inches

### Operating Temperature

- 0~55 °C

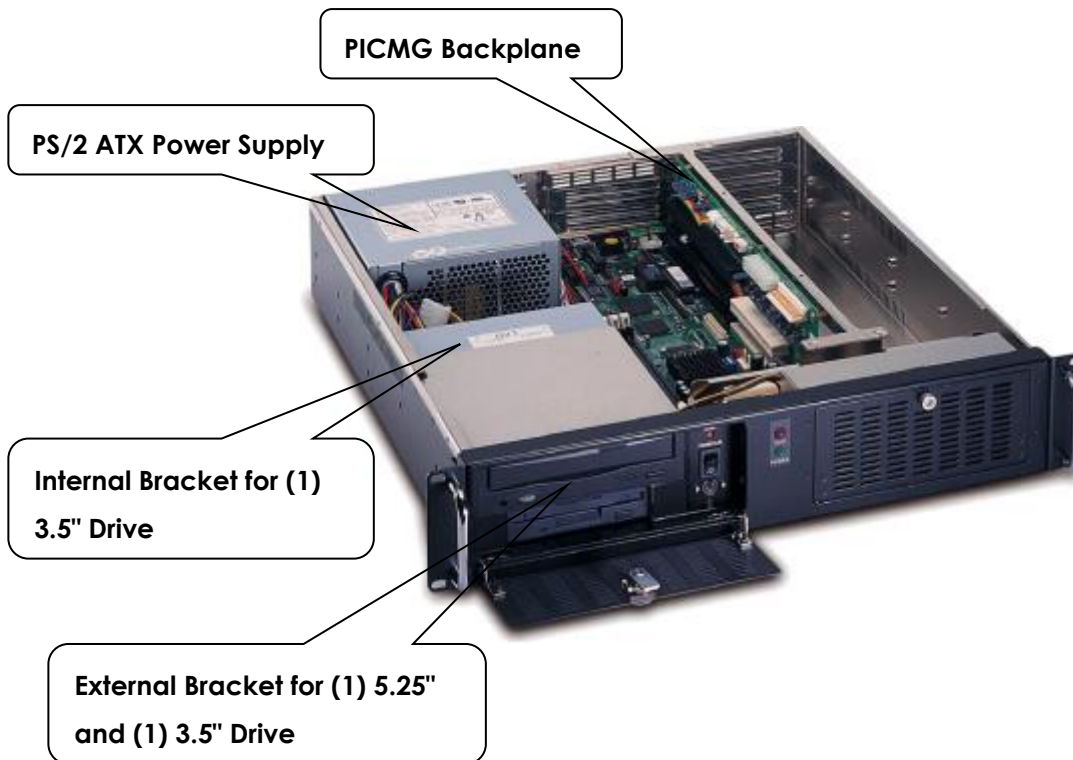
### Gross Weight

- 7kg

### Ordering Information

**NDS-203M-  
300W**

2U chassis for Mini-ITX motherboard with 300W ATX power supply



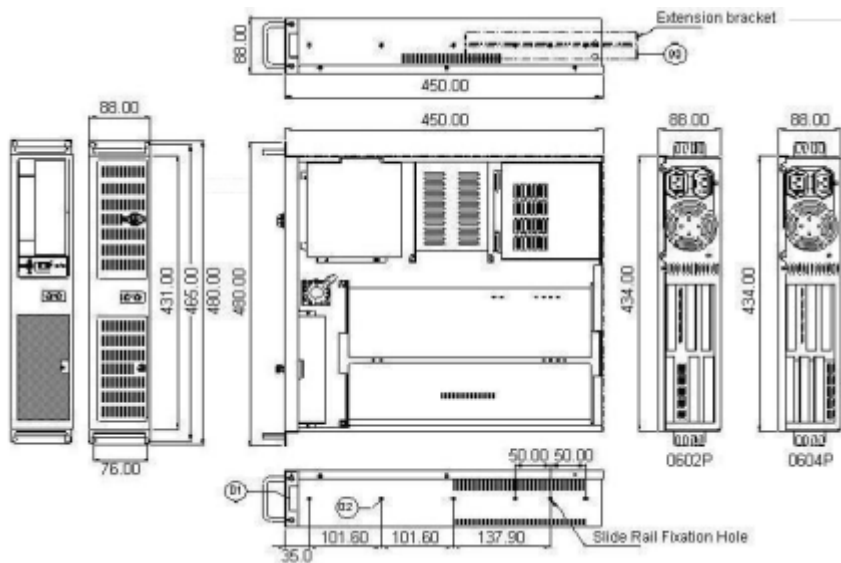
### Introduction

The **RCK-203B** boasts a depth of only 450mm (17"), thus providing an ideal solution for those applications where depth can make or break a project. Designed to support a PICMG Backplane and Full or Half-Size SBC, the RCK-203B proves to be a perfect choice for any ISP or Telecom application. The RCK-203B can support up to three drive bays, (1) 5.25" CD-ROM/DVD-ROM, (1) 3.5" FDD, and (1) "hidden" internal 3.5" bays. Additional I/O expansion can be easily configured through the optional 2 or 4-PCI slots found on the PICMG backplane. Two 8cm ball bearing fans ensure excellent airflow when faced with a heat sensitive application. The **RCK-203B** provides a robust solution to any server application, while still remaining compact.

### Features

- EIA RS-310C 19" Rackmount Standard
- Heavy Duty Steel with Ni Plating
- Supports Full Size SBC
- Supports Full Length PCI Expansion
- Supports PICMG1.0/1.3 Backplane with optional 2 or 4 PCI slots for Expansion
- Slide Rail Applicable
- Lockable Front Door and Replaceable Air Filter
- 2 x 8cm Replaceable High-speed Ball Bearing Fans for Better Ventilation
- 350W/400W ATX Auto-switch Power Supply

## Mechanical Drawing



## Construction

- Heavy duty steel with Ni plating

## Color

- Black/Beige(RAL7035)

## Board Support

- Full Size PIII/PIV Single Board Computer

## Drive Bays

- (1) 5.25" + (1) 3.5" external drives and (1) 3.5" internal drives

## Expansion

- PICMG1.0/1.3 Backplane with optional 2 or 4 PCI slots for Expansion

## Power Supply

- 350W/400W PS/2 ATX power supply (80PLUS optional)

## Cooling System

- (2) 8 cm ball bearing fans and replaceable air filter

## Switches

- On/Off Switch and Reset Switch

## Indicators

- Power On/Off LED and HDD LED

## Dimensions

- 434 (W) x 450 (D) x 88 (H) mm
- 17 (W) x 17.7 (D) x 3.5 (H) inches

## Operating Temperature

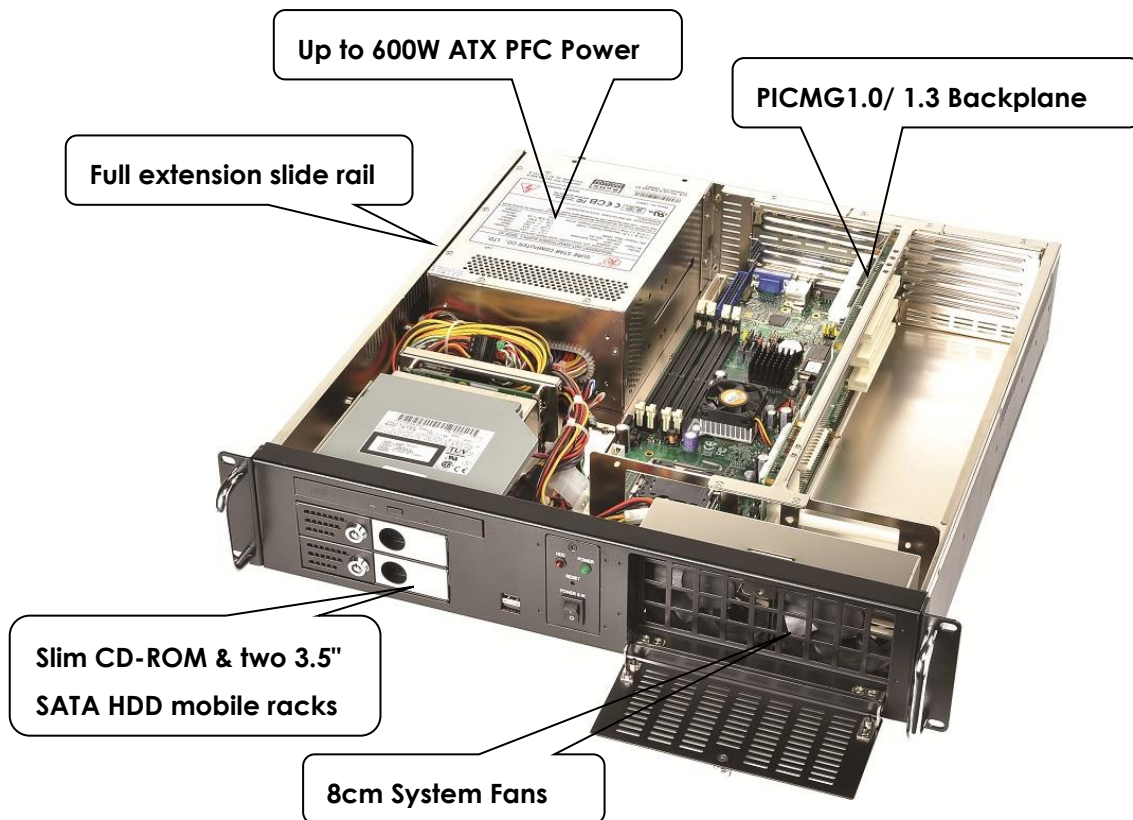
- 0~55 °C

## Net/Gross Weight

- 7.5Kg/10.2kg

## Ordering Information

<b>RCK-203B -0602P-350W</b>	2U chassis RCK-203B with (2 PCI, 2 ISA, 2 PICMG) butterfly backplane and 350W 80PLUS ATX PS/2 power supply
<b>RCK-203B -0604P-400W</b>	2 U chassis RCK-203B with (4 PCI, 2PICMG) butterfly backplane and 400W ATX PS/2 power supply
<b>SR-120</b>	Slide Rail



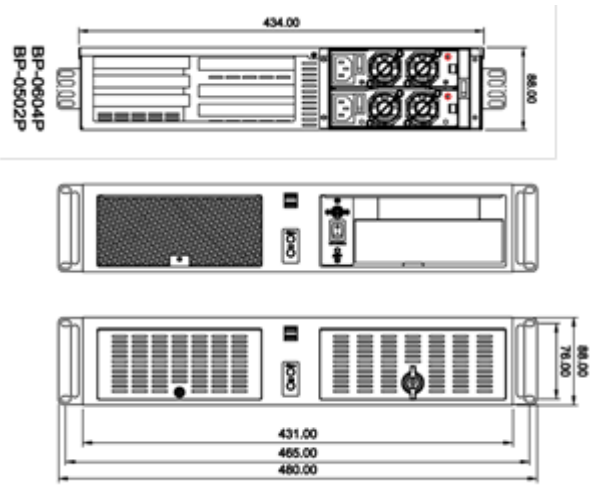
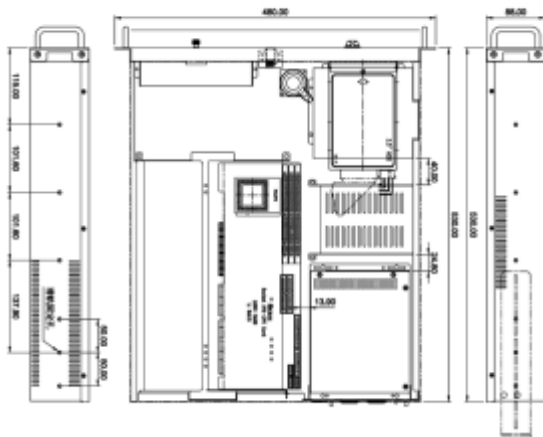
### Introduction

The **RCK-203BR** is a 2U Rackmount chassis with a depth of only 450mm (17 inch). The chassis is designed to support a PICMG 1.0 or 1.3 SBC through a butterfly backplane, and thus is a perfect choice for sub-racks and short rack cabinets. The RCK-203BR can support (1) slim CD-ROM, and (2) 3.5" SATA HDD. Additional I/O expansion can be easily configured through the (4) PCI slots found on the optional PICMG backplane. Two 8cm ball bearing fans ensure excellent airflow when faced with a heat sensitive application. To ensure the 7/24 stable runtime system, the chassis also supports mini redundant power supply. The **RCK-203BR** provides a robust solution to Firewall Server, Proxy Server, VPN

### Features

- Heavy duty steel construction with only 450mm in depth
- Supports Full Size SBC through PICMG1.0/ 1.3 butterfly backplane
- Drive Bays: (1) Slim CD-ROM, (2) 3.5" SATA HDD mobile racks
- USB ports on the front panel
- Two 8cm ball bearing fans to ensure excellent heat dissipation
- Optional up to 600W ATX power supply or mini-redundant power supply included
- Full extension slide rail

## Mechanical Drawing



### Construction

- Heavy duty steel

### Color

- Black, optional other color by order

### Board Support

- Single Board Computer

### Drive Bays

- (1) Slim CD-ROM, (2) 3.5"SATA HDD mobile racks

### Expansion

- PICMG 1.0 backplane with (4) PCI slots
- PICMG 1.3 backplane with (1) PCIe x16, (1) PCIe x4 and (2) PCI slots

### Power Supply

- Up to 600W PS/2 ATX Power Supply (Optional 80PLUS)
- Mini-Redundant Power Supply

### Cooling System

- Two 8cm ball bearing fans

### Switches

- On/Off Switch and Reset Switch

### Indicators

- Power On/Off LED and HDD LED

### Dimensions

- 434 (W) x 450 (D) x 88 (H) mm
- 17 (W) x 17.7 (D) x 3.5 (H) inches

### Operating Temperature

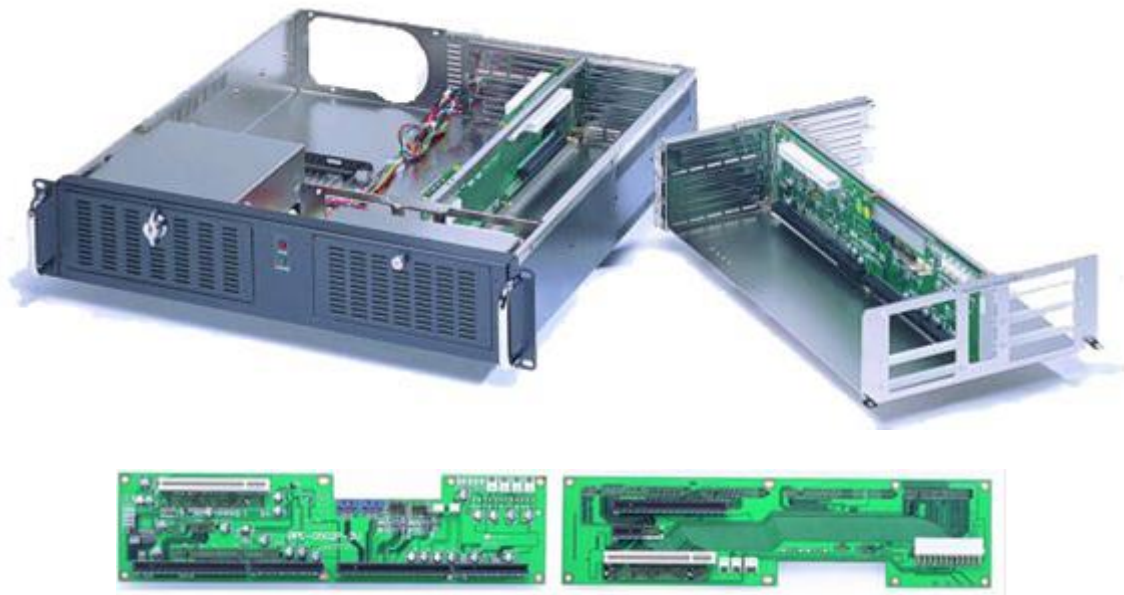
- 0~45 °C

### Net/Gross Weight

- 7.4Kg/10Kg

## Ordering Information

<b>RCK-203BR</b>	2U chassis with (3) drive bay
<b>RCK-203BR -0604P-400W</b>	2U chassis with (1) PICMG & (4) PCI slots backplane and 400W ATX PFC power supply
<b>RCK-203BR -0604P-600W</b>	2U chassis with (1) PICMG & (4) PCI slots backplane and 600W ATX PFC power supply
<b>RCK-203BR -0502P-400W</b>	2U chassis with (1) PICMG1.3 & (1) PCIe x16, (1) PCIe x4 and (2) PCI, 400W ATX PFC power Supply
<b>RCK-203BR</b>	2U chassis with (1) PICMG1.3



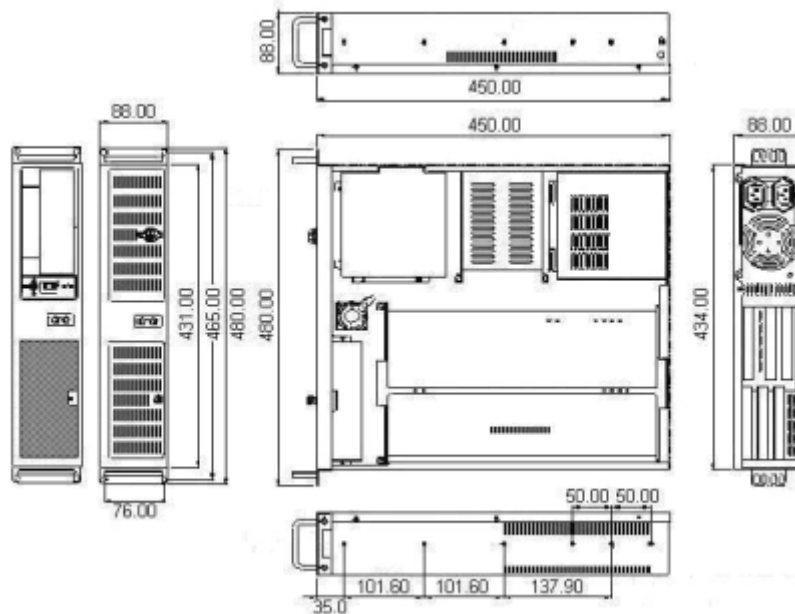
### Introduction

The **RCK-203BE** is the first and only 2U chassis that supports System Host Board (SHB) through 2U PICMG 1.3 butterfly backplane **BPE-0502P**. The backplane also supports (1) PCIe x16 slot, (1) PCIe x4 slot, and (2) PCI 32 bit 5V slots to configure additional expansions. The chassis boasts a depth of only 450mm (17"), thus providing an ideal solution for those applications where depth can make or break a project. The **RCK-203BE** supports up to three drive bays: (1) 5.25" CD/DVD-ROM, (1) 3.5" FDD, and (1) "hidden" internal 3.5" HDD. Two 8cm ball bearing fans ensure excellent airflow when faced with a heat sensitive application. The **RCK-203BE** provides a robust solution to any server application using System Host Board (SHB) while still remaining compact.

### Features

- EIA RS-310C 19" Rackmount Standard
- Heavy Duty Steel with Ni Plating
- 5.25" CD-ROM/DVD-ROM bay, (1) 3.5" FDD bay, and (1) Internal 3.5" HDD bay
- BPE-0502P 2U PICMG 1.3 backplane supports Full Size System Host Board, expandable through (1) PCIe x16 slot, (1) PCIe x4 slot, and (2) PCI 32 bit 5V slots
- Slide Rail Applicable
- Lockable Front Door and Replaceable Air Filter
- 8cm High-speed Ball Bearing Fans for Better Ventilation
- 400W PS2 Auto-switch ATX Power Supply with PFC

## Mechanical Drawing



## Construction

- Heavy duty steel with Ni plating

## Color

- Black/Beige(RAL7035)

## Board Support

- Full Size Single Host Board (SHB)

## Drive Bays

- 5.25", (1) 3.5" external drives, and (1) 3.5" internal drives

## Expansion

- 2U PICMG 1.3 butterfly backplane with (1) PICMG ver. 1.3 RC1.0 SHB slot, (1) PCIe x16 slot, (1) PCIe x4 slot, and (2) PCI slots

## Power Supply

- 400W PS/2 ATX power supply with PFC

## Cooling System

- (2) 8 cm ball bearing fans and replaceable air filter

## Ports

- (1) front panel PS/2 port for keyboard/mouse

## Switches

- On/Off Switch and Reset Switch

## Indicators

- power on/off LED and (1) HDD LED

## Dimensions

- 434 (W) x 450 (D) x 88 (H) mm
- 17.1 (W) x 17.7 (D) x 3.5 (H) inches

## Operating Temperature

- 0~55 °C

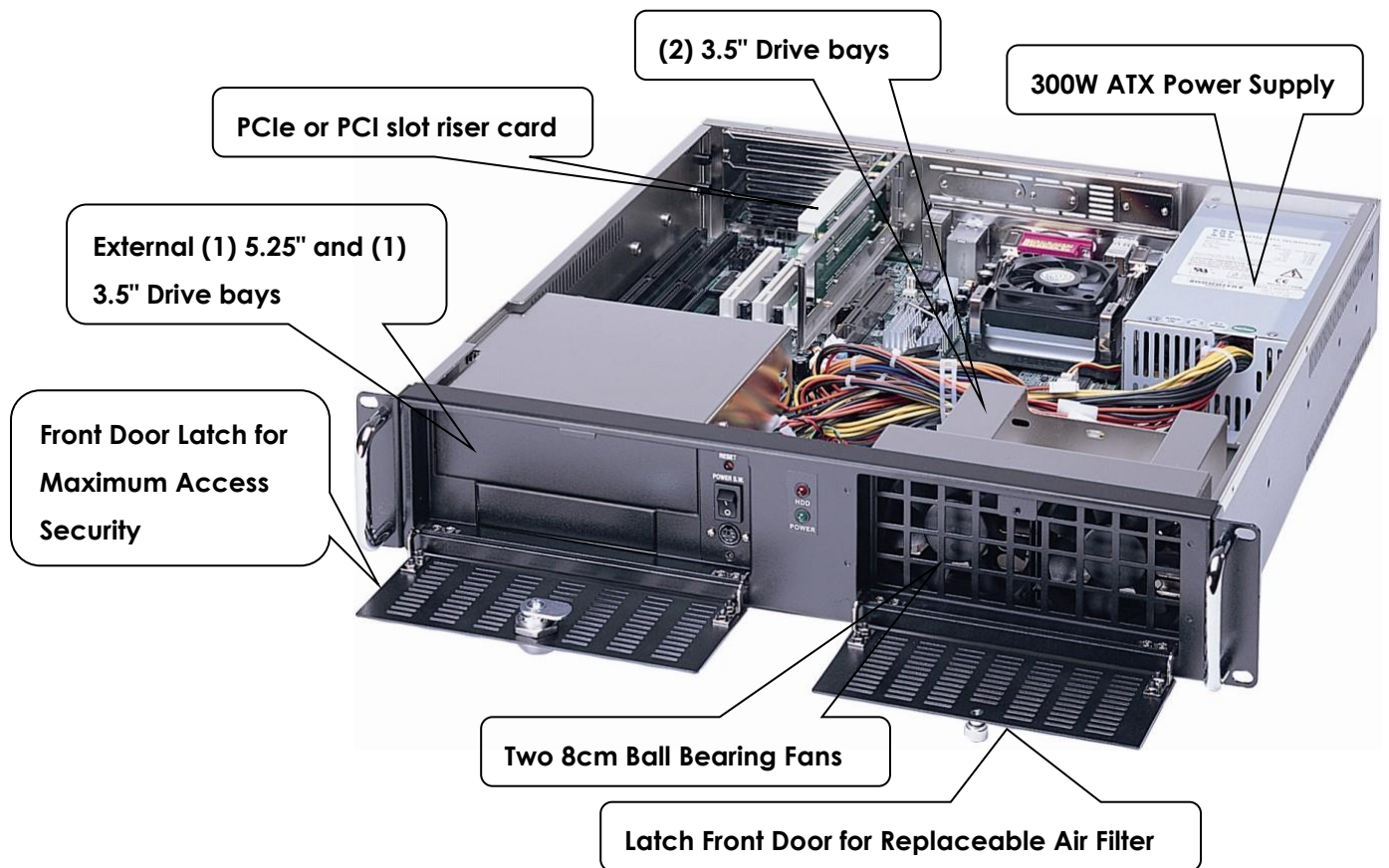
## Gross Weight

- 10.2kg

## Ordering Information

RCK-203BE	RCK-203BE with BPE-0502P
-0502P	backplane
RCK-203BE	RCK-203BE with BPE-0502P
-0502P-400W	backplane and 400W Auto-Switch ATX PS/2 power supply with PFC
SR-120	Slide Rail





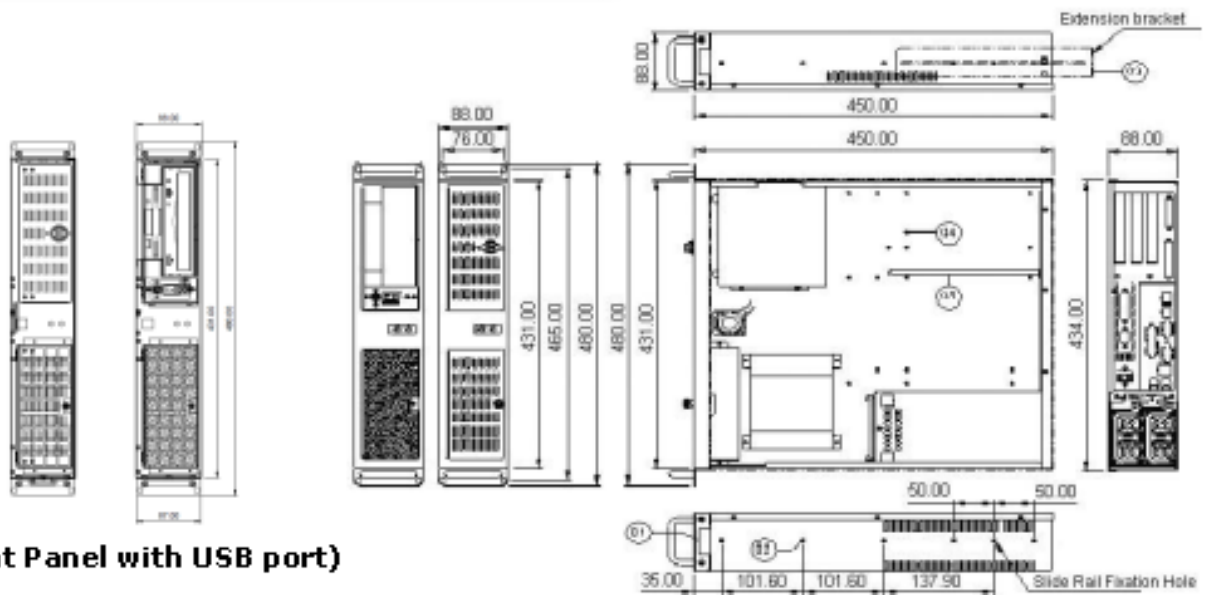
### Introduction

The **RCK-204M** is a 2U Rackmount chassis that boasts a depth of only 450mm (17"), thus providing an ideal solution for those applications where the chassis depth can make or break a project. Equipped to handle ATX motherboards or Dual CPU server boards, the **RCK-204M** proves to be a perfect choice for all ISP or Telecom applications. Exceeding the drive capacity of most 2U chassis, the **RCK-204M** can support up to four drive bays, one 5.25" CD/DVD, (1) 3.5" FDD, and (2) "hidden" internal 3.5" bays. A PCI riser card can be used with up to (3) PCI slots for additional peripherals. Two 8cm ball bearing fans ensure excellent airflow when faced with a heat sensitive application. The **RCK-204M** provides a robust solution to any server application, while still remaining compact.

### Features

- EIA RS-310C 19" Rackmount Standard
- Heavy Duty Steel with Ni Plating
- Supports ATX Motherboard or Dual CPU Server Board
- Slide Rail Applicable
- Lockable Front Door and Replaceable Air Filter
- Front Access to PS/2 Keyboard Connector
- (2) 8cm Replaceable High-speed Ball Bearing Fans for Better Ventilation
- **300W** ATX Auto-switch Power Supply

## Mechanical Drawing



(Front Panel with USB port)

### Construction

- Heavy duty steel with Ni plating

### Color

- Black/Beige(RAL7035)

### Board Support

- ATX Motherboard (12"x9")

### Drive Bays

- (1) 5.25" + (1) 3.5" external drives and (2) 3.5" internal drives

### Expansion

- (3) 32-bit PCI slot through riser card  
Or (2) 32-bit PCI slot + (1) PCIe x16 slot

### Power Supply

- 2U 300W ATX PFC power supply

### Cooling System

- (2) 8 cm ball bearing fans and replaceable air filter

### Ports

- One front panel PS/2 connector for keyboard/mouse
- Optional USB ports on front panel

### Switches

- On/Off Switch and Reset Switch

### Indicators

- power on/off LED and (1) HDD LED

### Dimensions

- 434 (W) x 450 (D) x 88 (H) mm
- 17.1 (W) x 17.7 (D) x 3.5 (H) inches

### Operating Temperature

- 0~55 °C

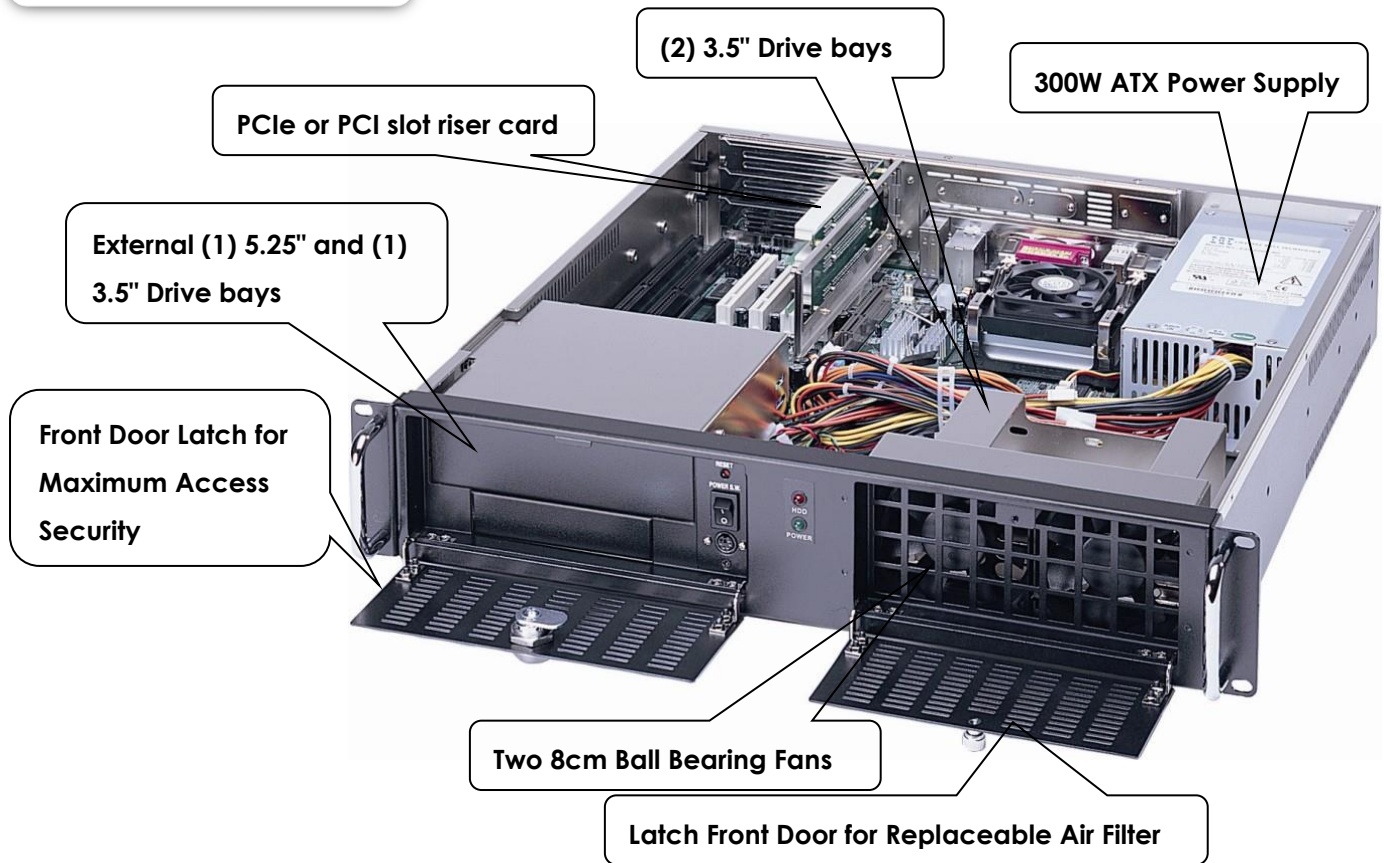
### Gross Weight

- 9.4kg

### Ordering Information

<b>RCK-204M</b>	2U chassis with (3) PCI riser card (for MBC-4601 only) and 300W ATX PFC power supply
<b>-PCI303-300W</b>	
<b>RCK-204M</b>	RCK-204M with 2U 300W ATX PFC power supply & PCIE-303 riser card (for MBC-4601 only)
<b>-PCIE303-300W</b>	
<b>MT-SR120</b>	Optional Slide Rails

## RCK-204M2



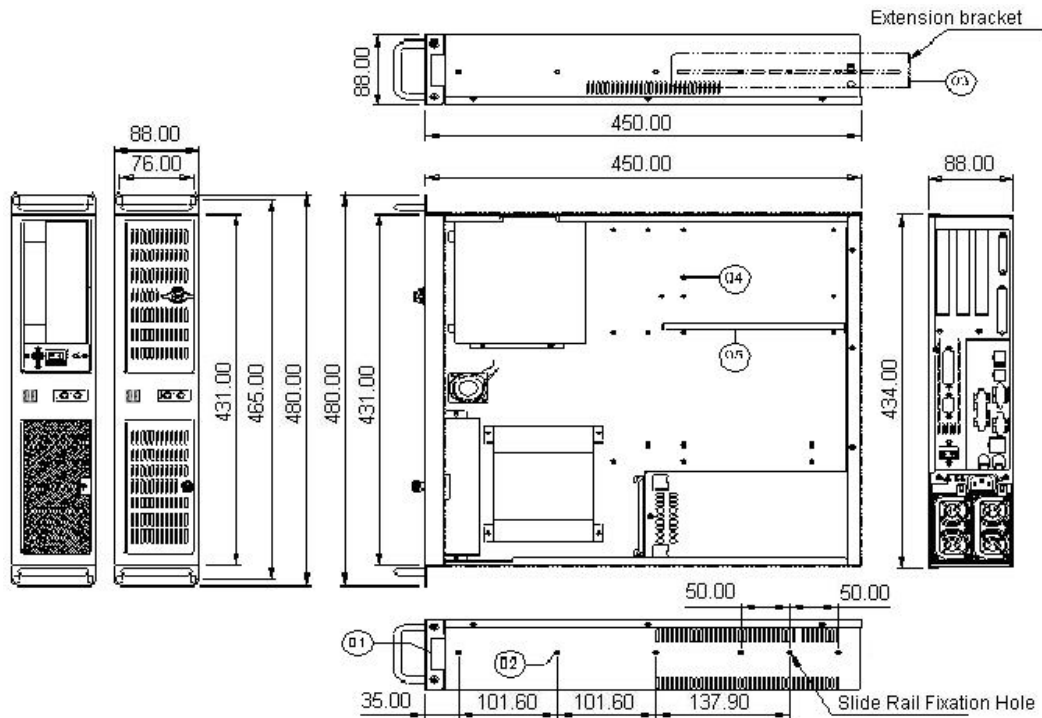
### Introduction

The **RCK-204M2** is a 2U Rackmount chassis that boasts a depth of only 450mm (17"), thus providing an ideal solution for those applications where the chassis depth can make or break a project. Equipped to handle ATX motherboards or Dual CPU server boards, the **RCK-204M2** proves to be a perfect choice for all ISP or Telecom applications. Exceeding the drive capacity of most 2U chassis, the **RCK-204M2** can support up to four Drive bays – (1) 5.25" & (1) 3.5" ext. Drive bays, and (2) int. 3.5" Drive bays. A PCI riser card can be used with up to (3) PCI slots for additional peripherals. Two 8cm ball-bearing fans ensure excellent airflow when faced with a heat sensitive application. The **RCK-204M2** provides a robust solution to any server application, while still remaining compact.

### Features

- EIA RS-310C 19" Rackmount Standard
- Heavy-duty Steel with Ni plating
- Supports ATX Motherboard
- Lockable Front Door for Maximum Access Security and Replaceable Air Filter
- (1) PS/2 connector on front panel
- (2) USB ports on front panel
- (2) 8cm Ball-bearing Fans
- Up to 2U 400W Single or 2U 380W Redundant Power supply
- Optional 18-inch Slide rail

## Mechanical Drawing



### Construction

- Heavy-duty Steel with Ni plating

### Color

- Black

### Board Support

- ATX Motherboard

### Drive Bays

- (1) 5.25" & (1) 3.5" external Drive bays, and (2) 3.5" internal Drive bays

### Expansion

- (3) 32-bit PCI slot through riser card, or  
 (2) 32-bit PCI slot + (1) PCIe x16 slot

### Power Supply

- 2U ~ 500W Single/ ~380W Redundant PSU

### Cooling System

- (2) 8cm Fans and Replaceable air filter

### Ports

- (1) PS/2 connector on front panel
- (2) USB port on front panel

### Switches

- On/Off Switch and Reset Switch

### Indicators

- Power On/Off LED and (1) HDD LED

### Dimensions (W x D x H)

- 434 x 450 x 88 mm
- 17.1 x 17.7 x 3.47 inches

### Operating Temperature

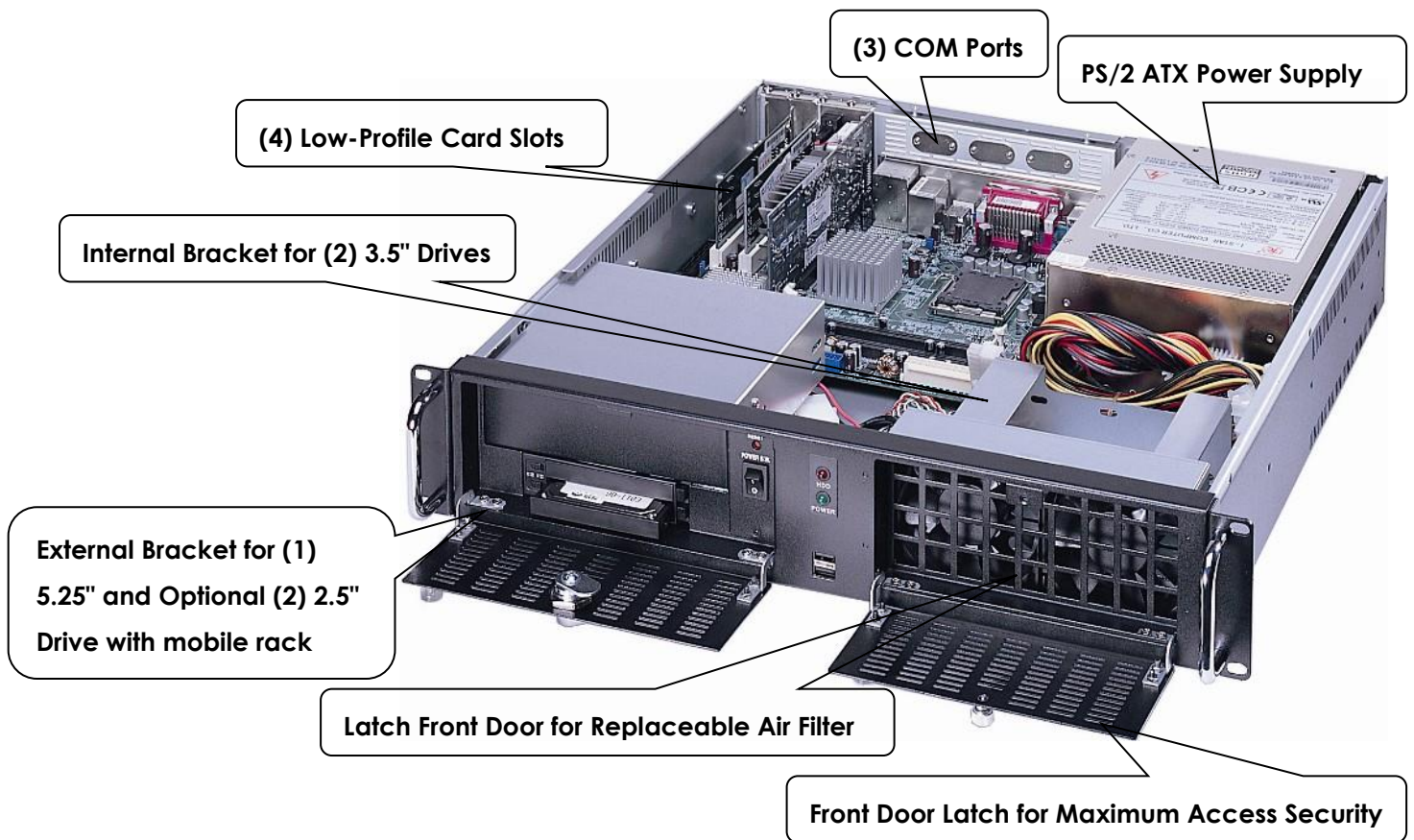
- 0~55 °C

### Gross Weight

- 9.4kgs

### Ordering Information

<b>RCK-204M2-PCI303-400W</b>	2U chassis with 3 PCI riser card 32bit and 400W PSU
<b>RCK-204M2-PCI303-380WR</b>	2U chassis with 3 PCI riser card 32bit and 380W Redundant PSU
<b>RCK-204M2-PCIE303-400W</b>	2U chassis with PCIE-303 riser card 32bit and 400W PSU
<b>RCK-204M2-PCIE303-380WR</b>	2U chassis w/ PCIE-303 riser card 32bit and 380W Redundant PSU
<b>MT-SR120</b>	Optional 18" Slide rail



## Introduction

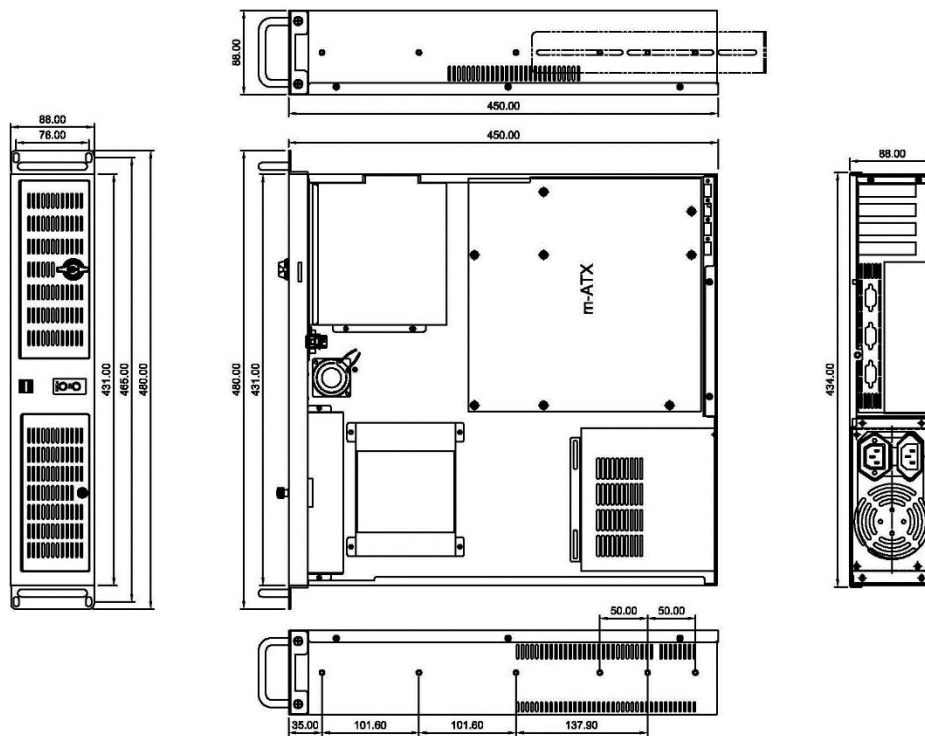
The **RCK-204MR** is a 2U Rackmount chassis which is designed with a depth of 450mm (17") only, thus providing an ideal solution for those applications where the chassis depth can make or break a project. The **RCK-204MR** can fit a PS2 size power supply which is much cheaper compared to the ordinary 2U power supply. As such user can have more flexibility in choosing the power supply for this chassis. The chassis can be integrated with micro ATX motherboards or mini-ITX boards

Exceeding the drive capacity of most 2U chassis, the **RCK-204MR** can support up to (5) drive bay, (4) low-profile PCI slots for additional peripherals. Two 8cm ball bearing fans ensure excellent airflow when faced with a heat sensitive application.

## Features

- EIA RS-310C 19" Rackmount Standard
- Heavy Duty Steel with Ni Plating
- Supports mATX/uATX/Mini-ITX motherboard
- Supports External (2) 2.5" HDD with mobile rack
- Lockable Front Door and Replaceable Air Filter
- Front Access to PS/2 Keyboard Connector
- (2) 8cm Replaceable High-speed Ball Bearing Fans for Better Ventilation
- PS/2 Auto-switch Power Supply

## Mechanical Drawing



### Construction

- Heavy duty steel with Ni plating

### Color

- Black/Beige

### Board Support

- mTAX/uATX/Mini-ITX motherboard

### Drive Bays

- External (1) 5.25" + (2) 2.5" with mobile rack
- (2) 3.5" internal drives

### Expansion

- (4) Low-Profile Card Slots

### Power Supply

- 350W/400W PS/2 Type power Supply (80PLUS & PFC optional), or PS/2 Type Hot Swap Redundant Power Supply

### Cooling System

- (2) 8 cm ball bearing fans and replaceable air filter

### Ports

- (2) USB ports on front panel

### Switches

- On/Off Switch and Reset Switch

### Indicators

- power on/off LED and (1) HDD LED

### Dimensions

- 434 (W) x 450 (D) x 88 (H) mm
- 17.1 (W) x 17.7 (D) x 3.5 (H) inches

### Operating Temperature

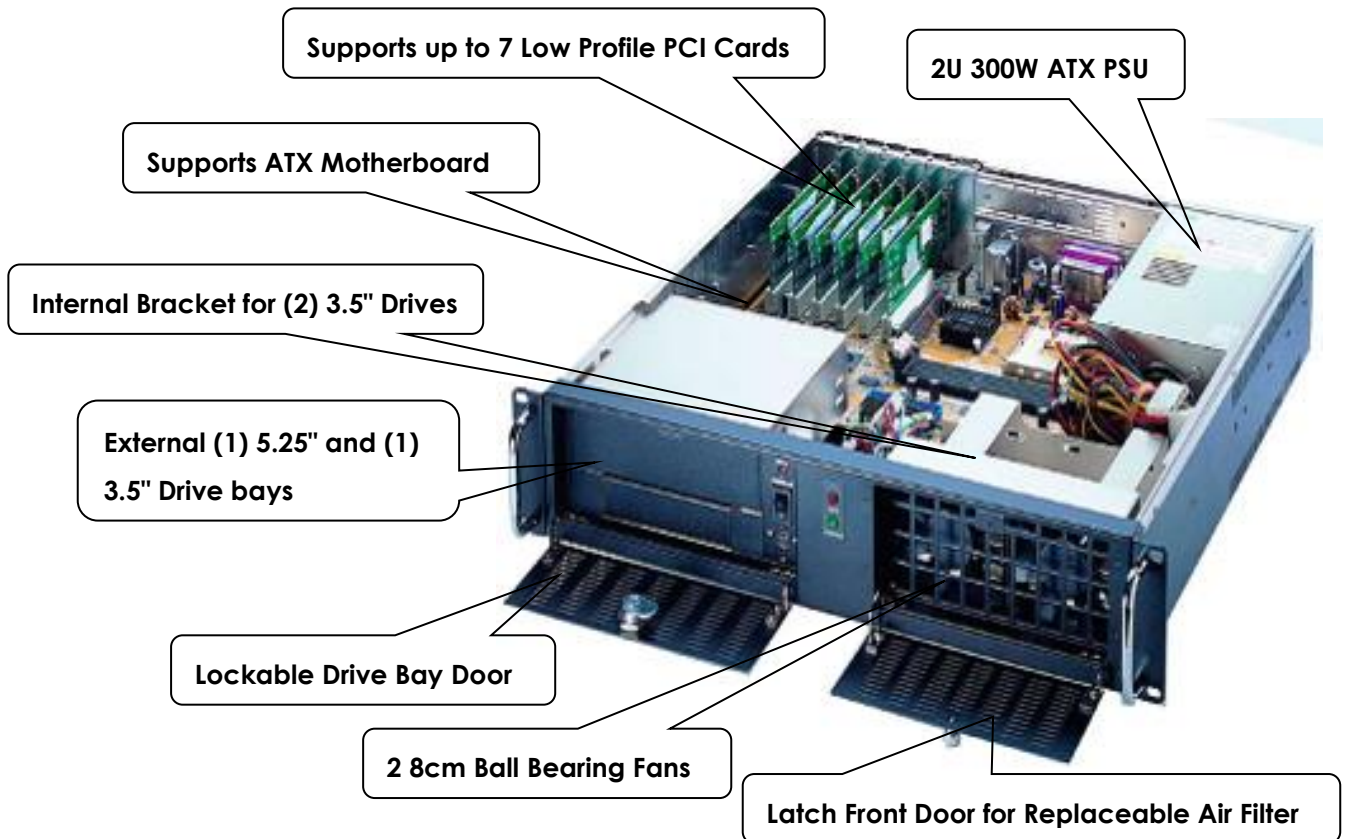
- 0~55 °C

### Gross Weight

- 9.4kg

### Ordering Information

<b>RCK-204MR-350W</b>	2U chassis supports up to (4) low profile add-on cards and 350W ATX power supply (80 PLUS)
<b>RCK-204MR-400W</b>	2U chassis supports up to (4) low profile add-on cards and 400W ATX power supply
<b>RCK-204MR-400WR</b>	2U chassis supports up to (4) low profile add-on cards and 400W Hot Swap Redundant Power Supply



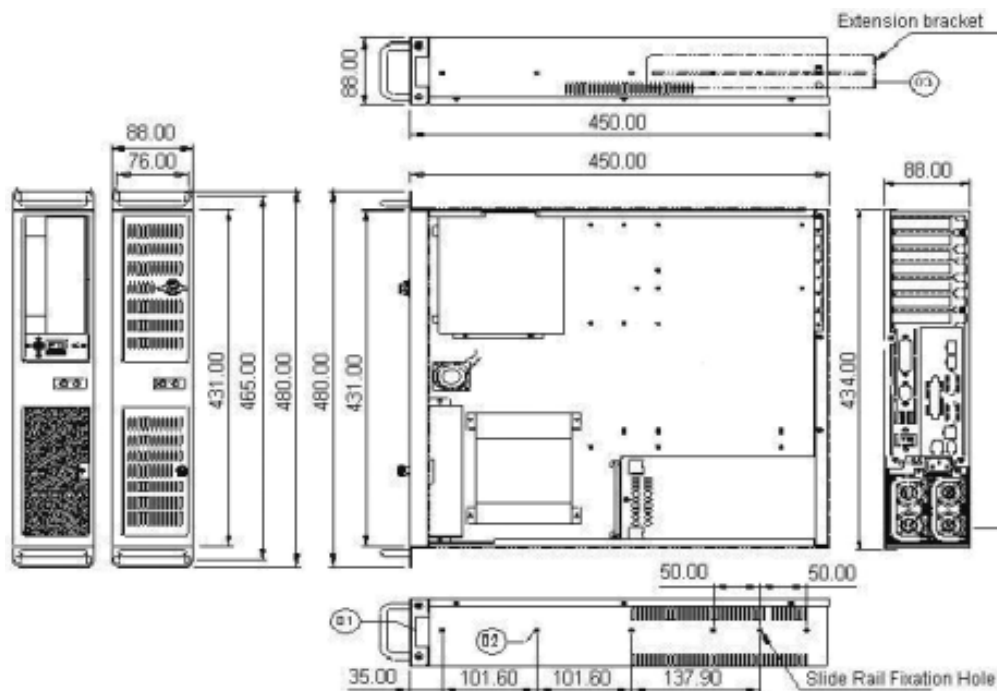
## Introduction

The **RCK-204ML** is designed for those who want to utilize the maximum number of slots on their motherboard whilst in the same time keeping the minimum height and size of the chassis. Just like **RCK-204M**, **RCK-204ML** also measuring a depth of only 450mm (17"). Equipped to handle ATX motherboards or Dual CPU server boards and up to 7 pieces of low-profile add-on cards that compliant to the standard set by PCI SIG group, the **RCK-204ML** proves to be a perfect choice for all ISP or Telecom applications. Exceeding the drive capacity of most 2U chassis, the **RCK-204ML** can support up to four drive bays, one 5.25"CD/DVD, (1) 3.5" FDD, and (2) "hidden" internal 3.5" bays. Two 8cm ball bearing fans ensure excellent airflow when faced with a heat sensitive application. The **RCK-204ML** provides a robust solution to any server application, while still remaining compact.

## Features

- Heavy Duty Steel with Ni Plating. EIA RS-310C 19" Rackmount Standard only 450mm deep
- Supports ATX Motherboard or Dual CPU Server Board
- Supports up to 7 low-profile add-on cards compliant to PCI SIG standard
- Slide Rail Applicable
- Lockable Front Door and Replaceable Air Filter
- Front Access to PS/2 Keyboard Connector
- 2 x 8cm Replaceable High-speed Ball Bearing Fans for Better Ventilation
- 2U 300W ATX Auto-switch Power Supply

## Mechanical Drawing



## Construction

- Heavy duty steel with Ni plating

## Color

- Black/Beige(RAL7035)

## Board Support

- ATX Motherboard

## Drive Bays

- 5.25" and (1) 3.5" external drives and (2) 3.5" internal drives

## Expansion

- Supports up to (7) Low Profile PCI SIG Cards

## Power Supply

- 2U 300W ATX power supply

## Cooling System

- (2) 8 cm ball bearing fans and replaceable air filter

## Ports

- Front panel PS/2 port for keyboard/mouse

## Switches

- On/Off Switch and Reset Switch

## Indicators

- Power on/off LED and (1) HDD LED

## Dimensions

- 434 (W) x 450(D) x 88(H) mm
- 17.1 (W) x 17.7 (D) x 3.5 (H) inches

## Operating Temperature

- 0~55 °C

## Gross Weight

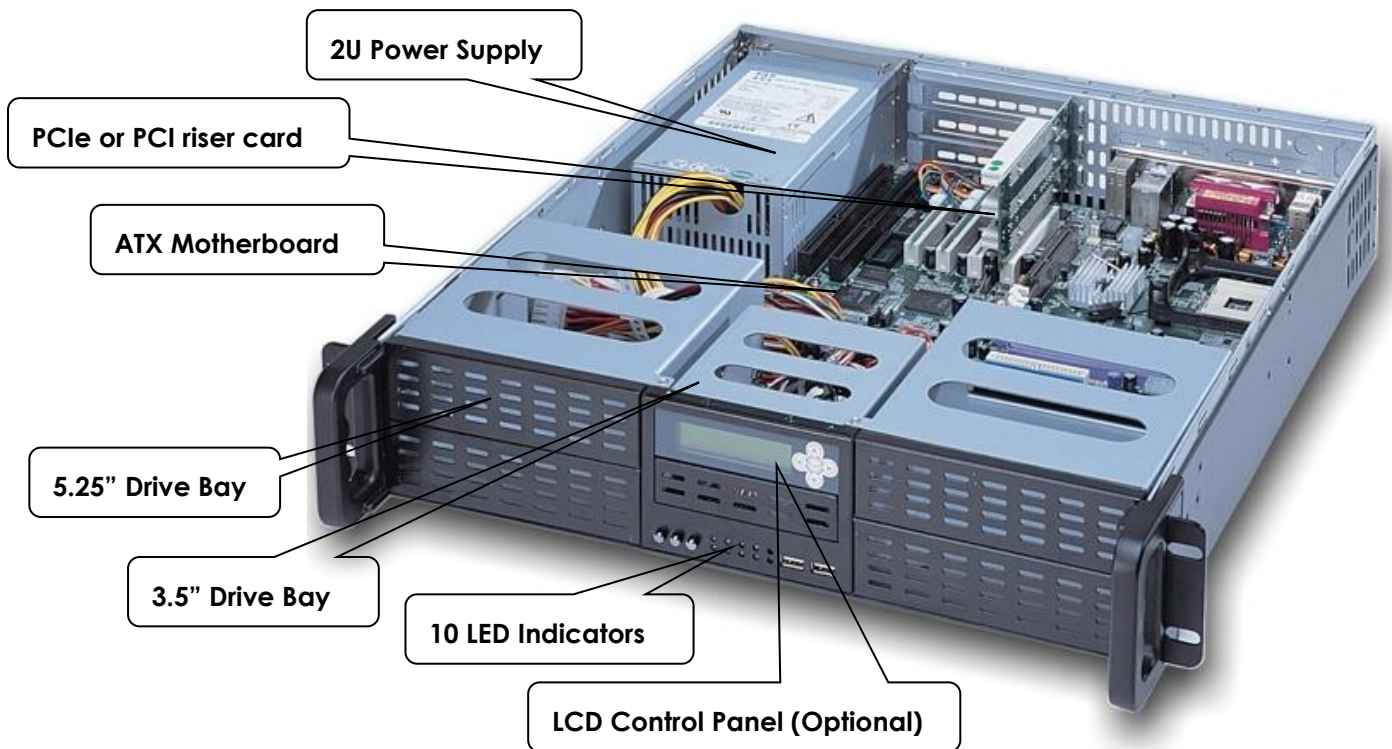
- 9.4kg

## Ordering Information

<b>RCK-204ML-300W</b>	2U chassis supports up to 7 low profile add-on cards and 300W ATX 2U power supply (PFC optional).
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## RCK-206M



### Introduction

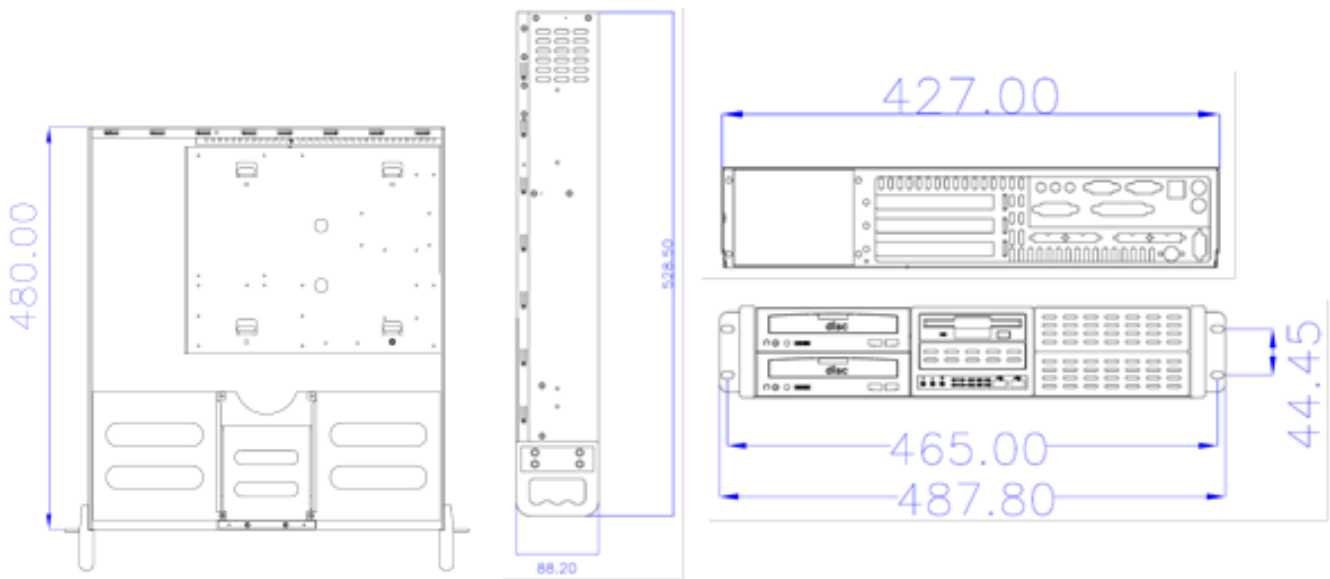
The **RCK-206M** is a new designed 2U chassis for motherboard with high density driver bays. It is constructed of heavy duty steel and supports standard ATX motherboards. Since it is configured for DVR application, it can accommodate two 3.5" Floppy drives and four 5.25" external driver bays.

Besides, **RCK-206M** has a built in "system monitoring boards" to monitor the status of the system. The users can easily trace the status of the system by viewing the LED at the front panel of the chassis.

### Features

- Standard 2U 19" Rackmount chassis
- Heavy duty steel
- 300 Watt 2U power supply with option for 400W Redundant power supply
- Riser card with 3 PCI expansion slots, or one PCIe x16 slot & 2 PCI expansion slots 10 LEDs indicators to monitor the system

## Mechanical Drawing



### Construction

- Heavy duty steel

### Color

- Black

### Board Support

- ATX/ micro-ATX Motherboard

### Drive Bays

- (2) 3.5" and (4) 5.25 external drive bays

### Expansion

- (3) 32-bit PCI slot through riser card
- Or (2) 32-bit PCI slot + (1) PCIe x16 slot

### Power Supply

- 300W ATX power supply or 400W Hot Swap Redundant power supply

### Cooling System

- Built-in (2)Temperature & (8)Fan Detect Board for system environmental monitoring
- Optional 60mm Ball-bearing Fans

### Ports

- Two USB ports on front panel

### Switches

- On/Off Switch and Reset Switch

### Indicators

- Power ON/OFF LED
- (6) HDD Active LED
- (1) Fan Failure LED
- (2)Temperature Sensor LED

### Dimensions

- 427 (W) x 480 (D) x 88.2 (H) mm
- 16.8 (W) x 18.9 (D) x 3.5 (H) inches

### Operating Temperature

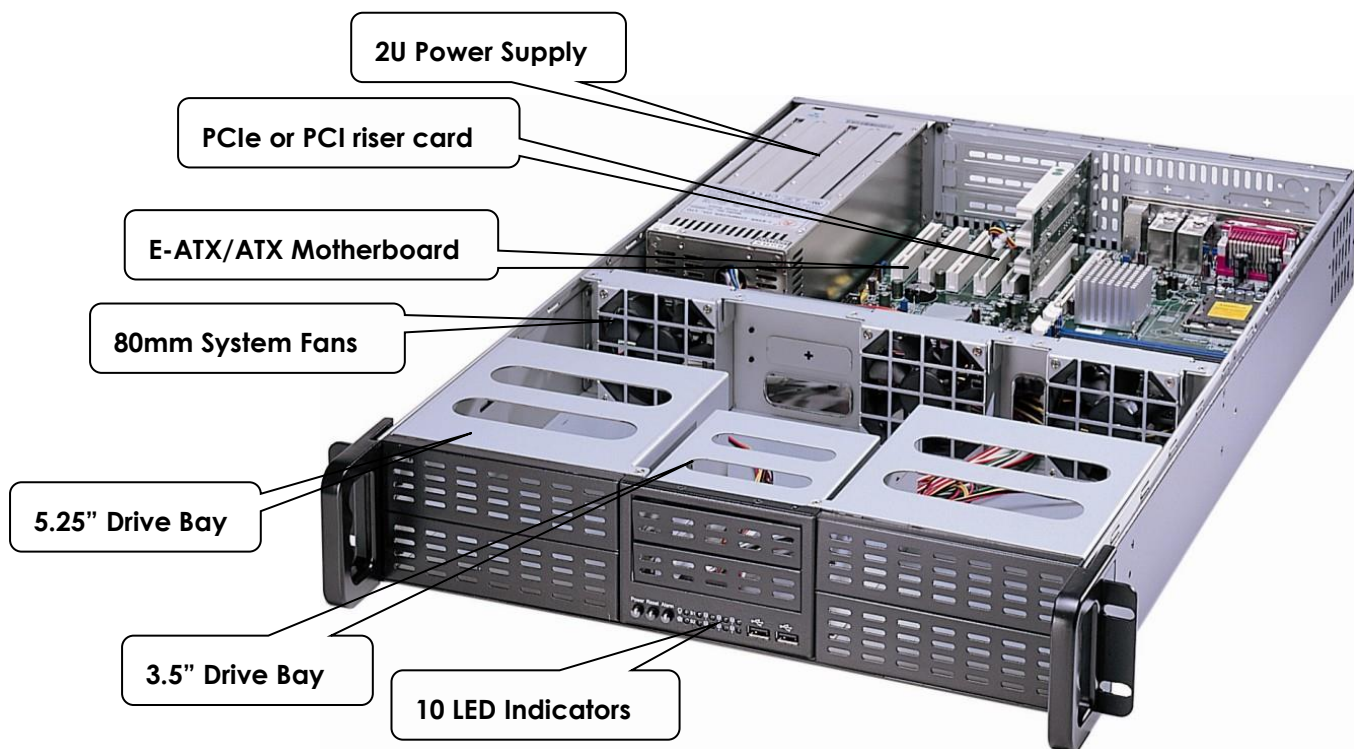
- 0~55 °C

### Gross Weight

- 10.9kg

## Ordering Information

<b>RCK-206M</b>	RCK-206M with 2U 300W ATX PSU & PCI riser card
<b>-PCI303-300W</b>	
<b>RCK-206M</b>	RCK-206M with 2U 300W ATX power supply & PCIe-303 riser card
<b>-PCIE303-300W</b>	
<b>RCK-206M</b>	RCK-206M with 2U 400W ATX Hot Swap Redundant power supply with Active PFC function
<b>-PCI303-400WR</b>	
<b>PCIE-303</b>	Riser card with (2) 32-bit PCI slot + (1) PCIe x16 slot



## Introduction

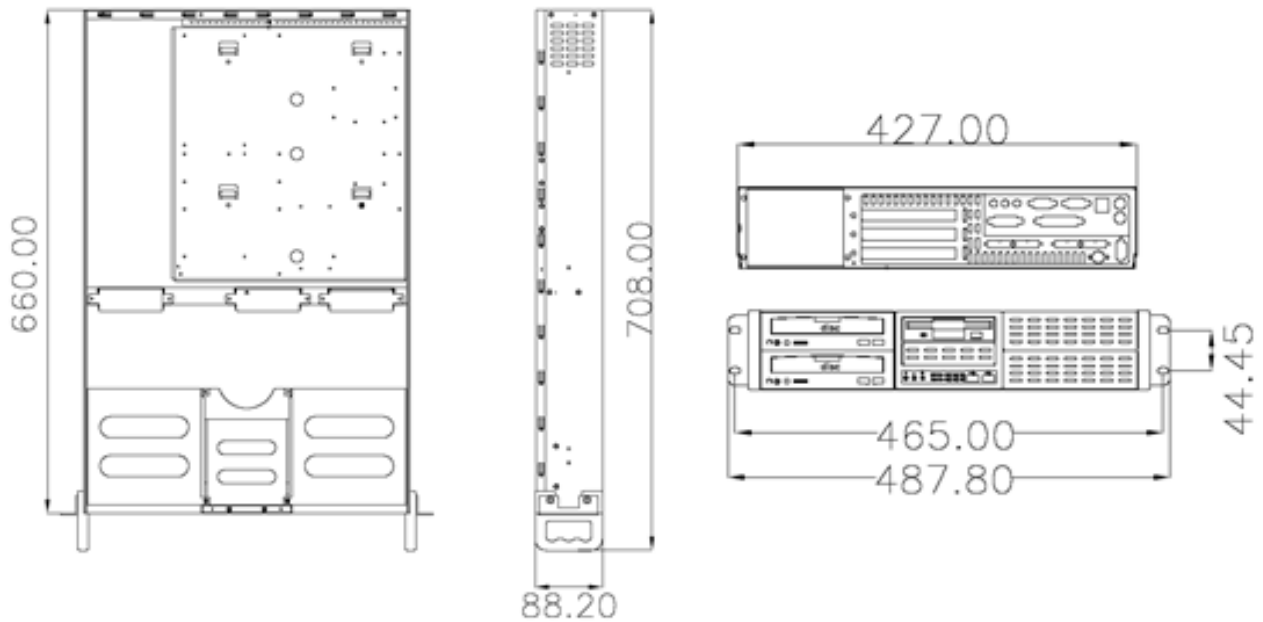
The **RCK-206ME** is a new designed 2U chassis for motherboard with high density driver bays. It is constructed of heavy duty steel and supports extended ATX 12"x13" motherboards. Since it is configured for DVR application, it can accommodate two 3.5" Floppy drives and four 5.25" external driver bays.

Besides, **RCK-206ME** has a built in "system monitoring boards" to monitor the status of the system. The users can easily trace the status of the system by viewing the LED at the front panel of the chassis.

## Features

- Standard 2U 19" Rackmount chassis
- Heavy duty steel
- 300 Watt 2U power supply with option for 400W Redundant power supply
- Riser card with 3 PCI expansion slots, or one PCIe x16 slot & 2 PCI expansion slots
- 10 LEDs indicators to monitor the system

## Mechanical Drawing



### Construction

- Heavy duty steel

### Color

- Black

### Board Support

- E-ATX, ATX and micro-ATX Motherboard

### Drive Bays

- (2) 3.5" and (4) 5.25 external drive bays

### Expansion

- (3) 32-bit PCI slot through riser card
- Or (2) 32-bit PCI slot + (1) PCIe x16 slot

### Power Supply

- 300W ATX power supply or 400W Hot Swap Redundant power supply

### Cooling System

- Built-in (2)Temperature & (8)Fan Detect Board for system environmental monitoring
- (3) 80mm Ball-bearing Fans

### Ports

- Two USB ports on front panel

### Switches

- On/Off Switch and Reset Switch

### Indicators

- Power ON/OFF LED
- (6) HDD Active LED
- (1) Fan Failure LED
- (2)Temperature Sensor LED

### Dimensions

- 427 (W) x 660 (D) x 88.2 (H) mm
- 16.8 (W) x 26.0 (D) x 3.5 (H) inches

### Operating Temperature

- 0~55 °C

### Gross Weight

- 14kg

## Ordering Information

<b>RCK-206ME</b>	RCK-206ME with 2U 300W ATX power supply & PCI riser card
<b>-PCI303-300W</b>	
<b>RCK-206ME</b>	RCK-206ME with 2U 300W ATX power supply & PCIE-303 riser card
<b>-PCIE303-300W</b>	
<b>RCK-206ME</b>	RCK-206ME with 2U 400W ATX Hot Swap Redundant power supply with Active PFC function
<b>-PCI303-400WR</b>	
<b>PCIE-303</b>	Riser card with (2) 32-bit PCI slot + (1) PCIe x16 slot

## 3U Ruggedized Industrial Chassis



## RCK-308M2

Supports ATX  
Motherboard internal  
3.5" drives

Brackets for (4) 5.25", (2)  
3.5" drive and (2)

6cm Ball Bearing Fan and extra space for  
additional fan 3.5" drives



Two alternative positions  
for (2) 2.0 USB ports

Latched Front Doors

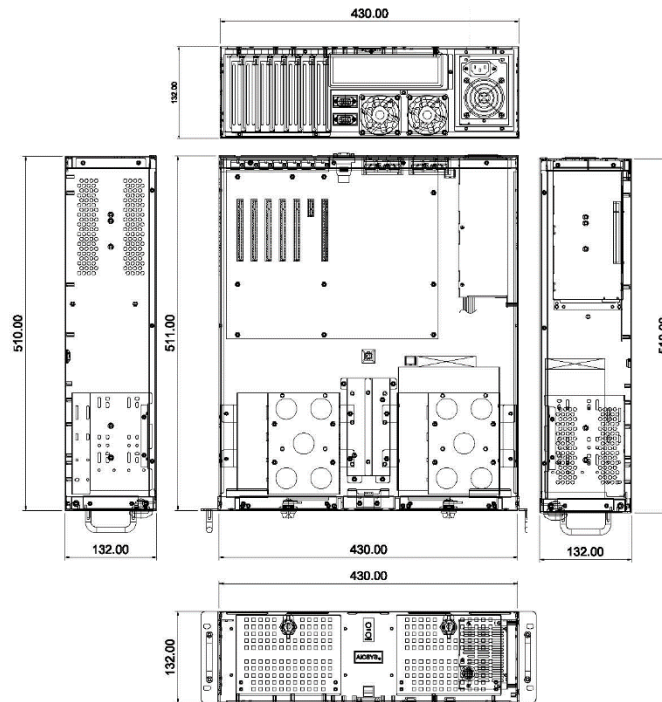
### Introduction

The **RCK-308M2** 3U Rackmount Chassis provides a classy and resourceful solution for a variety of Industrial applications using ATX motherboard. Besides external four 5.25" bays and two 3.5" bays, **RCK-308M2** offers two 3.5" shock resistive drive bays; sufficient for applications that use quite significant number of drivers without having to use very bulky 4U chassis. Two levels temperature management relies on two 4cm ball-bearing fan that provide excellent cooling. **RCK-308M2** offers two 2.0 USB ports.

### Features

- Standard 3U 19" Rackmount Chassis
- Heavy Duty Steel with Ni plating RoHS compliant
- Front Panel with Lockable Doors to Protect Drives
- (4) 5.25", (2) 3.5" FDD, (2) 3.5" internal HDD drive bays with shock-resistant drive brackets
- (2) 2.0 USB ports with two alternative positions to choose
- Supports ATX Motherboard
- Extra space for one additional 4cm fan

## Mechanical Drawing



### Construction

- Zinc-Coated Steel with Aluminum Alloy front bezel

### Color

- Black

### Board Support

- ATX Motherboard

### Drive Bays

- (4) 5.25" and (2) 3.5" external drives and (2) 3.5" internal drives

### Expansion

- 7-Slots for full size add-on cards

### Power Supply

- Supports 2U/3U ATX power supply

### Cooling System

- Two extra space for additional 4cm fans

### Ports

- Two USB ports on front panel

### Cooling System

- (2) 4cm ball-bearing fans

### Power Supply

- 2U & 3U ATX Power supply

### Operation Temperature

- 0~55 °C

### Dimension

- 430mm (W) x 132mm (H) x 510mm (D)

### Ordering Information

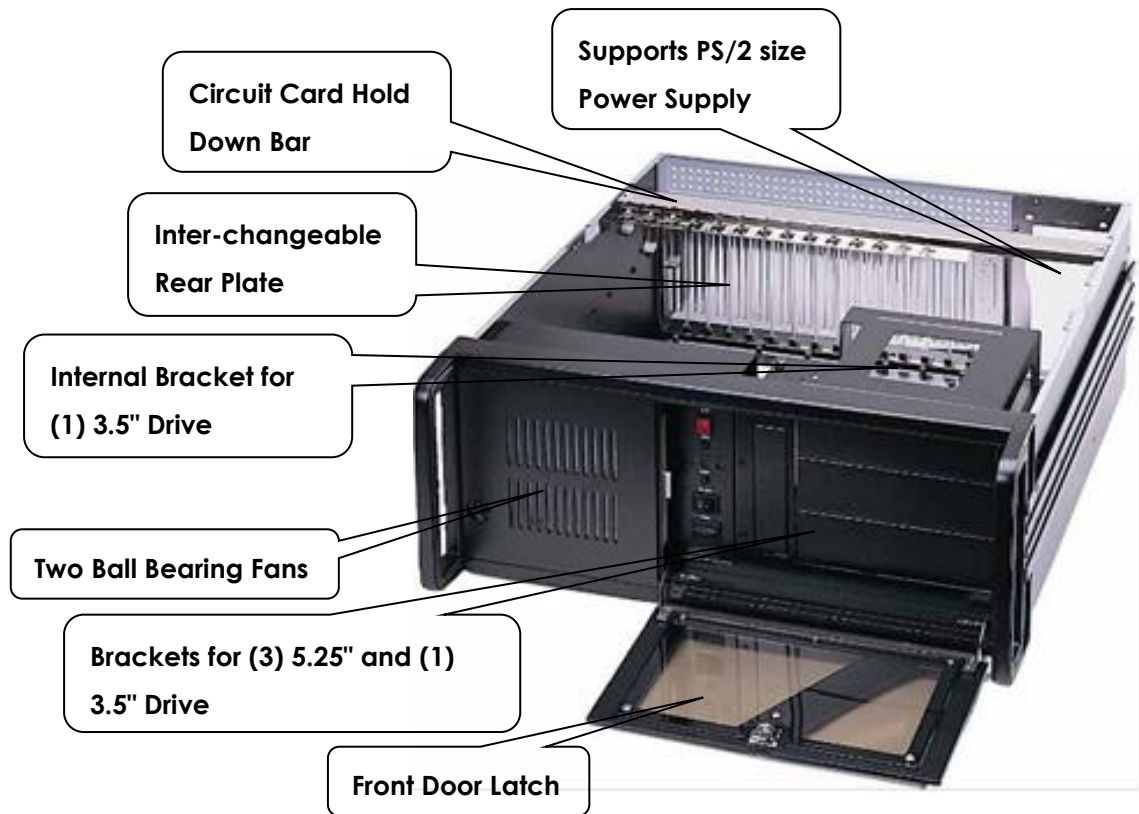
<b>RCK-308M2</b>	3U Rackmount chassis for ATX MB with (8) drive bays
<b>RCK-308M2-400W</b>	3U Rackmount chassis for ATX MB with (8) drive bays and 400W PSU
<b>RCK-308M2-500W</b>	3U Rackmount chassis for ATX MB with (8) drive bays and

## 4U Ruggedized Industrial Chassis



The Global Choice for Premium Industrial Computer Products





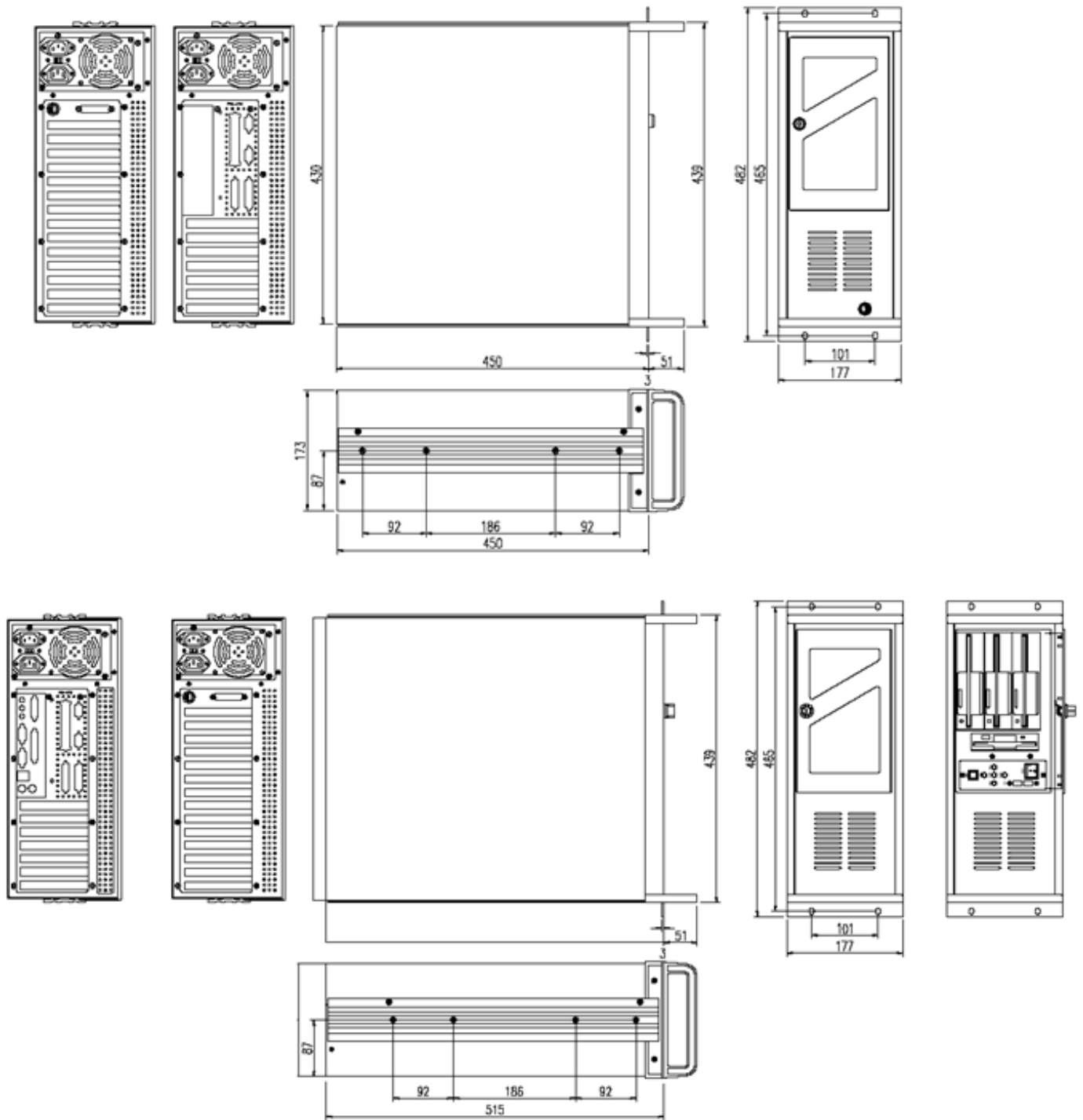
## Introduction

The **RCK-405** 4U Rackmount Chassis provides a cost effective solution for a variety of Industrial applications. It is easily configurable to support either an ATX Motherboard or a 14-slot PICMG backplane by simply changing the rear panel. The **RCK-405** can support up to five shock resistant drives (3-5.25"/1-FDD/1-HDD) and a retaining bar is included to hold expansion cards in place for those applications which encounter a high level of vibration. Both AT and ATX PS/2 size Power Supplies are supported by the **RCK-405** for any applications with unique power requirements.

## Features

- 4U 19" Rackmount Chassis
- Front Panel with Lockable Door to Protect Drives
- (2) 3.5" and (3) 5.25" Drive Bays
- (2) Front USB 2.0 Ports (optional)
- Changeable rear I/O shield
- Anti Vibration Card Clamp
- Motherboard or Backplane Support

Mechanical Drawing



**Construction**

- Heavy duty steel with Ni plating

**Color**

- Black/Beige

**Board Support**

- Backplane (405B)/ ATX Motherboard (405M)/ Extended ATX Motherboard (405ME)

**Drive Bays**

- (3) 5.25" + (1) 3.5" external drives and (1) 3.5" internal drives

**Expansion**

- Depends on backplane or motherboard

**Power Supply**

- ATX power supply/ Mini-Redundant Power

**Cooling System**

- One 12 cm and one 8 cm ball bearing fans with replaceable air filter

**Ports**

- One front panel connector for keyboard
- Optional (2) USB ports on front panel

**Switches**

- On/Off Switch and Reset Switch

**Indicators**

- Power ON/OFF LED
- (6) HDD Active LED

**Dimensions**

- RCK-405M/405B:  
449(W) x 450(D) x 177(H) mm  
17.7(W) x 17.7(D) x 7 (H) inches
- RCK-405ME/405BE:  
449(W) x 514(D) x 177(H) mm  
17.7(W) x 20.2(D) x 7(H) inches

**Operating Temperature**

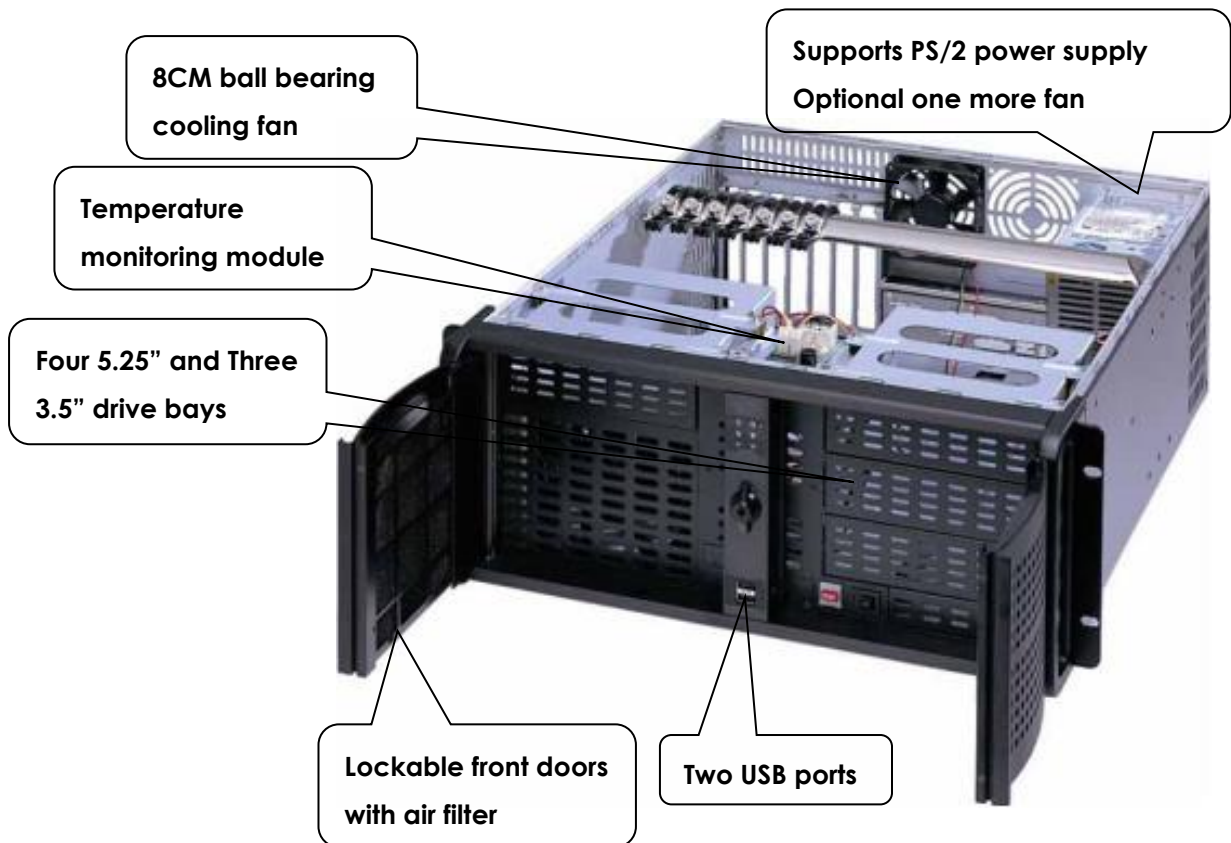
- 0~55 °C

**Net/Gross Weight**

- RCK-405M/405B: 10.8Kgs/13.8Kgs
- RCK-405ME/405BE: 17Kgs

**Ordering Information**

<b>RCK-405B</b>	4U Rackmount chassis, with (3) 5.25" and (2) 3.5" drive bays for 14/15-slot Backplane
<b>RCK-405BE</b>	4U Rackmount chassis, with (3) 5.25" and (2) 3.5" drive bays for 14/15-slot Backplane
<b>RCK-405M</b>	4U Rackmount chassis, with (3) 5.25" and (2) 3.5" drive bays for ATX motherboard
<b>RCK-405ME</b>	4U Rackmount chassis, with (3) 5.25" and (2) 3.5" drive bays for ATX / <b>Extended ATX motherboard</b>
<b>MT-PL01</b>	Optional back plate for RCK-405M/RCK-405ME with 2 fans



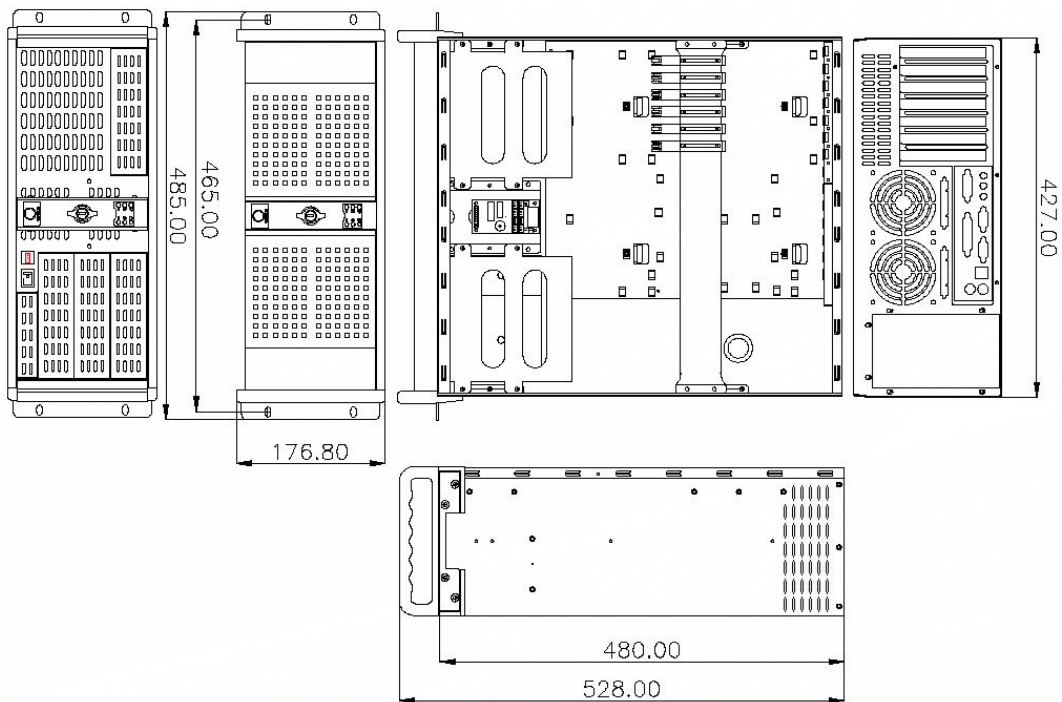
### Introduction

The **RCK-407MA** 4U Rack mount Chassis provides a classy and resourceful solution for a variety of Industrial applications using ATX motherboard. Besides external four 5.25" bays and one 3.5" bays, **RCK-407MA** offers two internal 3.5" shock resistive drive bays. Two levels temperature management relies on one ball bearing 12cm fan on the front + 8cm fan on the rear and System Environmental Monitor that warns users when the system temperature is above normal. One extra space for optional additional 8 cm fan is provided for more heat sensitive application. **RCK-407MA** offers two alternative positions for two 2.0 USB ports & supports 4U ATX Power Supplies.

### Features

- Standard 4U 19" Rackmount Chassis
- Heavy Duty Steel with Ni plating
- Front Panel with Lockable Doors
- (4) 5.25", (1) 3.5" FDD, (2) 3.5" internal HDD drive bays in two shock-resistant cages
- Two 2.0 USB ports
- ATX Motherboard Support System  
Environmental Monitor
- Extra space for one additional 8cm fan

## Mechanical Drawing



### Construction

- Zinc Coated Steel with Aluminum Alloy front

### Color

- Black

### Board Support

- ATX Motherboard

### Drive Bays

- (4) 5.25", (1) 3.5" for external, (2) 3.5" for internal

### Expansion

- (7) slots for full size add-on cards

### Power Supply

- PS/2 power supply

### Cooling System

- 12 cm front fan with air filter, (1) 8 cm fan on the rear and environmental monitoring board. (1) extra space for additional 8cm fan

### Ports

- (2) USB2.0 ports on front panel

### Switches

- On/Off Switch and Reset Switch

### Indicators

- Power ON/OFF LED
- (1) HDD LED
- Fan & Alarm

### Dimensions

- 427 (W) x 480 (D) x 176.8 (H) mm
- 16.8 (W) x 18.9 (D) x 7 (H) inches

### Operating Temperature

- 0~55 °C

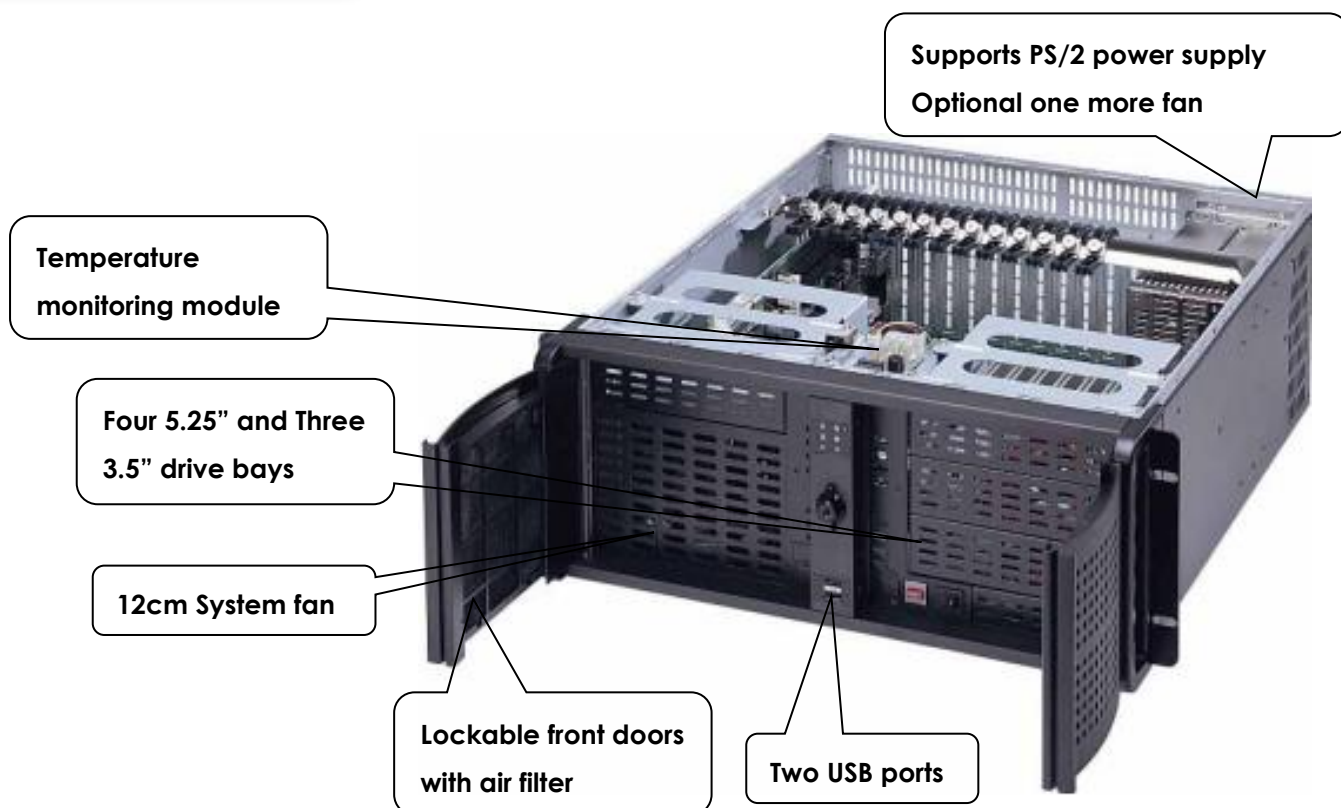
### Net/Gross Weight

- 12Kgs/15.6Kgs

### Ordering Information

<b>RCK-407MA</b>	4U chassis for ATX motherboard
<b>RCK-407MA-400W</b>	RCK-407MA with 400W PS/2 Power Supply
<b>MT-SR01</b>	Optional slide rail

## RCK-407BA



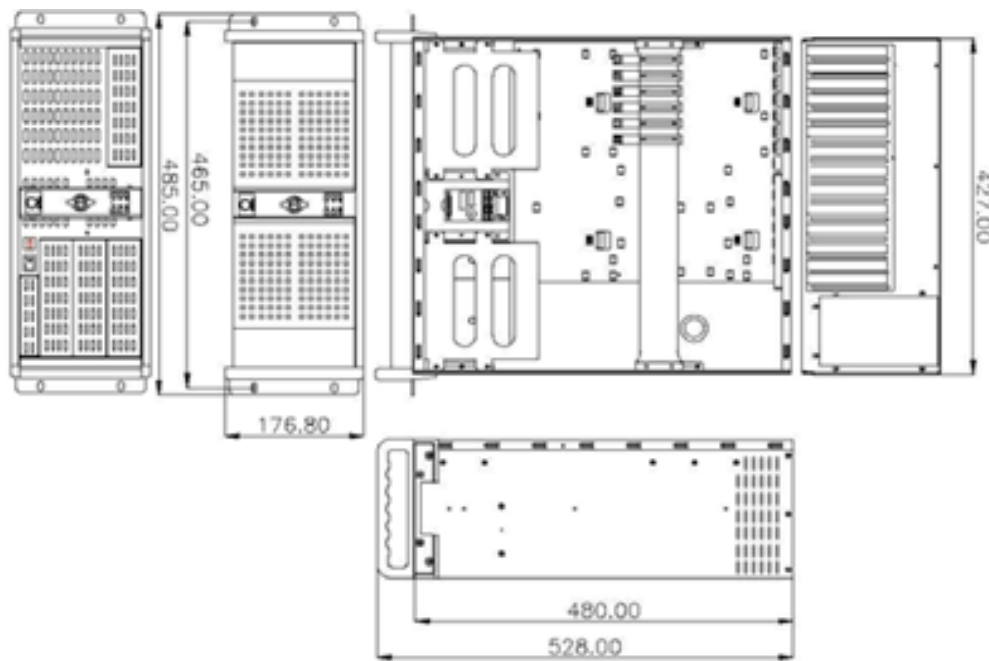
### Introduction

The **RCK-407BA** 4U Rack mount Chassis provides a classy and resourceful solution for a variety of Industrial applications using single board computer with backplane. Besides external four 5.25" bays and one 3.5" bays, **RCK-407BA** offers two internal 3.5" shock resistive drive bays. Two levels temperature management relies on one ball bearing 12cm fan on the front and System Environmental Monitor that warns users when the system temperature is above normal. **RCK-407BA** offers two alternative positions for two 2.0 USB ports & supports 4U ATX Power Supplies.

### Features

- Standard 4U 19" Rackmount Chassis
- Heavy Duty Steel with Ni plating
- Front Panel with Lockable Doors
- (4) 5.25", (1) 3.5" FDD, (2) 3.5" internal HDD drive bays in two shock-resistant cages
- Two 2.0 USB ports
- 14-slot backplane & System Environmental Monitor supported

## Mechanical Drawing



### Construction

- Zinc Coated Steel with Aluminum Alloy front bezel

### Color

- Black

### Board Support

- 14-slot backplane

### Drive Bays

- (4) 5.25", (1) 3.5" for external, (2) 3.5" for internal

### Expansion

- Depends on Backplane

### Power Supply

- PS/2 power supply

### Cooling System

- 12 cm front fan with air filter

### Ports

- (2) USB2.0 ports on front panel

### Switches

- On/Off Switch and Reset Switch

### Indicators

- Power ON/OFF LED
- (1) HDD LED
- Fan & Alarm

### Dimensions

- 427 (W) x 480 (D) x 176.8 (H) mm
- 16.8 (W) x 18.9 (W) x 7 (H) inches

### Operating Temperature

- 0~55 °C

### Gross Weight

- 15.5kg/34.1lbs

### Ordering Information

<b>RCK-407BA</b>	4U chassis for backplane with SBC
<b>RCK-407BA-400W</b>	RCK-407BA with 400W PS/2 PFC Power Supply
<b>RCK-407BA-400WR</b>	RCK-407BA with 400W mini redundant PFC Power Supply

## Ruggedized Wallmount Chassis



The Global Choice for Premium Industrial Computer Products





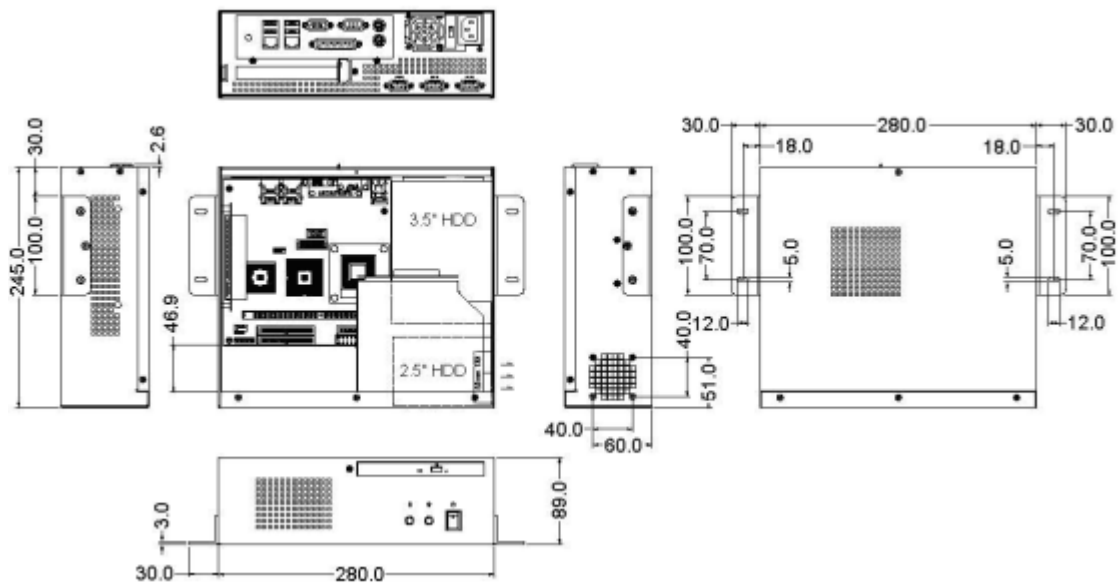
### Introduction

**WMC-103M** is a compact wallmount industrial chassis designed for Pentium M / Celeron M Mini-ITX motherboard. Regardless its size, it supports a total of 3 drive bays ; (1) Slim CDROM, (1) 3.5" HDD and (1) 2.5" HDD, make it the best choice for applications that require separation of Operating System Disk and disk for data. **WMC-103M** offers expandability through a 1-slot PCI/PCI-E Riser Card. Although the chassis no doubt supports fanless operations of CPU board with lower speed Pentium M / Celeron M, one 52mm fan is provided for higher speed applications. The system is powered by up to 250W ATX power supply for Pentium M/Celeron M and optional power supply to support P4 CPU board.

### Features

- Mini-ITX Chassis
- Heavy duty steel construction industrial chassis can be mounted vertically or horizontally
- Drive Bays for (1) Slim CDROM, (1) 3.5" HDD, and (1) 2.5" HDD.
- 52mm fan for higher speed applications.
- Supports (1) expansion slot through riser card
- Up to 250W ATX Power Supply

## Mechanical Drawing



### Construction

- Heavy Duty Steel

### Color

- Black

### Board Support

- Mini-ITX motherboard

### Drive Bays

- Slim CDROM, (1) 3.5", and (1) 2.5" internal drives for HDD

### Expansion

- One Slot PCI/PCI-E 16x riser card

### Power Supply

- Up to 250W ATX power supply

### Cooling System

- 52mm Fan

### Switches

- Power On/Off switch

### Indicators

- Power on/off LED, and HDD LED

### Dimensions

- 280 (W) x 245 (D) x 89 (H) mm
- 11 (W) x 9.6 (D) x 3.5 (H) inches

### Operating Temperature

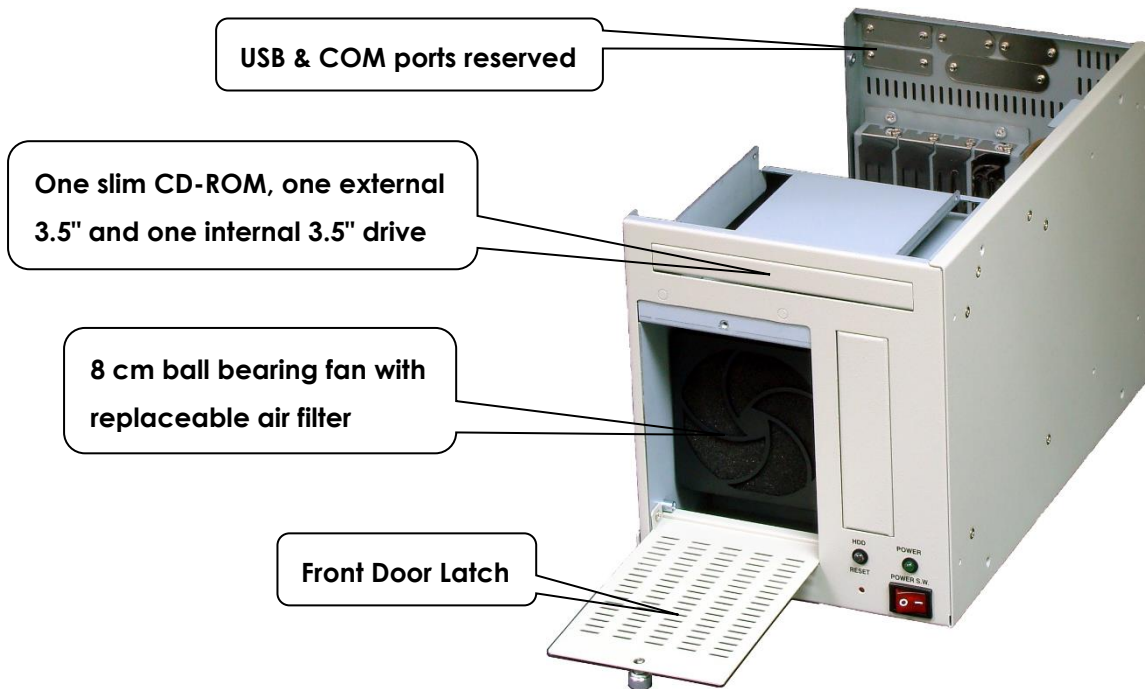
- 0~55 °C

### Net/Gross Weight

- 2Kgs/3Kgs

### Ordering Information

<b>WMC-103M-200W</b>	Mini-ITX Compact Wallmount Chassis with 3 Drive Bays, 1 PCI Riser Card with 200W PSU
<b>WMC-103M-250W</b>	With 250W (80PLUS Bronze) ATX power supply
<b>WMC-103M</b>	Mini-ITX Compact Wallmount Chassis
<b>PCIE-101R</b>	1-slot PCI-e 16x Riser Card



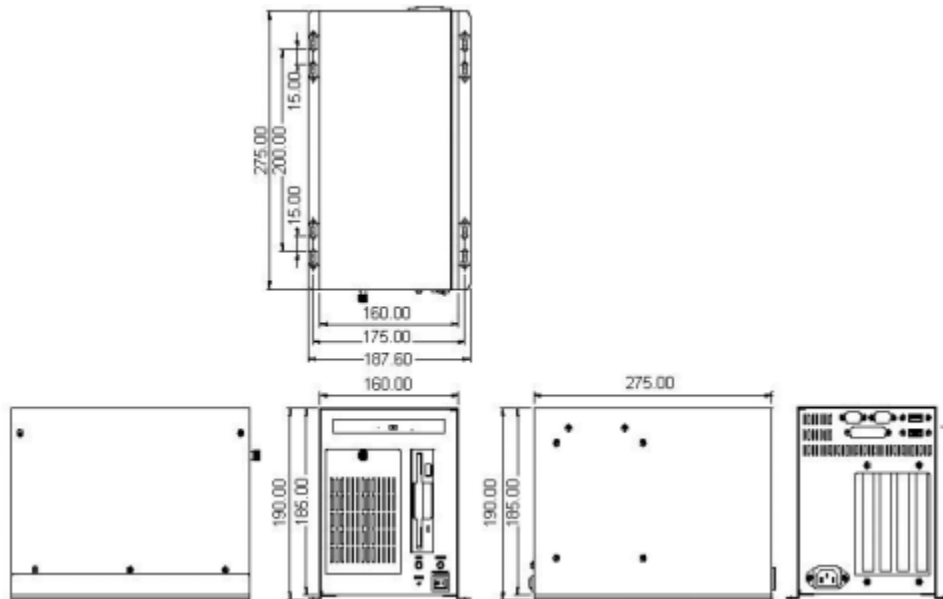
## Introduction

The **WMC-403B** is a 4 slot mini "shoe-box" industrial wallmount chassis. Small yet rugged, the **WMC-403B** is constructed of heavy-duty steel and has an 8CM ball-bearing fan with replaceable filter. Designed to support "Plug-n-Play" SBC's, the **WMC-403B** comes standard with an ISA backplane. An open frame Power Supply and Drive Bay space for (1) Slim CD/DVD and (2) 3.5" HDD or FDD bays round out the features of the **WMC-403B**. The **WMC-403B** is the best choice for any Industrial Computing application where size is at a premium.

## Features

- Heavy duty steel construction shoebox industrial chassis can be mounted vertically or horizontally.
- One slim CD-ROM drive-bay and two 3.5" drive bays (one hidden).
- 8cm ball bearing fan with replaceable air-filter
- 4-slot PCI or ISA backplane included
- Open Frame 70W AT/ 80W & 120W ATX power supply

## Mechanical Drawing



### Construction

- Heavy Duty Steel

### Color

- Beige

### Board Support

- Half Size PIII/PIV Single Board Computer

### Drive Bays

- (1) slim CD-ROM + (1) 3.5" external drive and (1) 3.5" internal drive

### Expansion

- 4-slot PCI or ISA Backplane

### Power Supply

- Open Frame 70W AT/ 80W & 120W ATX power supply

### Cooling System

- One 8 cm ball bearing fan with replaceable air filter

### Switches

- On/Off switch, reset switch

### Indicators

- One power on/off LED and one HDD LED

### Dimensions

- 160 (W) x 275 (D) x 190 (H) mm
- 6.3 (W) x 10.8 (D) x 7.5 (H) inches

### Operating Temperature

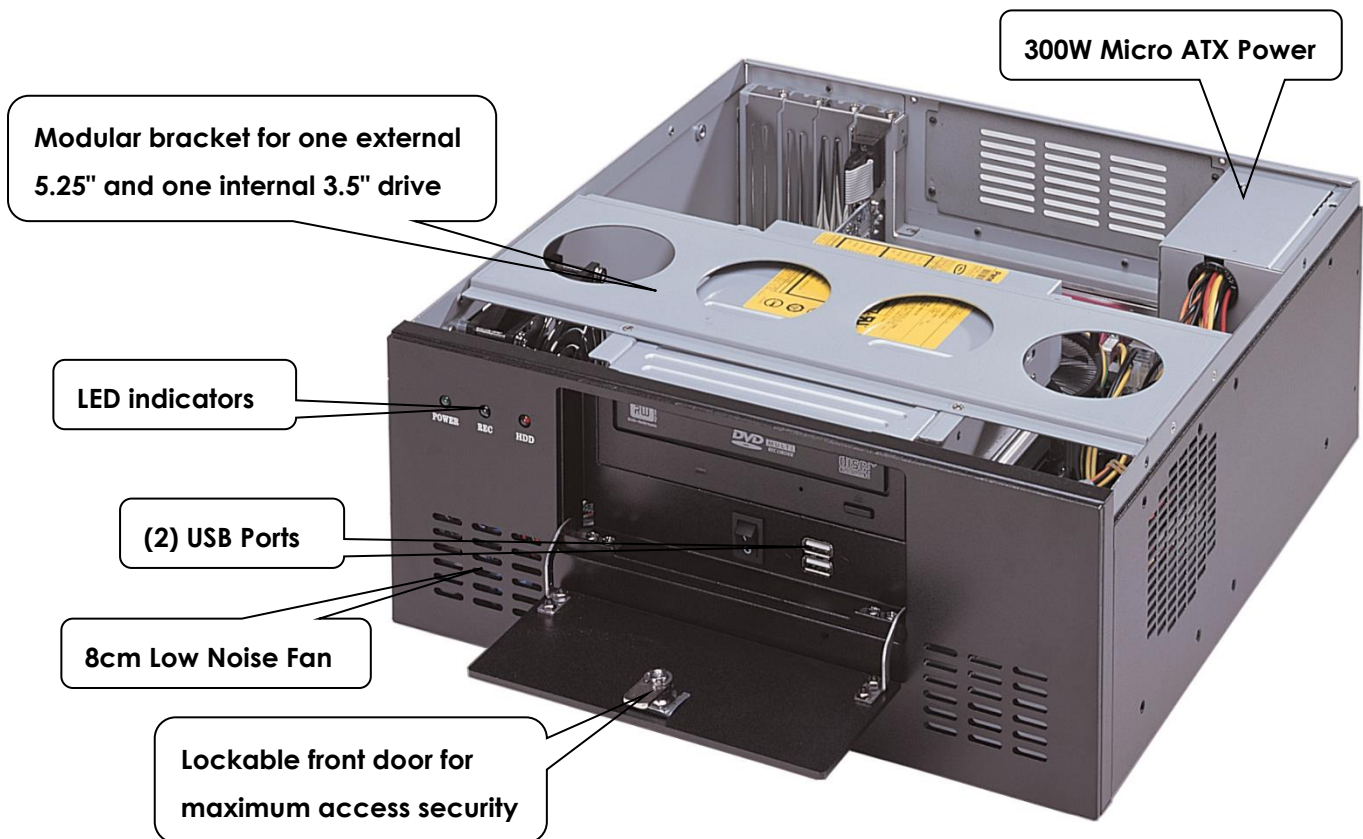
- 0~55 °C

### Gross Weight

- 4.4kg/9.7lbs

## Ordering Information

<b>WMC-403B</b>	For Half-size SBC, (1) 5.25" Drive Bay, (2) 3.5" Drive Bays, (1) 8cm Fan with removable filter
<b>WMC-403B -0400P-70W</b>	WMC-403B with 4-slot ISA backplane and 70W AT PSU,
<b>WMC-403B -0400P-80W</b>	WMC-403B with 4-slot ISA backplane and 80 ATX PSU
<b>WMC-403B -0403P-120W</b>	WMC-403B with 4-slot PCI backplane and customize 120W ATX PSU, Beige color



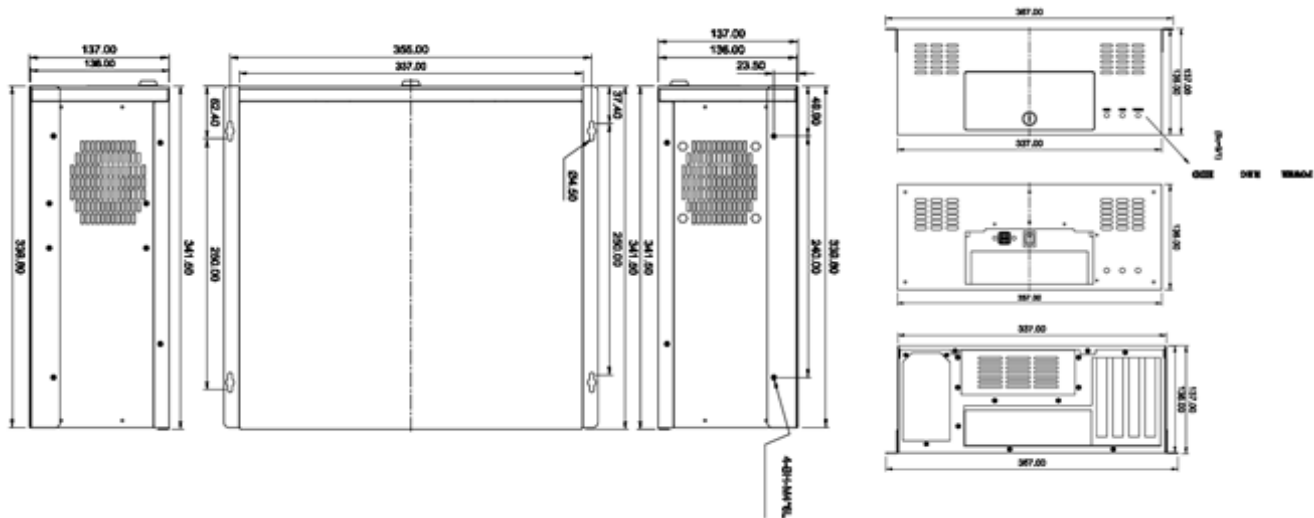
## Introduction

**WMC-402M** "Hawkeye" is the wallmount /desktop industrial grade chassis specifically designed for PC based Digital Video Recording system for security, monitoring, transaction, access control and other safety applications. Within its heavy-duty steel construction it supports standard micro-ATX size, one external 5.25" drive bay for CD-ROM/DVD-ROM and one internal 3.5" drive bay for HDD, sufficient for small video system management. One super Low-Noise 8 cm fan ensures excellent airflow for superior system cooling while maintaining the silence and tranquility of the room. The system is powered by micro-ATX 300W power supply which is sufficient to support the system full loaded. **WMC-402M** is definitely the perfect choice for surveillance system in residential and commercial area.

## Features

- Heavy duty steel construction shoebox industrial chassis can be mounted vertically or horizontally
- Perfect replacement for VCR time-lapse CCTV systems, it is an affordable Digital Video Management System for small businesses and homes, for Digital Signage, Video Wall or Data Wall
- One 5.25" CD-ROM drive-bay and one 3.5" drive bay for HDD
- 8cm low-noise ball bearing fan with air ventilation for excellent airflow
- 300W Micro ATX power supply (**80PLUS Certified**)
- Modular design for easy installation and maintenance

## Mechanical Drawing



### Construction

- Heavy Duty Steel

### Color

- Black

### Board Support

- Micro ATX motherboard

### Drive Bays

- (1) 5.25" CD-ROM + (1) 3.5" internal drive for HDD

### Expansion

- Supports up to 4-slots

### Power Supply

- 300W Micro ATX active PFC power supply

### Cooling System

- One 8cm low-noise ball bearing fan

### Ports

- 2 USB Ports on Front Panel

### Switches

- Power On/Off switch

### Indicators

- On/off LED, HDD LED and one recording in progress LED Defined LED

### Dimensions

- 337 (W) x 339.8 (D) x 136 (H) mm
- 13.3 (W) x 13.4 (D) x 5.4 (H) inches

### Operating Temperature

- 0~55 °C

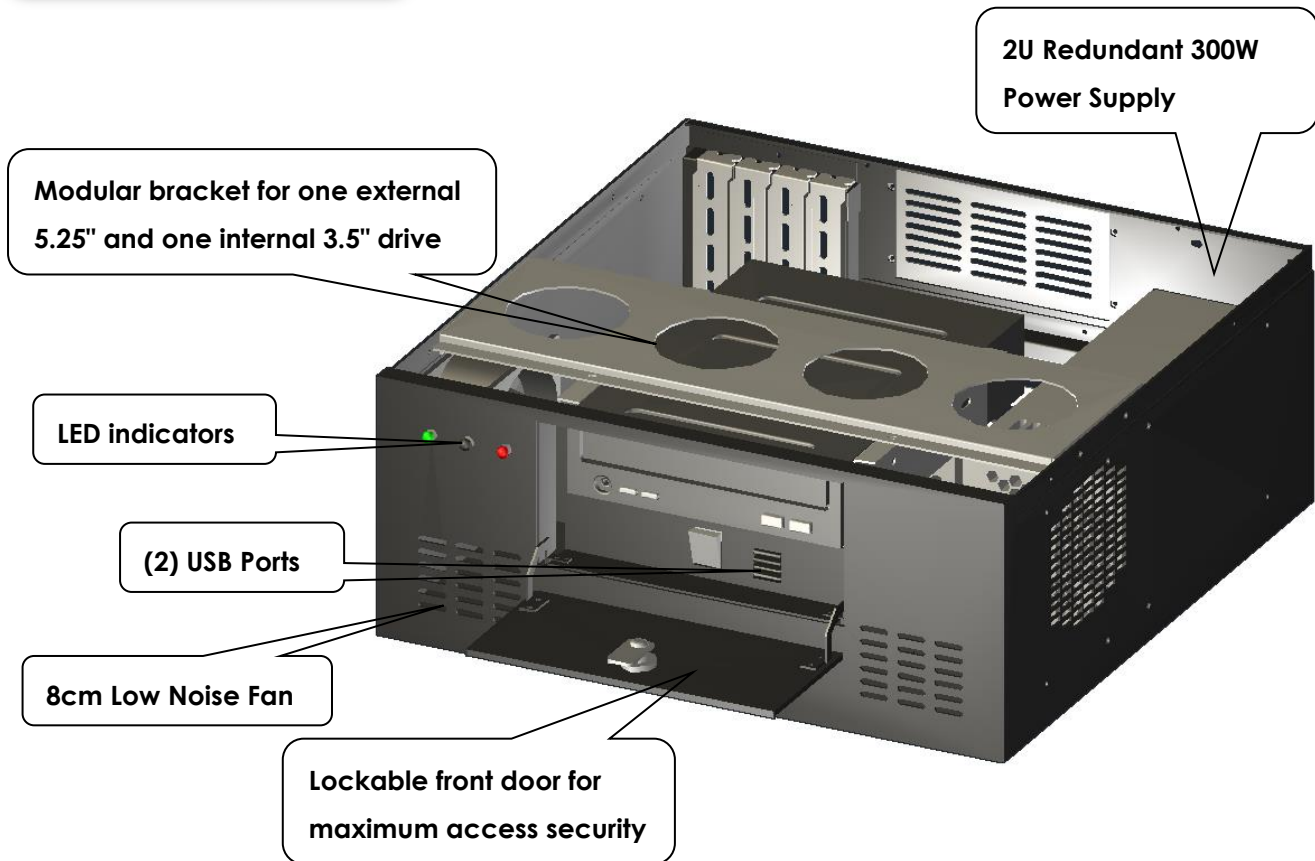
### Net/Gross Weight

- 5.1Kgs/8Kgs

### Ordering Information

**WMC-402M-300W** Compact chassis with (2) drive bays, 300W Micro ATX power supply for micro-ATX motherboard

**WMC-402M** Compact chassis with (2) drive bays



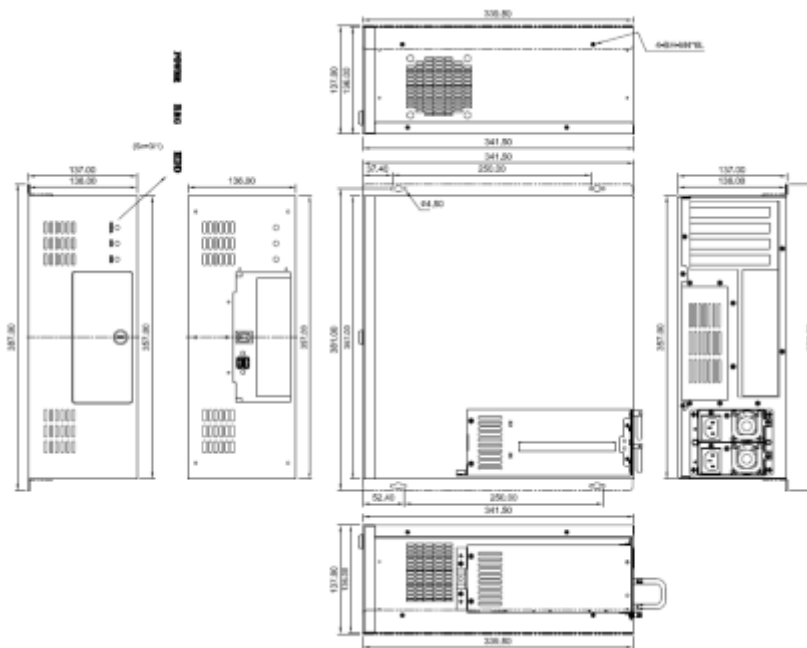
## Introduction

**WMC-402MR** "Hawkeye" is the wall mount /desktop industrial grade chassis specifically designed for PC based Digital Video Recording system for security, monitoring, transaction, access control and other safety applications. Within its heavy-duty steel construction it supports standard micro-ATX size, one external 5.25" drive bay for CD-ROM/DVD-ROM and one internal 3.5" drive bay for HDD, sufficient for small video system management. One super Low-Noise 8 cm fan ensures excellent airflow for superior system cooling while maintaining the silence and tranquility of the room. The chassis is now powered by **2U Redundant 300w Power Supply** for a critical operating system where the power can never fail for 24 hours, 7 days a week operation.

## Features

- Heavy duty steel construction shoebox industrial chassis can be mounted vertically or horizontally
- Perfect replacement for VCR time-lapse CCTV systems, it is an affordable Digital Video Management System for small businesses and homes, for Digital Signage, Video Wall or Data Wall
- One 5.25" CD-ROM drive-bay and one 3.5" drive bay for HDD
- 8cm low-noise ball bearing fan with air ventilation for excellent airflow
- **2U Redundant 300w Power Supply**
- Modular design for easy installation and maintenance

## Mechanical Drawing



### Construction

- Heavy Duty Steel

### Color

- Black

### Board Support

- Micro ATX motherboard

### Drive Bays

- (1) 5.25" CD-ROM & (1) 3.5" internal drive for HDD

### Expansion

- Supports up to 4-slots

### Power Supply

- 2U Redundant 300w power supply

### Cooling System

- One 8cm low-noise ball bearing fan

### Ports

- 2 USB Ports on Front Panel

### Switches

- Power On/Off switch

### Indicators

- On/off LED, HDD LED and one recording in progress LED Defined LED

### Dimensions

- 337 (W) x 339.8 (D) x 136 (H) mm
- 13.3 (W) x 13.4 (D) x 5.4 (H) inches

### Operating Temperature

- 0~55 °C

### Net/Gross Weight

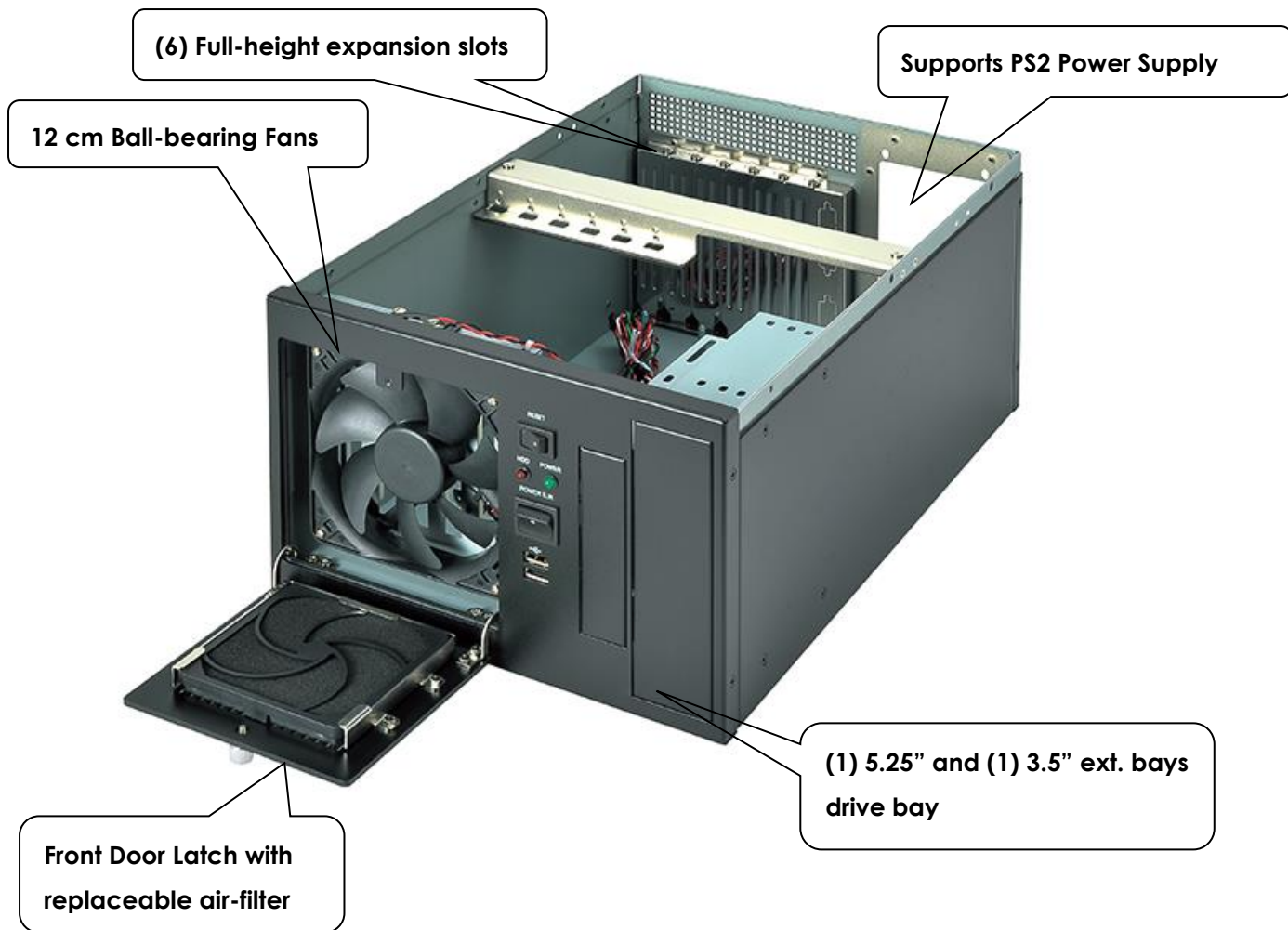
- 5.1Kgs/8Kgs

### Ordering Information

**WMC-402MR-300W** Compact chassis with (2) drive bays, 2U Redundant 300w Power Supply for micro-ATX motherboard

**WMC-402MR** Compact chassis with (2) drive bays





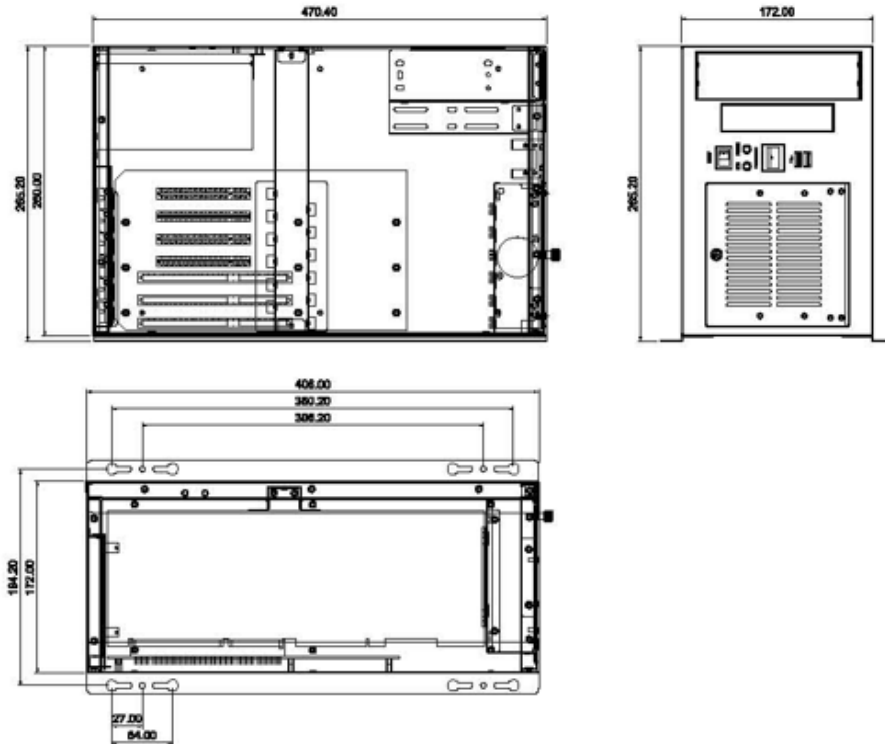
## Introduction

The **WMC-603B-RF** is rugged 6-slot "Shoebox" type Industrial Chassis. Designed for the harshest of environments, the **WMC-603B-RF** is constructed of heavy-duty steel and is outfitted with a hold down bar to stabilize the SBC when used in an application with a substantial amount of shock and/or vibration. With drive bay space for (1) 5.25" ODD and (1) 3.5" HDD drives as well as a 12cm ball-bearing fan with removable air filter, the **WMC-603B-RF** has all the features necessary to provide the perfect chassis solution for a number of industrial computing applications.

## Features

- Heavy-duty steel construction shoebox chassis
- Can be mounted horizontally or vertically
- (1) 5.25" and (1) 3.5" ext. drive bays internal drive bay
- (1) 12cm ball-bearing fan with replaceable air filter
- Hold-down bar with clamps
- Supports PS2 single power supply

## Mechanical Drawing



### Construction

- Heavy Duty Steel

### Color

- Black

### Board Support

- Full-size PICMG Single Board Computer

### Drive Bays

- One 5.25" and one 3.5" external drive bays

### Expansion

- BPE-0603P: (1) PICMG 1.3, (3) PCI, (1) PCIe x4 and (1) PCIe x16 slots

### Power Supply

- Supports PS/2 ATX power supply

### Cooling System

- One 12cm ball bearing fan with replaceable air filter

### Front Port

- (2) USB 2.0

### Switches

- On/Off switch, reset switch

### Indicators

- One power on/off LED and one HDD LED

### Dimensions

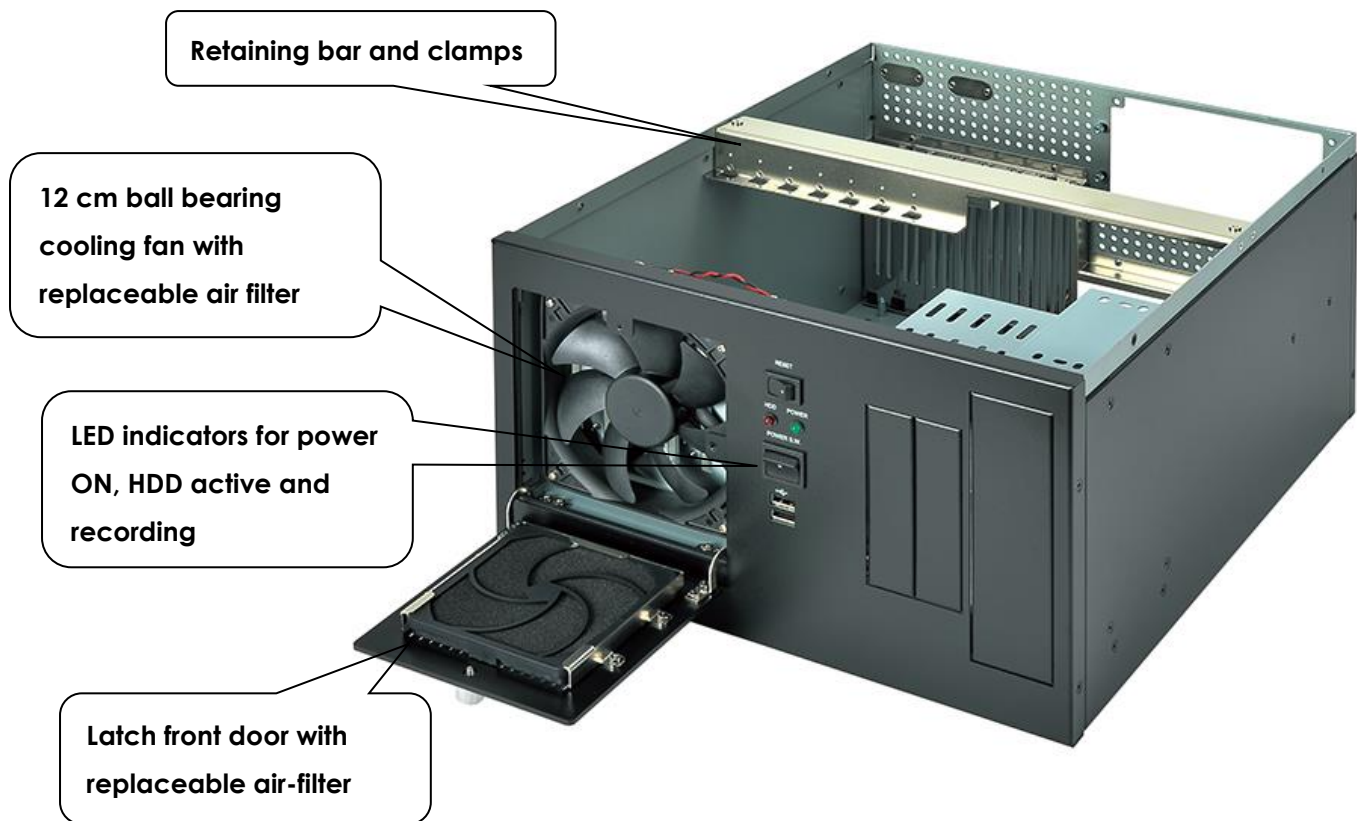
- 260 (W) x 470.4 (D) x 172 (H) mm
- 10 (W) x 18.5 (D) x 6.8 (H) inches

### Gross Weight

- 8kg/17.6lbs

## Ordering Information

<b>WMC-603B</b>	Wallmount chassis with one 5.25" and two 3.5" drive bays
<b>WMC-603B-0603P</b>	WMC-603B with (1) PICMG 1.3, (3) PCI, (1) PCIe x4 and (1) PCIe x16 backplane
<b>WMC-603B-0603P-600W</b>	WMC-603B with BPE-0603P backplane and PS/2 600W ATX power supply



## Introduction

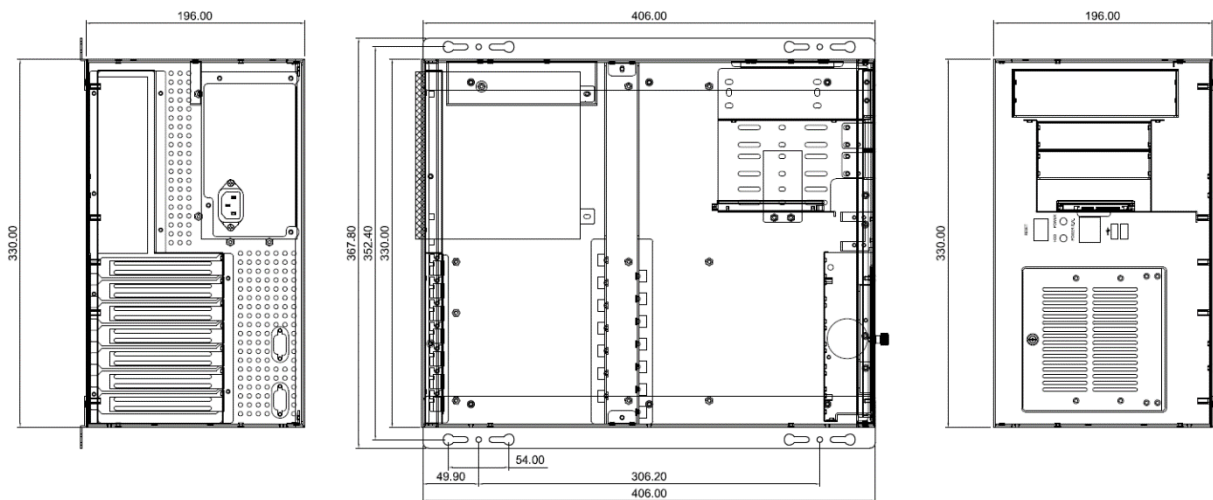
**WMC-704M-RF** is a standard 7-slot full-length "Shoebox" wallmount or benchtop industrial chassis. It is designed to support ATX motherboard especially for industrial automation applications outside your server room where environment is extra harsh and unfriendly. Within its heavy-duty steel construction, it is equipped with one 5.25", two 3.5" external and one 3.5" internal Drive bay for basic system requirement. Hold-down bar with clamps are provided to ensure stable operations against heavy vibration. A 12cm ball-bearing fan with replaceable air filter ensure excellent and clean cooling system for heavy-load applications.

**WMC-704M-RF** offers an ideal solution for computers in public area and mobile computers such as car computers or GPS.

## Features

- Heavy duty steel construction shoebox industrial chassis can be mounted vertically or horizontally.
- (1) 5.25", (2) 3.5" external and (1) 3.5" internal drive bays.
- 12 cm ball bearing fan with replaceable air-filter
- Supports PS/2 power supply.

## Mechanical Drawing



### Construction

- Heavy Duty Steel

### Color

- Black

### Board Support

- ATX Motherboard

### Drive Bays

- (2) 5.25", (2) 3.5" external drives and one 3.5" internal drives

### Expansion

- Ready for additional up to (7) additional add-on cards

### Power Supply

- PS/2 power supply

### Cooling System

- One 12cm ball bearing fan with replaceable air filter

### Ports

- (2) USB 2.0 on front panel

### Switches

- On/Off switch, reset switch

### Indicators

- One power on/off LED and one HDD LED

### Dimensions

- 330 (W) x 406 (D) x 196 (H) mm
- 13 (W) x 16 (D) x 7.7 (H) inches

### Operating Temperature

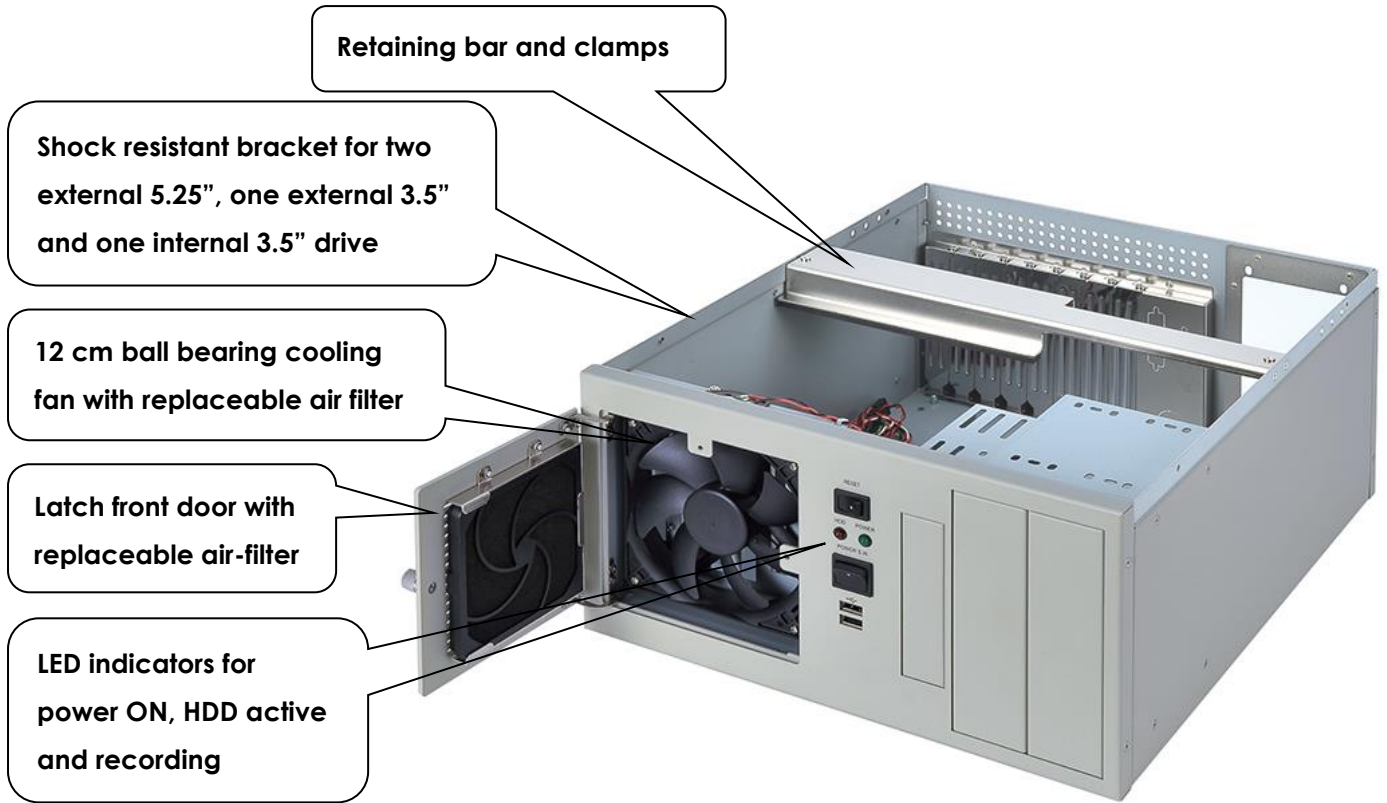
- 0~55 °C

### Net/Gross Weight

- 7.7Kgs/9.6Kgs

## Ordering Information

<b>WMC-704M-RF</b>	Wallmount chassis with (1) 2.5" and (3) 3.5" Drive Bays for ATX motherboard
<b>WMC-704M-RF-400W</b>	Same as above and with 400W PS/2 ATX Power Supply
<b>WMC-704M-RF-600W</b>	Same as above and with 600W PS/2 ATX Power Supply



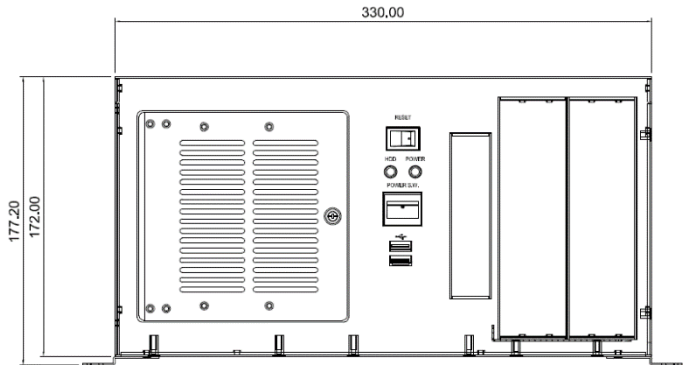
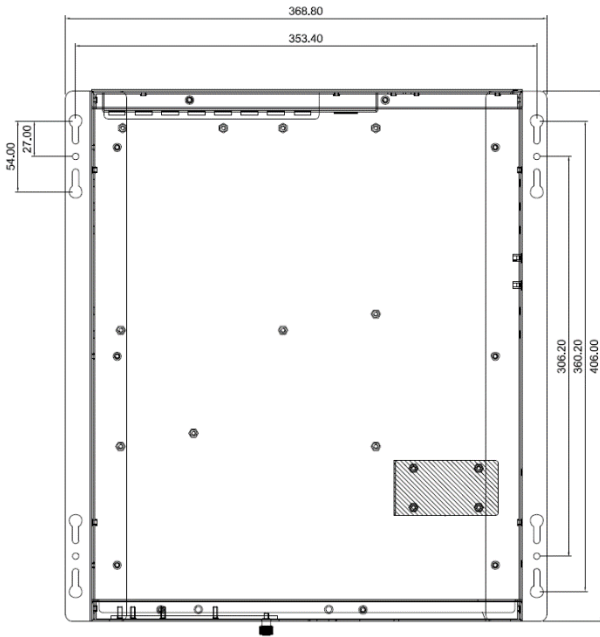
## Introduction

**WMC-804BA** is a standard 8 slot full-length "shoebox" wallmount or benchtop industrial chassis. It is designed to support 8 slots backplane especially for industrial automation applications outside your server room where environment is extra harsh and unfriendly. Within its heavy-duty steel construction, it is equipped with two 5.25", one external 3.5" and one internal 3.5" drive bays for basic system requirement. Hold down bar and clamps are provided to ensure stable operations against heavy vibration. 12cm ball bearing fan and replaceable air filter ensure excellent and clean cooling system for heavy-load applications. WMC-804 offers an ideal solution for computers in public area and mobile computers such as car computers or GPS.

## Features

- Heavy duty steel construction shoebox industrial chassis can be mounted vertically or horizontally
- Two 5.25" and two 3.5" drive bays (one hidden)
- 12 cm ball bearing fan with replaceable air-filter
- Shock resistant drive bracket.
- Supports PS/2 power supply.

## Mechanical Drawing



### Construction

- Heavy-duty Steel

### Color

- Beige

### Board Support

- Full or Half-size Single Board Computer

### Drive bay

- (2) 5.25" external drive bays
- (1) 3.5" external drive bay
- (1) 3.5" internal drive bay

### Expansion

- BP-0804P: (2) PICMG 1.0, (3) ISA and (4) PCI slots
- BPE-0804E: (1) PICMG 1.3, (3) PCI, (3) PCIe x4

### Front Port

- (2) USB 2.0 connectors

### Switch

- Power On/Off, and Reset

### Indicator

- Power On/Off, and HDD activity LEDs

### Cooling System

- (1) 12cm ball-bearing fan with replaceable air filter

### Power Supply

- PS2 ATX Power supply

### Operation Temperature

- 0~55 °C

### Dimension

- 330mm (W) x 172mm (H) x 407.4mm (D)

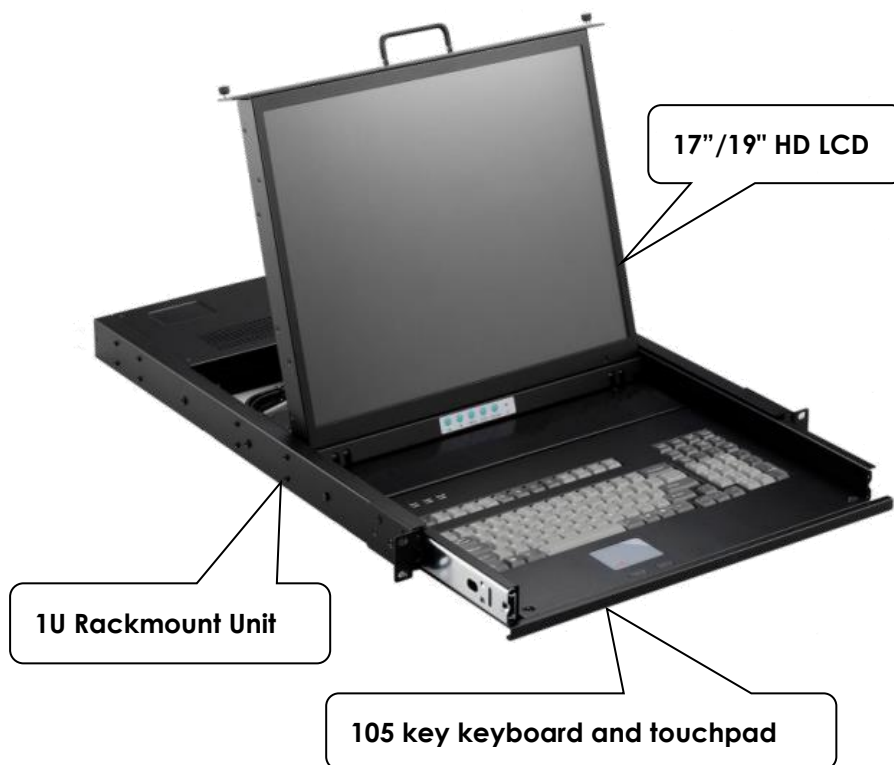
### Ordering Information

<b>WMC-804BA-BGE</b>	8-slot Wallmount chassis for SBC, with (2) 5.25" and (2) 3.5" drive bays
<b>WMC-804BA-BGE-0804P</b>	8-slot Wallmount chassis for SBC, with BP-0804P backplane
<b>WMC-804BA-BGE-0804P-400W</b>	WMC-804B-USB-0804P chassis, with 400W PS2 ATX Power supply
<b>WMC-804BA-BGE-0804P-600W</b>	WMC-804B-USB-0804P chassis, with 600W PS2 ATX Power supply
<b>WMC-804BA-BGE-</b>	8-slot Wallmount chassis for

## LCD & KVM Products



The Global Choice for Premium Industrial Computer Products



## Introduction

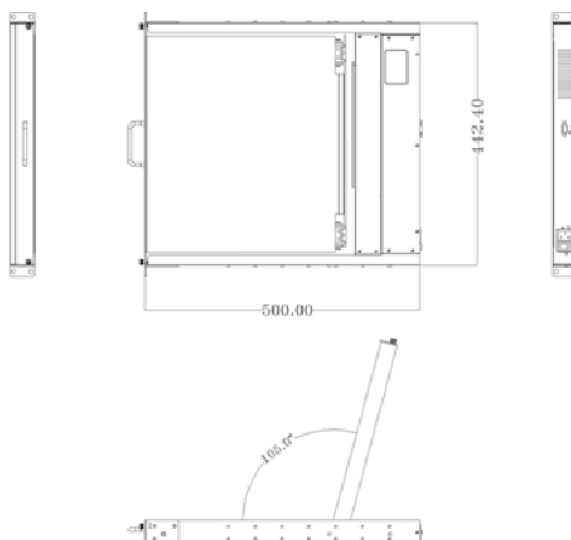
CYCLOPS-M is a series of 19" 1U rackmount KVM unit monitors, assists in efficient management of valuable space. The series provides Full High Definition of 19" LCD monitor. On Screen Display provides you with control over frequency, resolution, backlight luminance and brightness of the video display. The new additional features of this console includes the easy reachable rail-lock switch to avoid user's fingers from being clipped when pushing back the console and also new rail design that enables a single person to mount the console into the rack easily.

## Features

- 19" 1U KVM switch with 17"/19" HD LCD display and 105-key Keyboard and Touchpad
- Single/8/16 port KVM switch
- OSD menu to control frequency, resolution, backlight luminance and brightness of the video display
- Rail-Lock Switch for maximum safety



## Mechanical Drawing



### Construction

- Heavy Duty steel

### Color

- Black

### Panel

- 17"/19" TFT LCD with 1280 x 1024 resolution
- 16.7M Colors
- 1000:1 (Typ) Contrast Ratio
- Brightness: 300cd/m2

### Keyboard & Mouse

- 105 keys industrial keyboard and touchpad

### On Screen Control

- Auto adjustment, brightness, contrast, phases, H-V position, frequency, size, and display mode.
- Automatic and Manual Scan mode

### Video Input

- VGA HDDB 15 pin Female type

### Drawer Design

- Full extension high load rating slide rail with rail-lock safety switch. Rail design enables single person do the installation

### Dimensions

- Single: 17.42 (W) x 21.65 (D) x 1.73 (H) inches
- 8/1 6ports: 17.42 (W) x 23.22 (D) x 1.73 (H) inches

### Operating Temperature

- 0~50 °C

### Power Requirement

- 60W, 100~240VAC Auto Switch

## Ordering Information

CYCLOPS-M171	Single port KVM console with 17" LCD monitor and USB
CYCLOPS-M191	Single port KVM console with 19" LCD monitor and USB
CYCLOPS-M171P	Single port KVM console with 17" LCD monitor and PS/2
CYCLOPS-M191P	Single port KVM console with 19" LCD monitor and PS/2
CYCLOPS-M178	8 port KVM console with 17" LCD monitor and USB
CYCLOPS-M1716	16 port KVM console with 17" LCD monitor and USB
CYCLOPS-M198	8 port KVM console with 19" LCD monitor and USB
CYCLOPS-M1916	16 port KVM console with 19" LCD monitor and USB



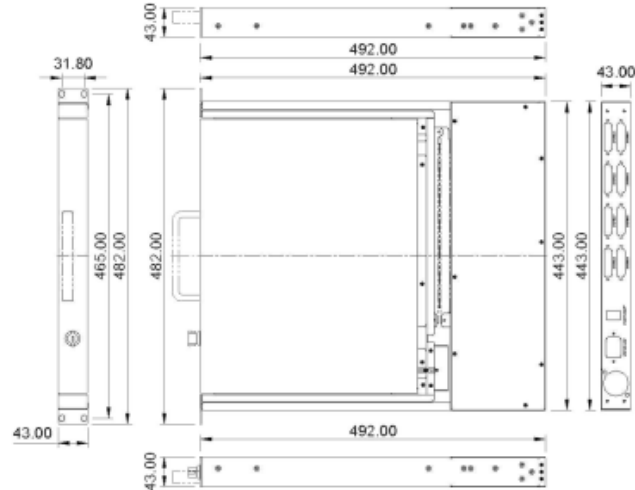
## Introduction

rackmountable KVM consoles monitors and controls up to 8 computers (expandable to 512 computers), assists in efficient management of valuable space. It is equipped with high quality 15" or 17" LCD monitor and 106 key industrial keyboard and touchpad. The **CYCLOPS-D** Series are designed to satisfy users from high-end market with elegantly designed and highly functional product with incredibly competitive price. It is equipped with special designed slider for smooth extraction and high-grade wrist-pad for operational comfort. All connected computers can be monitored comfortably using auto-scan function. On Screen Display provides you with control over frequency, resolution, backlight luminance and brightness of the video display

## Features

- 1U 8-port KVM units with 15"/17" LCD display, industrial PS/2 Cherry keyboard with integrated Trackball
- Expandable to control up to 512 computers.
- Special design slider for smooth extraction
- Single DB25 pin connectors for each port for effective cable management
- Auto-Scan and Single Select functions
- On Screen Display to control frequency, resolution, backlight luminance and brightness of the video display
- Built-In low power consumption power

## Mechanical Drawing



### Construction

- SECC with Ni Coating

### Color

- Black or metallic blue

### Panel

- 15"/17" LCD with 250 nit brightness, 16.7 million display colors with maximum resolution (XGA) 1024 x 768

### KVM Switch

- Ports access through front panel switch, hotkey and OSD control. DB25 Ports access trough front panel switch, hotkey and OSD control. DB25 pin type female connectors for 8 platform connections (VGA, PS/2 keyboard and PS/2 mouse male connectors at the platform side). Cascading up to 512 systems.

### Keyboard & Mouse

- Industrial PS/2 83-key Cherry keyboard with integrated Trackball

### On Screen Control

- Menu, Auto adjustment, brightness, contrast, phase, H-V position, pitch, zoom, color, language and OSD position Automatic and Manual Scan mode display mode. Automatic and Manual Scan mode

### Security Lock

- Front access lock for system security

### Drawer Design

- Special slider for smooth extraction and wrist pad for trackball version

### Dimensions

- 15": 443 (W) x 492 (D) x 43 (H) mm  
17.5 (W) x 19.4 (D) x 1.7 (H) inches
- 17": 443 (W) x 548 (D) x 43 (H) mm  
17.5 (W) x 21.6 (D) x 1.7 (H) inches

### Operating Temperature

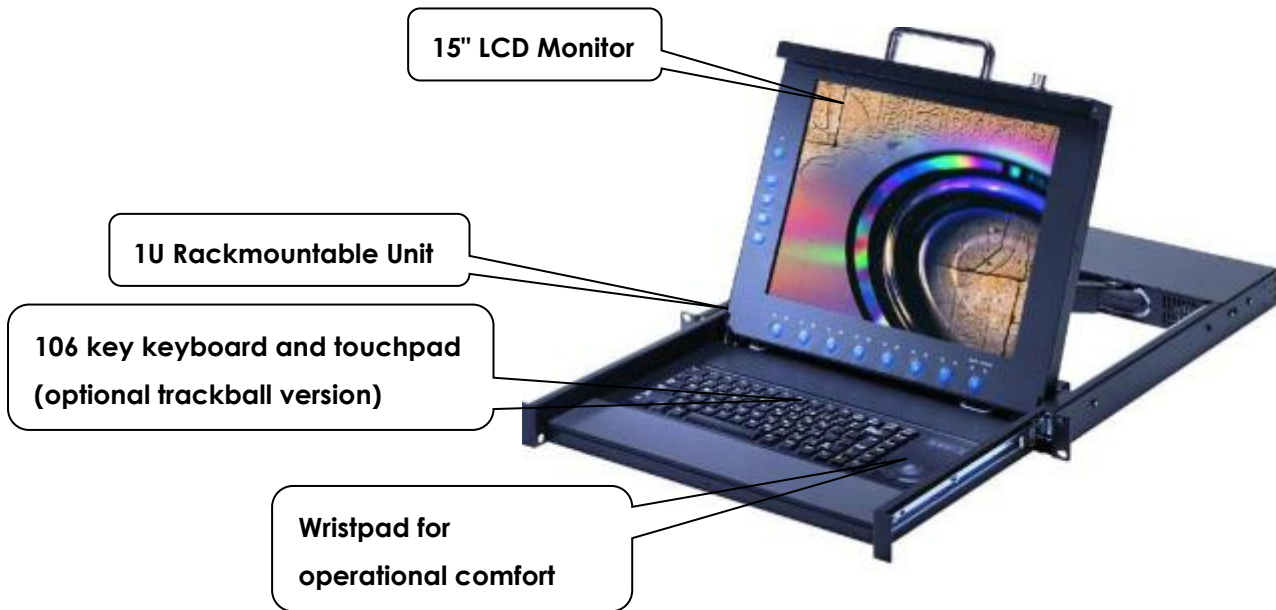
- 0~50 °C

### Gross Weight

- 15": 17.5kg/38.675 lbs
- 17": 18.6kg/41 lbs

## Ordering Information

CYCLOPS-D158C	1U 8 Port KVM switch, 15"LCD, Cherry keyboard, trackball, and one 2L-1601P
CYCLOPS-D178C	1U 8 Port KVM switch, 17"LCD, Cherry keyboard, trackball, and one 2L-1601P
2L-1601P	KVM cable 1.8 M, PS/2 for CYCLOPS D series
2L-1603P	KVM cable 3.0 M, PS/2 for CYCLOPS D series



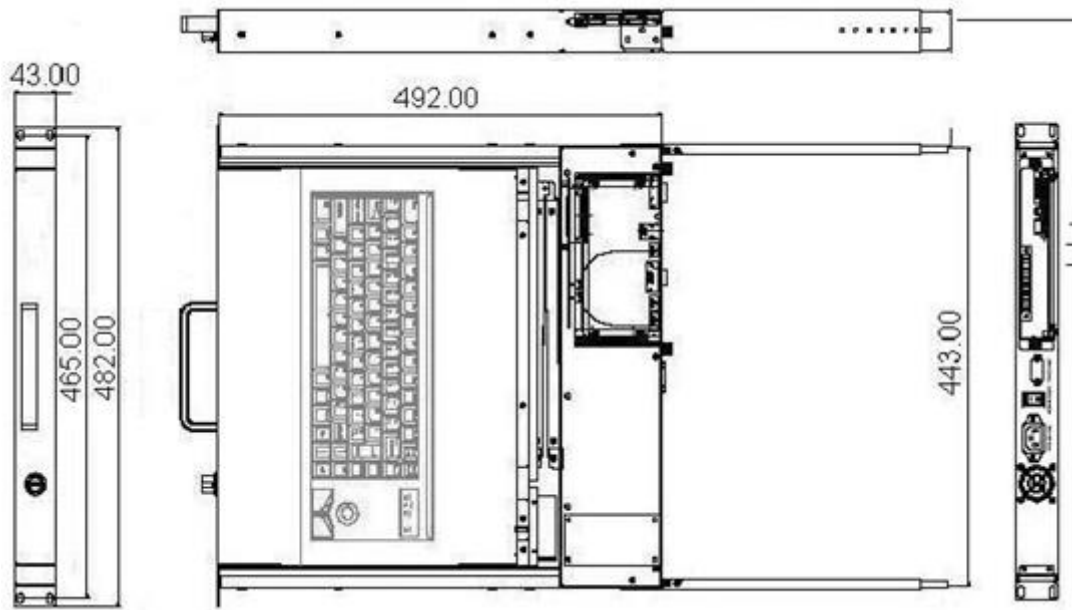
## Introduction

**CYCLOPS-D151** is 1U rackmountable LCD/Keyboard Drawer with high quality 15" LCD monitor and 106 key industrial keyboard and touchpad. The **CYCLOPS-D151** is designed to satisfy users from high-end market with elegantly designed and highly functional product with incredibly competitive price. It is equipped with special designed slider for smooth extraction and high-grade wristpad for operational comfort. On Screen Display provides you with control over frequency, resolution, backlight luminance and brightness of the video display. Optional 17" LCD and Cherry keyboard with trackball are also available.

## Features

- 1U compact design LCD/Keyboard Drawer with 15"/17" High Bright LCD Screen
- Industrial slim keyboard+ touchpad or Cherry keyboard+ trackball
- Special design slider for smooth extraction
- On Screen Display to control frequency, resolution, backlight luminance and brightness of the video

## Mechanical Drawing



### Construction

- SPCC with Ni Coating

### Color

- Black

### Panel

- 15"/17" LCD with 250 nit brightness, 16.7 million display colors with maximum resolution (XGA) 1024 x 768/1280 x 1024

### KVM Switch

- N/A

### Keyboard & Mouse

- PS/2 106 key industrial keyboard and touch pad or optional Cherry keyboard with trackball

### On Screen Control

- Auto adjustment, brightness, contrast, phases, H-V position, frequency, size, and display mode.
- Automatic and Manual Scan mode

### Security Lock

- Front access lock for system security

### Drawer Design

- Special slider for smooth extraction and wrist pad for trackball version

### Dimensions

- 443 (W) x 492 (D) x 43 (H) mm

### Operating Temperature

- 0~50 °C

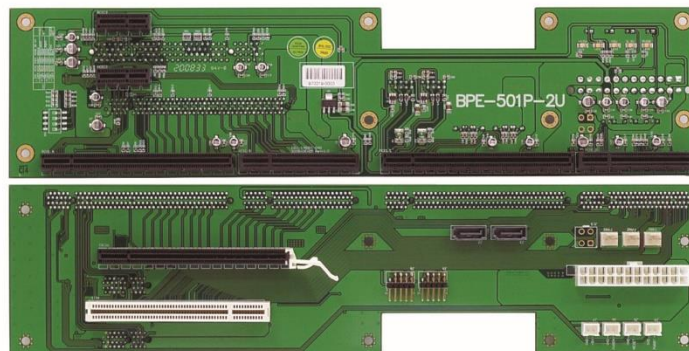
### Gross Weight

- 16.5kg

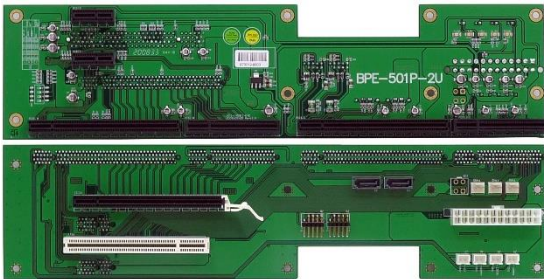
## Ordering Information

CYCLOPS-D151	1U LCD/Keyboard Drawer with 15"LCD, industrial slim keyboard and touchpad
CYCLOPS-D151C	1U LCD/Keyboard Drawer with 15"LCD, Cherry keyboard and trackball
CYCLOPS-D171	1U LCD/Keyboard Drawer with 17"LCD, industrial slim keyboard and touchpad
CYCLOPS-D171C	1U LCD/Keyboard Drawer with 17"LCD, Cherry keyboard and trackball

## Backplanes



## BPE-501P-2U



### Specification

- 5-Slot 2U PICMG 1.3 Backplane
- PICMG ver. 1.3 RC1.0 SHB slot for SHB Express
- PCIe x16 slot
- PCIe x1 slots
- PCI 32 bit 5V slots
- SATA connectors
- Supports ATX 24P power connector
- Connectors for 3-pin fans
- Power LEDs
- Multilayer PCB

## BPE-0502P-2U



### Specification

- 5-Slot 2U PICMG 1.3 Backplane
- (1) PCIe x16 slot
- (1) PCIe x4 slot (1X compatible)
- (2) PCI 32 bit 5V slots
- SATA connectors
- USB connectors
- Supports ATX 24P power connector
- Connectors for 3-pin fans
- Power LEDs
- Multilayer PCB

## BPE-0605E-2U



### Specification

- 6-Slot 2U PICMG 1.3 Backplane
- (1) PICMG ver. 1.3 RC1.0 SHB slot for SHB Express
- (4) PCIe x1 slot
- (2) SATA connectors
- (2) USB connectors
- Supports ATX 24P power connector
- (2) Connectors for 3-pin fans
- Power LEDs
- Multilayer PCB

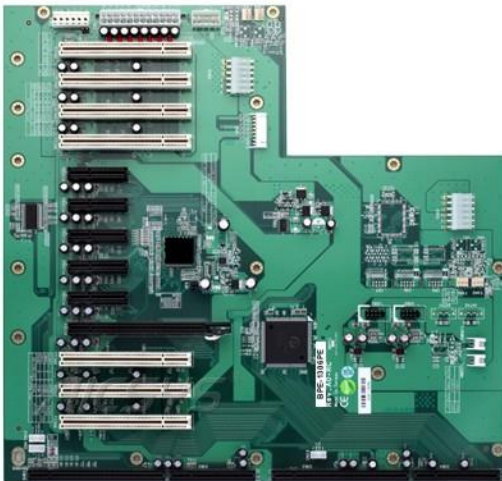
## BPE-0603P



### Specification

- 6-Slot PICMG 1.3 Backplane
- (1) PICMG ver. 1.3 RC1.0 SHB slot for SHB Express
- (3) PCI slots
- (1) PCIe x4 slot
- (1) PCIe x16 slot
- (2) SATA connectors
- Supports ATX 24P power connector
- (2) Connectors for 3-pin fans
- Power LEDs
- Multilayer PCB

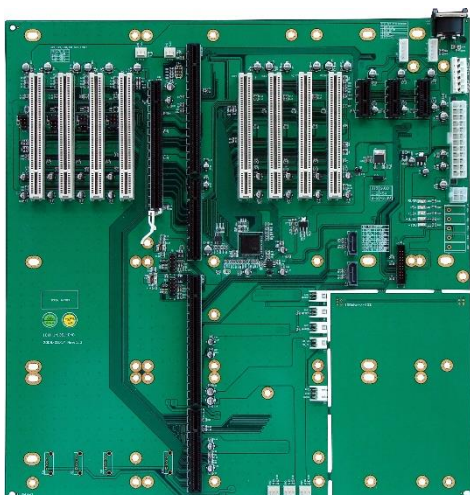
## BPE-1306PE



### Specification

- 13-Slot Bridged PICMG 1.3 Backplane
- Full-Size PICMG 1.3 CPU Slots
- (1) PCIe x16 Gen 2.0
- (5) PCIe x4
- (7) PCI Slots
- (2) USB 2.0 pin headers
- Power Indicator LEDs
- Multilayer PCB
- ATX Power Connector

## BPE-1308A

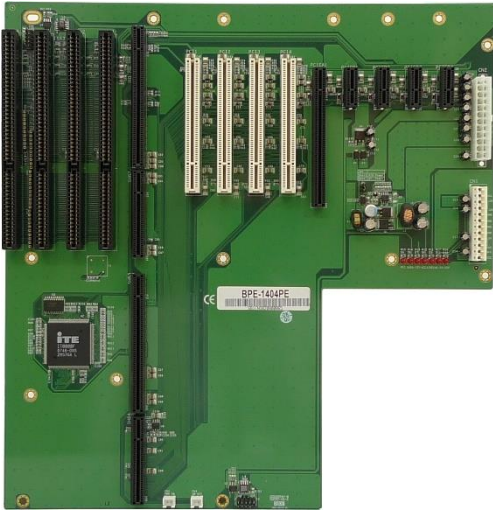


### Specification

- 13-Slot PICMG 1.3 Backplane
- (1) PCIe x16 slot
- (3) PCIe x1 slot
- (8) PCI 32 bit 5V slots
- SATA connectors
- USB ports ( A type female) or by Pin Header
- Supports ATX 24P power connector
- Connectors for 3-pin fans
- AT keyboard connector
- Power Indicator LEDs
- Multilayer PCB
- ATX Power Connector
- PCI-E 16x slot also supports PCI-E



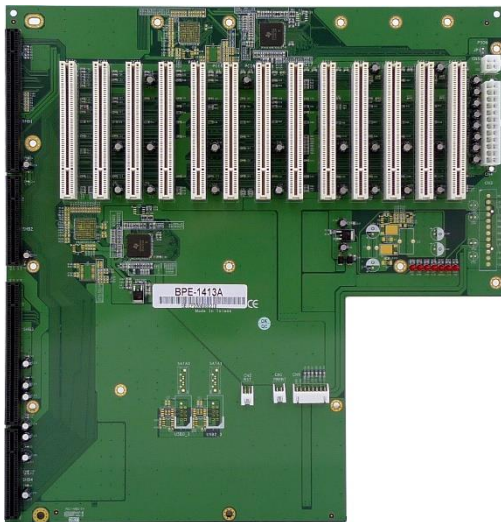
## BPE-1404PE



### Specification

- 14-Slot Passive PICMG 1.3 Backplane
- Full-Size PICMG 1.3 CPU Slots
- (4) PCI Slots
- (4) ISA Slots
- (1) PCIE 16x
- (4) PCIE 4x Slots
- Power Indicator LEDs
- Multilayer PCB
- AT/ATX Power Connector

## BPE-1413A



### Specification

- 14-Slot Bridged PICMG 1.3 Backplane
- Full-Size PICMG 1.3 CPU Slots
- (13) PCI Slots
- Power Indicator LEDs
- Multilayer PCB
- ATX Power Connector

## BP-0604P



### Specification

- 6-Slot PCI Passive Backplane
- (2) Full-Size PICMG CPU Slots
- (1) ISA Slot
- (4) PCI Slots (one shared with ISA Slot)
- Power Indicator LEDs
- Multilayer PCB
- P8/P9 Power Connectors
- ATX Power Connector
- Heavy Duty Screw Terminals for High Current Power Connection

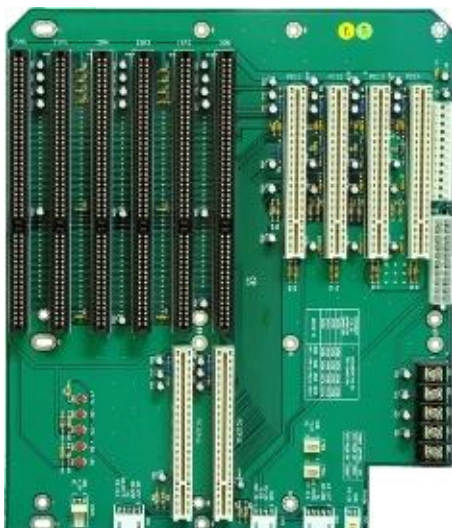
## BP-0804P



### Specification

- 8-Slot PCI Passive Backplane
- (2) Full-Size PICMG CPU Slots
- (2) ISA Slots
- (4) PCI Slots
- Power Indicator LEDs
- Multilayer PCB
- P8/P9 Power Connectors
- ATX Power Connector
- Heavy Duty Screw Terminals for High Current Power Connection

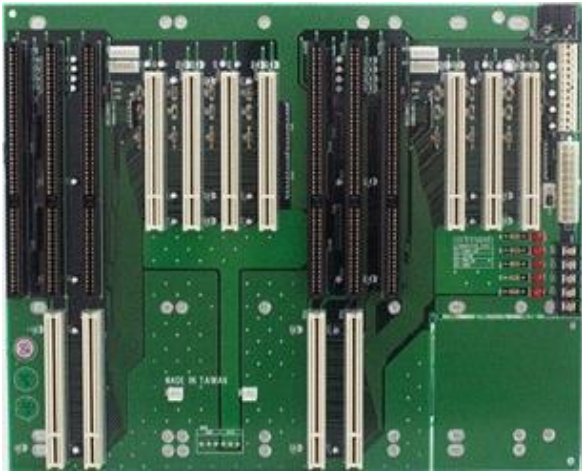
## BP-1004P



### Specification

- 10-Slot PCI Passive Backplane
- (2) Full-Size PICMG CPU Slots
- (4) ISA Slots
- (4) PCI Slots
- PICMG SLOT with 3.3V support
- Power Indicator LEDs
- Multilayer PCB
- P8/P9 Power Connectors
- ATX Power Connector
- Heavy Duty Screw Terminals for High Current Power Connection

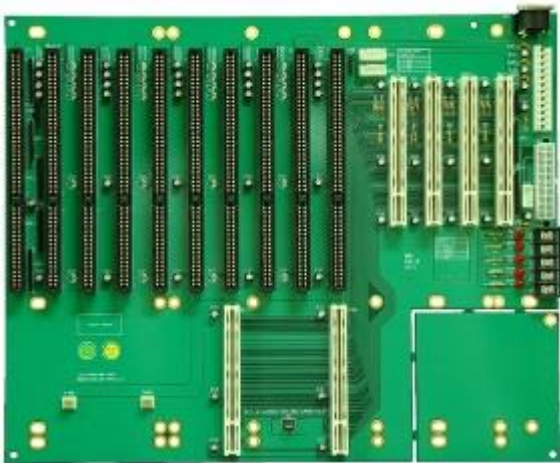
## BP-1307PS



### Specification

- 13-Slot Segmented PCI Passive Backplane
- (4) Full-Size PICMG CPU Slots,
- (2) ISA Slots
- (7) PCI Slots
- Power Indicator LEDs
- On-board 5-pin DIN Keyboard Connector
- Multilayer PCB
- P8/P9 Power Connectors
- ATX Power Connector

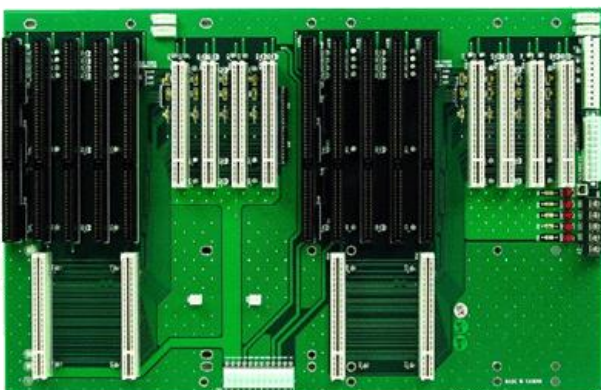
## BP-1404P



### Specification

- 14-Slot PCI Passive Backplane
- (2) Full-Size PICMG CPU Slots, (8) ISA Slots, and (4) PCI Slots
- PICMG Slot with 3.3V support
- Power Indicator LEDs
- On-board 5-pin DIN Keyboard Connector
- Multilayer PCB
- P8/P9 Power Connectors
- ATX Power Connector
- Heavy Duty Screw Terminals for High Current Power Connection

## BP-1808PS



### Specification

- 18-Slot Segmented PCI Passive Backplane
- (6) ISA slots
- (8) PCI slots
- (4) PICMG support Dual-System
- Power Indicator LEDs
- On-board 5-pin DIN Keyboard Connector
- Multilayer PCB
- P8/P9 Power Connectors
- ATX Power Connector

# PICMG 1.0 Passive Backplanes

## BP-403PA0-1U



### Specification

- 1U 3-Slot PCI Passive Backplane
- Full-Size PICMG CPU Slot
- (1) ISA Slot
- (1) PCI Slot
- 3 x Fan Connectors
- 6 x LED Indicators
- Multilayer PCB
- ATX Power Connector
- Only for RCK-103B 1U chassis

## BP-0602P-2U



### Specification

- 6-Slot 2U PCI Passive Backplane
- (2) Full-Size PICMG CPU Slots
- (2) ISA slots
- (2) PCI Slots
- Multilayer PCB
- ATX Power Connector
- Ideal Choice RCK-203B 2U Chassis

## BP-0604P-2U



### Specification

- 6-Slot 2U PCI Passive Backplane
- (2) Full-Size PICMG CPU Slots
- (4) PCI Slots
- Multilayer PCB
- ATX and AT Power Connectors
- Ideal Choice RCK-203B 2U Chassis

# PICMG 1.0 Bridged Backplanes

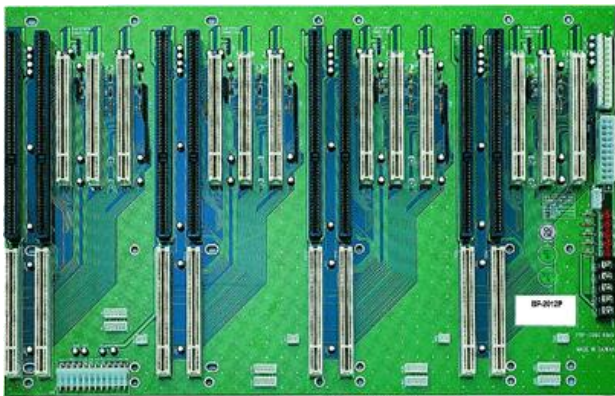
## BP-1904P



### Specification

- 19-Slot Passive Backplane
- (3) Full-Size PICMG CPU Slots
- (12) ISA Slots
- (4) PCI Slots
- Power Indicator LEDs
- Multilayer PCB
- P8/P9 Power Connectors
- ATX Power Connector
- Heavy Duty Screw Terminals for High Current Power Connection

## BP-2012PS



### Specification

- 20-Slot Segmented PCI Passive Backplane
- (8) Full-Size PICMG CPU Slots
- (12) PCI Slots
- Power Indicator LEDs
- On-board 5-pin DIN Keyboard Connector
- Multilayer PCB
- P8/P9 Power Connectors
- ATX Power Connector
- Heavy Duty Screw Terminals for High Current Power Connection

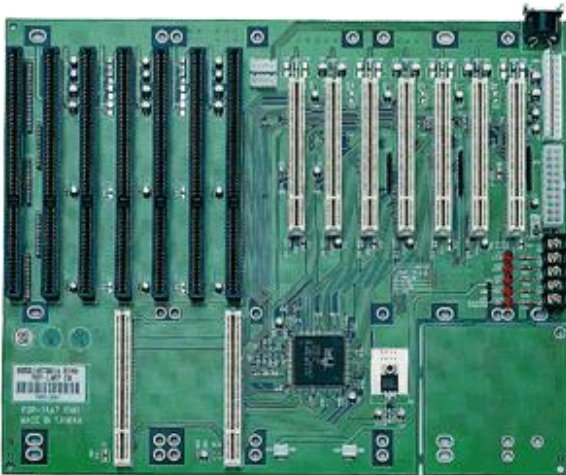
## BP-0807A



### Specification

- 8-Slot Bridged PCI Passive Backplane
- Full-Size PICMG CPU Slot
- (1) ISA Slot
- (7) PCI Slots
- Power Indicator LEDs
- On-board 5-pin DIN Keyboard Connector
- Multilayer PCB
- P8/P9 Power Connectors
- ATX Power Connector
- Heavy Duty Screw Terminals for High Current Power Connection

## BP-1407A



### Specification

- 14-Slot Bridged PCI Passive Backplane
- (2) Full-Size PICMG CPU Slots
- (5) ISA Slots
- (7) PCI Slots
- Power Indicator LEDs
- On-board 5-pin DIN Keyboard Connector
- Multilayer PCB
- P8/P9 Power Connectors
- ATX Power Connector
- Heavy Duty Screw Terminals for High Current Power Connection

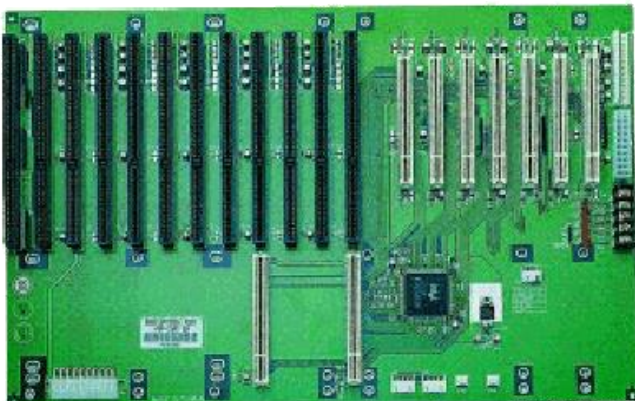
## BP-1412A



### Specification

- 14-Slot Bridged PCI Passive Backplane
- (2) Full-Size PICMG CPU Slots
- (1) ISA Slot
- (12) PCI Slots (one shared)
- Power Indicator LEDs
- On-board 5-pin DIN Keyboard Connector
- Multilayer PCB
- P8/P9 Power Connectors
- ATX Power Connector
- Heavy Duty Screw Terminals for High Current Power Connection

## BP-1907A



### Specification

- 19-Slot Bridged PCI Passive Backplane
- (2) Full-Size PICMG CPU Slots
- (10) ISA Slots
- (7) PCI Slots
- Power Indicator LEDs
- On-board 5-pin DIN Keyboard Connector
- Multilayer PCB
- P8/P9 Power Connectors
- ATX Power Connector
- Heavy Duty Screw Terminals for High Current Power Connection

## 1U Power Supply



**AC/DC 200W Power Supply  
for 1U system with PFC  
function and ATX output**



**Features**

- Compact size for 1U rackmount chassis
- AC/DC 250W with ATX output
- Input Voltage Range: 110 ~ 240V
- Output Voltage: 5V / 3.3V / 12V / -12V / 5VSB
- Safety Standard: CB, CCC, CE, TUV, UL
- EMI Standards: FCC Class B/ VCCI Class 2

**Input**

- 110 ~ 240V

**Efficiency**

- 70% minimum, at full load

**Hold Up Time**

- 20ms minimum, at full load

**Remote On/Off**

- PSON compatible signal

**Power Good**

- TTL signal compatible power good signal. Turn-on delay 100 ~ 500ms

**Cooling**

- 40mm Ball bearing fan (40x40x20 mm)

**Output Protection**

- Short circuit, overload & over voltage power protection

**MTBF**

- 100K hours at 25°C, 70% full rated load (calculated by MIL217E).

**Environment**

- Operating Temperature: 0 to 50 °C.
- Operating Humidity: 20% ~ 90% relative humidity, non-condensing at 40°C.

**EMI/RFI**

- FCC part 15, Subpart B, Class B computing devices.
- CISPR22 (EN55022) Class B.
- VCCI Class 2

**Safety**

- CB, CCC, CE, TUV, UL

**Dimension**

- 81.5 (W) x 150 (D) x 40.6 (H) mm

**Output Table**

Output Voltage	V1 +5V	V2 +3.3V	V3 +12V	V4 -5V	V5 +12V	5VSB
Max Load	30A	20A	12A	0.5A	1A	1.5A
Min Load	3A	0A	1A	0A	0A	0A
Load Regulation	+/-5%	+5/-3%	+/-5%	+/-10%	+/-10%	+/-5%
Cross Regulation	+/-5%	+5/-3%	+/-5%	+/-10%	+/-10%	+/-5%
Line Regulation	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%
Ripple	+/-1%	+/-1%	+/-1%	+/-2%	+/-2%	+/-1%
Noise	+/-1%	+/-1%	+/-1%	+/-2%	+/-2%	+/-1%

Note 1: The output of +5V and +3.3V shall not exceed 150W.

Note 2: The +12V, +5V and +3.3V total output power maximum is 234W.

Note 3: The +12 Volt output of the power supply must be capable of 15 Amps peak for 10 seconds. A +/-5% tolerance is permissible. Output voltage is measured at the load and of the out put cable.

Note 4: Noise bandwidth is from DC to 20 MHz.

Note 5: Regulation tolerance shall include temperature change, warm up drift and dynamic load

**Ordering Information**

PSA-1200AXP AC/DC 200W Power Supply For 1U chassis with ATX Output with Active PFC function



**AC/DC 250W Power Supply for 1U system with PFC function and ATX output**



**Features**

- Compact size for 1U rackmount or mini-itx chassis
- AC/DC 250W with ATX output
- Input Voltage Range: 100V~264V
- Output Voltage: 5V / 3.3V / 12V / -12V / 5VSB
- Safety Standard: CB, CE, TUV, C-UL

**Input**

- 100V ~ 264V

**Efficiency**

- 80% minimum, at full load

**Hold Up Time**

- 12ms minimum, at full load

**Remote On/Off**

- PSON compatible signal

**Power Good**

- open collector +5DC, TTL compatible
- Logic Level High: between 2.4VDC and +5V output while sourcing 200 uA

**Cooling**

- 40mm Ball bearing fan (40x40x20 mm)

**Output Protection**

- Short circuit, overload & over voltage power

**MTBF**

- Over 100,000 hours at 75% Load and 25°C ambient conditions and 115V~ or 230V~ input

**Environment**

- Operating Temperature: 0 to 50 °C.
- Operating Humidity: 20% ~ 85%

**EMI/RFI**

- Comply to CE EN50081-1(1992) ,EN55024(1998)&FCC (B)
- Comply to EN55024(1998)

**Safety**

- IEC950 (EN60950) standards: TUV, CB, C-UL

**Dimension**

- 81.5 (W) x 150 (D) x 40.5 (H) (mm)

**Output Table**

Output Voltage	+5V	+3.3V	V1 +12V	V2 +12V	-12V	5VSB
Max Load	17A	14A	8A	14A	0.8A	2.0A
Min Load	0.5A	0A	1A	1A	0A	0A
Peak Load			10A	16A		2.5A
Regulation	+/-5%	+/-5%	+/-5%	+/-5%	+/-10%	+/-5%
Ripple Reg. mV	50 mV	50 mV	120 mV	120 mV	120 mV	50 mV
Noise Reg. mV	50 mV	50 mV	120 mV	120 mV	120 mV	50 mV

1. Maximum continuous total DC output power should not exceed 250 W
2. Maximum continuous combined load on +3.3 VDC and +5 VDC outputs should not exceed 110 W.
3. Maximum continuous combined load on +12 V1DC and +12V2DC outputs should not exceed 216 W/18A.
4. Maximum peak total DC output power should be approximate 275 W.
5. Peak power and current loading should be supported for a minimum of 1 second

**Ordering Information**

**PNA-F250AXP** AC/DC 250W Power Supply For 1U chassis with ATX Output with

**AC/DC 250W Power Supply  
For 1U with PFC function and  
ATX Output**



**Features**

- Active PFC Function
- Compact size for 1U rackmount chassis
- AC/DC 250W with ATX output
- Input Voltage Range: 115 ~ 240V
- Output Voltage: 5V/3.3V/12V/-5V/-12V/5VSB
- Safety Standard: CE/FCC/UL/CB
- EMI Standards: FCC Class B/ VCCI Class 2

**Input**

- 115 ~ 240V

**Efficiency**

- 70% minimum, at full load

**Hold Up Time**

- 20ms minimum, at full load

**Remote On/Off**

- PSON compatible signal

**Power Good**

- TTL signal compatible power good signal. Turn-on delay 100 ~ 500ms

**Cooling**

- 40mm Ball bearing fan (40x40x20 mm)

**Output Protection**

- Short circuit, overload & over voltage power protection

**MTBF**

- 100K hours at 25°C, 70% full rated load (calculated by MIL217E).

**Environment**

- Operating Temperature: 0 to 50 °C.
- Operating Humidity: 20% ~ 90% relative humidity, non-condensing at 40°C.

**EMI/RFI**

- FCC part 15, Subpart B, Class B computing devices.
- CISPR22 (EN55022) Class B.
- VCCI Class 2

**Safety**

- CE, FCC, UL, CB

**Dimension**

- 100 (W) x 190 (D) x 40.5 (H) (mm)

**Output Table**

Output Voltage	V1 +5V	V2 +3.3V	V3 +12V	V4 -5V	V5 +12V	5VSB
Max Load	25A	15A	10A	0.5A	0.5A	2A
Min Load	3A	0A	1A	0A	0A	0A
Load Regulation	+/-5%	+5/-3%	+/-5%	+/-10%	+/-10%	+/-5 %
Cross Regulation	+/-5%	+5/-3%	+/-5%	+/-10%	+/-10%	+/-5 %
Line Regulation	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%
Ripple	+/-1%	+/-1%	+/-1%	+/-2%	+/-2%	+/-1%
Noise	+/-1%	+/-1%	+/-1%	+/-2%	+/-2%	+/-1%

Note 1: The output of +5V and +3.3V shall not exceed 150W.

Note 2: The +12V, +5V and +3.3V total output power maximum is 234W.

Note 3: The +12 Volt output of the power supply must be capable of 15 Amps peak for 10 seconds. A +/-5% tolerance is permissible. Output voltage is measured at the load and of the out put cable.

Note 4: Noise bandwidth is from DC to 20 MHz.

Note 5: Regulation tolerance shall include temperature change, warm up drift and dynamic load.

**Ordering Information**

**PA-1250AXP** AC/DC 250W Power Supply For 1U chassis  
with ATX Output and Active PFC Function

**AC/DC 300W Switching Power Supply with PFC Function and ATX Output**



**Features**

- Active PFC Function
- Compact size for 1U rackmount chassis
- AC/DC 300W with ATX output
- Input Voltage Range: 115 ~ 240V
- Output Voltage: 5V/3.3V/12V/-5V/-12V/5VSB
- Safety Standard: CE/FCC
- EMI Standards: FCC Class B/ VCCI Class 2

**Input**

- 115 ~ 240V

**Efficiency**

- 70% minimum, at full load

**Hold Up Time**

- 20ms minimum, at full load

**Remote On/Off**

- PSON compatible signal

**Power Good**

- TTL signal compatible power good signal. Turn-on delay 100 ~ 500ms

**Cooling**

- 40mm Ball bearing fan (40x40x20 mm)

**Output Protection**

- Short circuit, overload & over voltage power protection

**MTBF**

- 100K hours at 25°C, 70% full rated load (calculated by MIL217E).

**Environment**

- Operating Temperature: 0 to 50 °C.
- Operating Humidity: 20% ~ 90% relative humidity, non-condensing at 40°C.

**EMI/RFI**

- FCC part 15, Subpart B, Class B computing devices.
- CISPR22 (EN55022) Class B.

**Safety**

- CE, FCC

**Dimension**

- 100 (W) x 215 (D) x 40.5 (H) (mm)

**Output Table**

Output Voltage	V1 +5V	V2 +3.3V	V3 +12V	V4 -5V	V5 +12V	5VSB
Max Load	30A	20A	12A	0.5A	1A	1.5A
Min Load	3A	0A	1A	0A	0A	0A
Load Regulation	+/-5%	+5/-3%	+/-5%	+/-10%	+/-10%	+/-5%
Cross Regulation	+/-5%	+5/-3%	+/-5%	+/-10%	+/-10%	+/-5%
Line Regulation	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%
Ripple	+/-1%	+/-1%	+/-1%	+/-2%	+/-2%	+/-1%
Noise	+/-1%	+/-1%	+/-1%	+/-2%	+/-2%	+/-1%

Note 1: The output of +5V and +3.3V shall not exceed 150W.

Note 2: The +12V, +5V and +3.3V total output power maximum is 278W.

Note 3: The +12 Volt output of the power supply must be capable of 16 Amps peak for 10 seconds. A +/-5% tolerance is permissible. Output voltage is measured at the load and of the out put cable.

Note 4: Noise bandwidth is from DC to 20 MHz.

Note 5: Regulation tolerance shall include temperature change, warm up drift and dynamic load

**Ordering Information**

**PA-1300AXP** AC/DC 300W Power Supply For 1U chassis with ATX Output with Active PFC function

**460W 1U AC/DC Power Supply with high efficiency, active PFC function and ATX output**

**Features**

- High efficiency  $\geq 86\%$
- Compact size for 1U Rackmount or Mini-ITX chassis
- 460W AC/DC with ATX output
- Input Voltage Range: 100V~240V,  $\pm 10\%$
- Output Voltage: 5V / 3.3V / 12V / -12V / 5VSB
- Safety Standard: UL cUL, TUV

**Input**

- 100V ~ 240V,  $\pm 10\%$

**Efficiency**

- $\geq 86\%$  at 115VAC, at full load

**Hold Up Time**

- 16ms minimum, at max load & normal input

**Remote On/Off**

- PSON compatible signal

**Power Good**

- TTL compatible signal

**Cooling**

- 40x40mm DC fan

**Output Protection**

- Short circuit, Overload & Over voltage power

**MTBF**

- Over 100,000 hours at 75% Loading and 25°C ambient temperature

**Environment**

- Operating Temperature: 0 to 45 °C.
- Humidity: 5% ~ 90% non condensing



**EMI/RFI**

- FCC Class A, CISPR22 Class A
- Comply to EN61000-3-2

**Safety**

- UL, cUL, TUV

**Dimension**

- 100(W) x 200(D) x 40.5(H) (mm)

**Output Table**

Output Voltage	+5V	+3.3V	+12V	-12V	+5VSB
Output Current (max)	25A	25A	34A	0.8A	3.5A
Output Current (min)	0.5A	0.5A	2A	0A	0.1A
Ripple/Noise Max	60mV	60mV	120mV	120mV	60mV
Line Regulation	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
Load Regulation	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$

1. Noise Test – Noise bandwidth is from DC to 20MHz.
2. Ripple frequencies greater than 1MHz shall be attenuated by the measurement System.
3. Add 0.1uF/10uF capacitor at output connector terminals for ripple and noise measurement.
4. The combined total power from 5V & 3.3V shall not exceed 160W.
5. Ripple/Noise max measured peak to peak.

**Ordering Information**

- PI-1460P** 460W AC/DC PSU for 1U chassis with active PFC function and ATX output
- PI-1400P** 400W AC/DC PSU for 1U chassis with active PFC function and ATX output\*
- PI-1520P** 520W AC/DC PSU for 1U chassis with active PFC function and ATX output\*

\* Separate datasheets available for 400W and 520W output PSU

## Mini Redundant Power Supply



## AC/DC 400W Hot Swap Redundant Power Supply with PFC Function and ATX Output

### Features

- Short circuit, Overload, Over voltage protection
- LED indicator for Power System Fault Signal
- Safety standard to meet: UL/TUV/CE / CCC/CB
- EMI Standard: FCC Part 15, Subpart B, Class B / CISPR 22 (EN 55022) Class B

### Input

- 100-240Vac 47~63 Hz

### Efficiency

- $\geq 73\%$  at full load

### Hold Up Time

- 16msec (minimum)

### Remote On/Off

- PSON compatible signal

### Power Good

- TTL compatible signal

### Cooling

- 40 x 40 x 10 mm fan (magnetic floating bearing)

### Output Protection

- Short circuit, overload & over voltage power protection

### MTBF

- 100K hours at 25°C

### Environment

- Operating Temperature: 0 to 50 °C.
- Operating Humidity: 5% ~ 90% relative humidity & non-condensing



### EMI/RFI

- FCC Part 15 .Class B.
- CISPR 22 (EN 55022) Class B

### Safety

- TUV, CUL, UL, CCC, CE

### Dimension

- 150 (W) x 200 (D) x 86 (H) mm

### Output Table

Output Voltage	+5V	+3.3V	+12V	-12V	+5Vsb
Max Load	25A	25A	28A	0.8A	2A
Min Load	3A	0.3A	2A	0.1A	0.1A
DC Max Power	300W				
Load Regulation	+/-5%	+/-5%	+/-5%	+/-10%	+/-5%
Ripple Reg. mV	50 mV	50 mV	120 mV	120 mV	50 mV
Noise Reg. mV	50 mV	50 mV	120 mV	120 mV	50 mV

Note 1: The combined total power +5V and +3.3V shall not exceed 150 W. 2. Add 0.1uF/10uF capacitors at output terminals for ripple and noise measurements.

### Ordering Information

**SS-400R8P**

AC/DC 400W ATX Hot Swap  
Redundant Power Supply

## AC/DC 500W Hot Swap Redundant Power Supply with PFC Function and ATX Output

### Features

- Short circuit, Overload, Over voltage protection
- LED indicator for Power System Fault Signal
- Safety standard to meet: UL/TUV/CCC/IEC
- EMI Standard: FCC Part 15, Subpart B, Class A / CISPR 22 (EN 55022) Class B

### Input

- 100-240Vac 47~63 Hz

### Efficiency

- Minimum 80% at full load and 115V/60Hz input

### Hold Up Time

- 16ms minimum

### Remote On/Off

- PSON compatible signal

### Power Good

- TTL signal compatible signal

### Cooling

- 40 x 40 x 10 mm fan (magnetic floating)

### Output Protection

- Short circuit, overload & over voltage power protection

### MTBF

- 100K hours at 25°C

### Environment

- Operating Temperature: 0 to 50 °C.
- Operating Humidity: 0% ~ 95% relative humidity & non-condensing



### EMI/RFI

- FCC Part 15, Subpart B, Class A
- CISPR 22 (EN 55022) Class B

### Safety

- TUV, CUL, UL, CCC

### Dimension

- 150 (W) x 200 (D) x 86 (H) mm

### Output Table

Output Voltage	+5V	+3.3V	+12V	-12V	+5Vsb
Max Load	25A	25A	41A	0.8A	3.5A
Min Load	1A	1A	1A	0A	0.5A
Load Regulation	+/-5%	+/-5%	+/-5%	+/-10%	+/-5%
Ripple Reg. mV	50 mV	50 mV	120 mV	120 mV	50 mV
Noise Reg. mV	60 mV	60 mV	120 mV	120 mV	50 mV

Note 1: The combined total power +5V and +3.3V shall not exceed 170 W. 2. Add 0.1uF/10uF capacitors at output terminals for ripple and noise measurement.

### Ordering Information

<b>R4B-500G1V2</b>	AC/DC 500W ATX Hot Swap Redundant Power Supply
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## AC/DC 1350W Hot Swap 3+1 Redundant Power Supply with PFC Function and ATX Output

### Features

- Short circuit, overload, over voltage protection
- Power System Fault Signal and Audible Alarm
- Input Voltage 100~240V AC Full Range
- Safety Standard to meet: UL/TUV/CSA
- EMI standards: FCC Class A / CISPR22 Class A

### Input

- 100~240V (Auto-sensing)

### Efficiency

- 65% minimum, at 115V full load

### Hold Up Time

- 16ms minimum in regular limitation at 90VAC

### Remote On/Off

- PSON compatible signal

### Power Good

- TTL signal compatible power good signal. Turn-on delay 100 ~ 500ms

### Cooling

- 40mm Ball bearing fan (40 x 40 x10 mm)

### Output Protection

- Short circuit, overload & over voltage power protection. Power Fault Warning with front panel status LED and audible alarm

### MTBF

- 233,535 hours at 25°C

### Environment

- Operating Temperature: 0 to 40 °C.
- Operating Humidity: 10% ~ 90% relative humidity & non-condensing



### EMI/RFI

- FCC Class A
- CISPR22 (EN55022) Class A

### Safety

- UL, TUV, CSA

### Dimension

- 426 (W) x 340 (D) x 42 (H) mm

### Output Table

Output Voltage	V1 +5V	V2 +3.3V	V3 +12V	V4 -5V	V5 -12V	5VSB
Max Load	84.5A	67.5A	90A	1.2A	1.2A	3.5A
Min Load	6A	3.5A	6A	0.2A	0.2A	0.4A
Regulation	+/-5%	+/-5%	+/-6%	+5/ -10%	+5/ -10%	+5/-6%
Ripple(mV)	70	70	120	120	120	70

Note 1: Power module total current of +5V and +3.3V can not exceed 40A

Note 2: Power module total output can not exceed 500W

Note 3: Total power output 3+1=1350W

### Ordering Information

<b>M1W4-6D50P</b>	AC/DC 1350W ATX Hot Swap 3+1 Redundant Power Supply
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## AC/DC 120W 1U Redundant Power Supply with Active PFC and ATX Output

### Features

- Short circuit, Overload, Over voltage protection
- LEC indicator for Power System Fault Signal
- Safety standard to meet: UL/TUV/CCC/CUL
- EMI Standard: FCC Part 15 Class B / CISPR 22 (EN 55022) Class B

### Input

- 90~127Vac (115V), 180-240Vac (220V) 47~63

### Efficiency

- 86% (Each power unit)

### Hold Up Time

- 16ms minimum

### Remote On/Off

- PSON compatible signal

### Power Good

- TTL signal compatible signal

### Cooling

- 40 x 40 x 10 mm active fan

### Output Protection

- Short circuit, overload & over voltage power protection

### MTBF

- 273,688 hours at 25°C

### Environment

- Operating Temperature: 0 to 50 °C.
- Operating Humidity: 20% ~ 80% relative humidity & non-condensing



### EMI/RFI

- FCC Part 15, Subpart B, Class A
- CISPR 22 (EN 55022) Class B

### Safety

- TUV, CUL, UL, CCC

### Dimension

- 215 (W) x 106 (D) x 41.5 (H) mm

### Output Table

Output Voltage	+5V	+3.3V	V1 +12V	-12V	+5VSB
Max Load	10A	10A	10A	0.3A	3A
Min Load	0A	0A	2A	0A	0.1A
Max Power	80W				
	120W				
Load Regulation	+/-5%	+/-5%	+/-5%	+/-5%	+/-5%
Ripple Reg. mV	50 mV	50 mV	120 mV	120 mV	50 mV
Noise Reg. mV	50 mV	50 mV	120 mV	120 mV	50 mV

Note 1: Maximum continuous total DC output power should not exceed 120 W. 2. Maximum continuous combined load on +12 VDC 10A.

### Ordering Information

R1T2-5120VOHP AC/DC 120W ATX 1U Redundant PSU

## PS/2 Power Supply



**AC/DC 400W PS/2 Type Power Supply with PFC Function and ATX Output**



**Features**

- 400W Active PFC, Meet Intel ATX 12V v2.3
- High efficiency and reliability
- Low ripple and noise
- Complies with EN61204-3:2000, & FCC Part 15 & Part 2 (CISPR 22 CLASS B)

**Input**

- 90~264Vac, 47~63 Hz

**Efficiency**

- 82% ~ 85%
- 80 PLUS Bronze Compliant

**Hold Up Time**

- 10msec (minimum)

**Remote On/Off**

- PSON compatible signal

**Power Good**

- TTL compatible signal

**Cooling**

- 80 x 80 x 25 mm active fan, 34 CFM, <35dB

**Output Protection**

- Short circuit, overload & over voltage power protection

**MTBF**

- 100K hours at 25°C

**Environment**

- Operating Temperature: 0 to 50 °C.
- Operating Humidity: 20% ~ 80% relative humidity

**EMI/RFI**

- FCC Part 15 & Part 2 (CISPR 22 CLASS B)
- EN61204-3:2000
- GB4943-2001

**Safety**

- TUV, CUL, CB

**Dimension**

- 150 (W) x 140 (D) x 86 (H) mm

**Output Table**

Output Voltage	+5V	+3.3V	V1 +12V	V2 +12V	-12V
Max Load	20A	20A	17A	17A	0.8A
Min Load	0.3A	0.5A	1A	1A	0A
Max Power	130W				
	27A/ 324W				
Peak Load			20A	20A	
Regulation	+/-1%	+/-1%	+/-1%	+/-1%	+/-2%
Ripple Reg. mV	50 mV	50 mV	120 mV	120 mV	120 mV
Noise Reg. mV	50 mV	50 mV	120 mV	120 mV	120 mV

Note 1: Maximum continuous total DC output power should not exceed 400 W. 2. Maximum continuous combined load on +3.3 VDC and +5 VDC outputs should not exceed 130 W. 3. Maximum continuous combined load on +12V1DC&+12V2DC outputs should not exceed 30A/360W. 4. Maximum peak total DC output power should not exceed 440 W. 5. Peak power and current loading should be supported for a minimum of 1 second

**Ordering Information**

**PNA-400AXP** AC/DC 400W ATX PS/2 Type PSU

**AC/DC 600W PS/2 Type Power Supply with PFC Function and ATX Output**



**Features**

- 600W Active PFC, Meet Intel ATX 12V v2.3
- High efficiency and reliability
- Low ripple and noise
- Complies with EN61204-3:2000, & FCC Part 15 & Part 2 (CISPR 22 CLASS B)

**Input**

- 90~264Vac, 47~63 Hz

**Efficiency**

- 82% ~ 85%
- 80 PLUS Bronze Compliant

**Hold Up Time**

- 10msec (minimum)

**Remote On/Off**

- PSON compatible signal

**Power Good**

- TTL compatible signal

**Cooling**

- 80 x 80 x 25 mm active fan, 41.5 CFM, <38.2dB

**Output Protection**

- Short circuit, overload & over voltage power protection

**MTBF**

- 100K hours at 25°C

**Environment**

- Operating Temperature: 0 to 50 °C.
- Operating Humidity: 20% ~ 80% relative humidity

**EMI/RFI**

- FCC Part 15 & Part 2 (CISPR 22 CLASS B)
- EN61204-3:2000,
- GB9254-1998, GB17625.1-2003 standards, C-TICK

**Safety**

- TUV, CUL, CB, CCC

**Dimension**

- 150 (W) x 140 (D) x 86 (H) mm

**Output Table**

Output Voltage	+5V	+3.3V	V1 +12V	V2 +12V	-12V	5VSB
Max Load	24A	24A	24A	24A	0.8A	2.5A
Min Load	0.2A	0.1A	0.1A	0.5A	0A	0A
Max Power	130W					
	46A/ 552W					
Peak Load			27A	27A		3.0A
Regulation	+/-1%	+/-1%	+/-1%	+/-1%	+/-2%	+/-1%
Ripple Reg. mV	50	50	120	120	120	50
	mV	mV	mV	mV	mV	mV
Noise Reg. mV	50	50	120	120	120	50
	mV	mV	mV	mV	mV	mV

Note 1: Maximum continuous total DC output power should not exceed 600 W. 2. Maximum continuous combined load on +3.3 VDC and +5 VDC outputs should not exceed 130 W. 3. Maximum continuous combined load on +12V1DC&+12V2DC outputs should not exceed 46A/552W. 4. Maximum peak total DC output power should not exceed 660 W. 5. Peak power and current loading should be supported for a minimum of 1 second

**Ordering Information**

**PNA-600XP** AC/DC 600W ATX PS/2 Type PSU

**Micro-ATX AC/DC 300W  
Switching Power Supply with  
ATX Output**



**Features**

- Micro-ATX AC/DC 300W Switching Power Supply
- Active PFC Function, PFC>0.95 full load.
- Smart Silent Fan Control, Noise< 35dBA
- Double Ball Bearing Fan, CFM>30
- Input Voltage Range: 110~240VAC Full Range
- Reset After Shut Down within 20ms

**Input**

- 115V ~ 230V, maximum 264V

**Efficiency**

- 81.3% @60W; 83.8% @149W; 80.8% @296W output
- 80 PLUS Compliant

**Hold Up Time**

- 16ms min. at 80% of full load, at 230AC input

**Remote On/Off**

- PSON compatible signal

**Power Good**

- Turn-on delay 100 ~ 500ms

**Cooling**

- 80 x 80 x 25 mm active fan

**Output Protection**

- Short circuit, overload & over voltage power protection

**MTBF**

- 100K hours at 25°C, 75% load in 115V ~ 230V

**Environment**

- Operating Humidity: 20% ~ 85% relative humidity

**EMI/RFI**

- CE EN50081-1, EN55024 & FCC (B) regulation, C Tick
- EN55024
- EN61000-3-2
- BSMI Class B

**Safety**

- IEC950 (EN60950); TUV, CB, C-UL, S

**Dimension**

- 100 (W) x 125 (D) x 76.8 (H) mm

**Output Table**

Output Voltage	+5V	+3.3V	V1 +12V	V2 +12V	-12V	5VSB
Max Load	20A	20A	8A	14.5A	0.8A	2A
Min Load	0.3A	0.5A	1A	1A	0A	0A
Max Power	125W		270W			
Peak Load			10A			2.5A
Regulation	+/-5%	+/-5%	+/-5%	+/-5%	+/-10%	+/-5%
Ripple Reg. mV	50 mV	50 mV	120 mV	120 mV	150 mV	50 mV
Noise Reg. mV	50 mV	50 mV	120 mV	120 mV	150 mV	50 mV

Note 1: Maximum continuous total DC output power should not exceed 300W. 2. Maximum continuous combined load on +3.3 VDC and +5 VDC outputs should not exceed 125W. 3. Maximum continuous combined load on +12V1DC&+12V2DC outputs should not exceed 270W. 4. Maximum peak total DC output power should not exceed 330W. 5. Peak power and current loading should be supported for a minimum of 1 second

**Ordering Information**

PNA- AC/DC 300W ATX PSU

**400W MicroATX Power Supply with active PFC and ATX output**



**Features**

- 400W MicroATX AC/DC PSU with ATX output
- Short circuit, Over-Voltage and Over-Current protection
- Safety standard to meet: CB/UL/TUV
- EMI Standard: FCC Part 15, Subpart B, Class B / EN55022, AS/NZS

**Input**

- 90~135Vac(115V), 180-265Vac(230V), 47~63 Hz

**Efficiency**

- 85%
- 80 PLUS Bronze Certified

**Hold Up Time**

- 24msec (minimum)

**Remote On/Off**

- PSON compatible signal

**Power Good**

- TTL compatible signal

**Cooling**

- 80mm sleeve-bearing fan with Thermal sensor

**Output Protection**

- Short circuit, Over-Voltage and Over-Current protection

**MTBF**

- >100,000 hours at ambient temperature 25°C

**Environment**

- Operating Temperature: 10 to 50 °C.
- Operating/Storage Humidity: 5%~95%RH relative humidity & non-condensing

**EMI/RFI**

- FCC Part 15, Subpart B, Class B. CISPR 22: 1997, Class B
- EN55022: 2006+A1: 2007, Class B.

**Safety**

- CB: IEC 60950~1:2005 (2<sup>nd</sup> edition) / EN 60950~1
- UL 60951-1 , 2nd Edition, 2007-03-27
- TUV: EN 60950-1:2006+All

**Dimension**

- 125 (W) x 100 (D) x 63.5 (H) mm

**Output Table**

Output	+5V	+3.3V	+12V1	+12V2	-12V	+5VSB
Min Load	0.2A	0.1A	0.1A	0.5A	0A	0A
Normal Load	11A	10.5A	9A	9A	0.25A	1.25A
Max Load	22A	21A	17A	16A	0.5A	2.5A
Peak Load				19A		3.5A
Line Reg.	±1%	±1%	±1%	±1%	±1%	±1%
Load Reg.	±5%	±5%	±5%	±5%	±10%	±5%
Ripple&Nois e	70mV	70mV	140mV	140mV	140mV	70mV

1. +3.3V & 5V total output not exceed 120W
2. Total output continuous shall not exceed 400W
3. +12V2 Peak current is 19A (less than 10ms), minimum voltage during peak is >10.8Vdc
4. 5Vsb Peak current is 3.5A (less than 500ms), minimum voltage during

**Ordering Information**

**FPA-** 400W MicroATX PSU with active  
**M400AXP** PFC and

## Micro-ATX DC 300W Switching Power Supply with ATX Output

### Features

- 300W DC/DC PS2 ATX power supply with P4 connector
- Input Voltage Range: +19VDC ~ 32VDC
- Suitable for vehicle application
- Fully isolated primary and secondary ground.
- MTBF>116,000hr. MIL-217F at 40°C full load

### Input

- +19VDC ~ 32VDC

### Efficiency

- 65% ~ 76.82%

### Remote On/Off

- PSON compatible signal

### Power Good

- TTL signal compatible power good signal. Turn-on delay 100 ~ 500ms

### Cooling

- 80mm Fan

### Output Protection

- Short circuit, overload & over voltage power

### MTBF

- MTBF>116,000hr. MIL-217F at 40°C full load

### Environment

- Operating Temperature: -20°C~70°C(derating from 30°C)
- Operating Humidity: 5% ~ 95%RH, non-condensing



### EMI/RFI

- FCC part 15, Subpart B, Class B computing devices
- CISPR22 (EN55022) Class B

### Safety

- UL60950-1 and EN60950-1 approved
- TUV, EN 60950-1

### Dimension

- 150 (W) x 140 (D) x 86 (H) (mm)

### Output Table

Output Voltage	+5V	+3.3V	+12V	-12V	-5V	5VSB
Max Load	30A	15A	15A	2A	2A	1.2A
Min Load	2A	0A	0.1A	0A	0A	0A
Max Power	150W					
Peak Load						
Line Regulation	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%
Ripple Reg. mV	50 mV	50 mV	100 mV	100 mV	50 mV	100 mV
Noise Reg. mV	50 mV	50 mV	100 mV	100 mV	50 mV	100 mV

Note 1: The maximum total combined output power on the +3.3V and +5V rail is 150W.

Note 2: The total DC continuous power shall be kept within 300W ambient temperature of 30°C below, and input voltage at +24V ~ +32V. When input voltage is +19V ~ +23V the total DC continuous power shall be kept within 250W.

### Ordering Information

PGA- DC 24V 300W ATX PS/2 Type  
300AX- Power Supply

## Open Frame Power Supply





## AC/DC 80W Open Frame Power Supply



### Features

- Compact size with ATX output
- Supports 60W convection cooling
- Input Voltage Range: 90 ~ 264V
- Output Voltage: 5V / 3.3V / 12V / -12V / 5VSB
- Safety Standard: UL, CB, TUV
- EMI Standards: FCC Class B/ CISPR22 Class B

### Input

- 90 ~264V

### Efficiency

- 70% minimum at full load, 115Vac input

### Hold Up Time

- 20ms minimum at full load, 230Vac input

### Remote On/Off

- PSON compatible signal

### Power Good

- TTL signal compatible power good signal. Turn-on delay 100 ~ 500ms

### Cooling

- 80W with 8.6CFM air-cooling, 60W for convection cooling

### Output Protection

- Short circuit, overload & over voltage power protection

### MTBF

- 130K hours at 25°C, 70% full rated load (calculated by MIL217F).

### Environment

- Operating Temperature: 10°C to 50°C at full loading
- Operating Humidity: 5% ~ 95%RH, non-condensing

### EMI/RFI

- FCC part 15, Subpart B, Class B computing devices
- CISPR22 (EN55022) Class B

### Safety

- UL, UL 60950, 3rd edition
- CB, IEC 60950-1, TUV, EN 60950-1: 2001

### Dimension

- 81 (W) x 128 (D) x 40 (H) (mm)

### Output Table

Output Voltage	V1	V2	V3	V5	5VSB
	+5V	+3.3V	+12V	-12V	5VSB
Max Load	8A	6A	3A	0.5A	0.75A
Min Load	0.5A	0A	0A	0A	0A
Load Regulation	+/-2%	+/-4%	+/-4%	+/-5%	+/-4%
Line Regulation	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%
Ripple	50 mV	50 mV	120 mV	120 mV	120 mV
Noise	50 mV	50 mV	120 mV	120 mV	120 mV

Note 1: The maximum total combined output power on the +3.3V and +5V rail is 40W.

Note 2: Measured by a 20MHz bandwidth limited oscilloscope and the each output is connected with a 10µF Electrolytic Capacitor and a 0.1µF Ceramic Capacitor.

Note3: The +5V output is set between 5.08V to 5.13V by variable resistor and all output at 60% rated load and the other outputs are checked to be within the accuracy range.

Note4: Total maximum load cannot exceed 80W with 8.6 CFM forced air-cooling and 60W convection cooling.

### Ordering Information

**PGA-U080AX** AC/DC 80W Open Frame ATX Power Supply

## AC/DC 120W Open Frame Power Supply

### Features

- Compact size with ATX output
- Supports fanless for 85W
- Input Voltage Range: 90 ~ 260V
- Output Voltage: 5V / 3.3V / 12V / -12V / 5VSB
- Safety Standard: UL, CB, TUV, IEC 60950-1, EN 60950-1
- EMI Standards: FCC Class B / CISPR22 Class B

### Input

- 90 ~260V

### Efficiency

- 70% minimum at full load

### Hold Up Time

- 16ms minimum at full load, 115Vac input

### Remote On/Off

- PSON compatible signal

### Power Good

- TTL signal compatible power good signal. Turn-on delay 100 ~ 500ms

### Cooling

- 120W with 8.6CFM forced air-cooling, 85W for fanless

### Output Protection

- Short circuit, overload & over voltage power protection

### MTBF

- 130K hours at 25°C, 70% full rated load (calculated by MIL217F).

### Environment

- Operating Temperature: 0°C to 50°C at full loading



### EMI/RFI

- FCC Class B
- CISPR22 (EN55022) Class B

### Safety

- UL, CB, TUV,
- IEC 60950-1, EN 60950-1

### Dimension

- 83.8 (W) x 152.4 (D) x 40 (H) (mm)

### Output Table

Output Voltage	V1 +5V	V2 +3.3V	V3 +12V	V5 -12V	5VSB
Max Load	14A	6A	3A	1A	0.75A
Min Load	1A	0A	0A	0A	0A
Load Regulation	+/-2%	+/-5%	+7/-3%	+8/-3%	+/-4 %
Line Regulation	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%
Ripple	50 mV	50 mV	120 mV	200 mV	120 mV
Noise	50 mV	50 mV	120 mV	200 mV	120 mV

Note 1: The maximum total combined output power on the +3.3V and +5V rail is 70W.

Note 2: Measured by a 15MHz bandwidth limited oscilloscope and the each output is connected with a 0.47μF Capacitors

Note3: The +5V output is set between 5.08V to 5.13V by variable resistor and all output at 60% rated load and the other outputs are checked to be within the accuracy range.

Note4: Total maximum load cannot exceed 120W with 8.6 CFM forced air-cooling.

### Ordering Information

**PGA-U120AX** AC/DC 120W Open Frame ATX Power Supply

## Accessories



1U height, ruggedized Keyboard Drawer with Touchpad for 19" rack cabinet application, EIA-310C industrial standard

Industrial grade steel housing

119-key Keyboard

Easy to operate Touchpad

1U Rackmountable Keyboard drawer with Handle



## Specification

### Construction

- Standard Rackmount 1U 19" Heavy Duty Steel

### Color

- Black

### Keyboard & Mouse

- USB type 119-key keyboard and touchpad. (two USB ports required)

### Drawer Design

- Handpad for comfortable typing

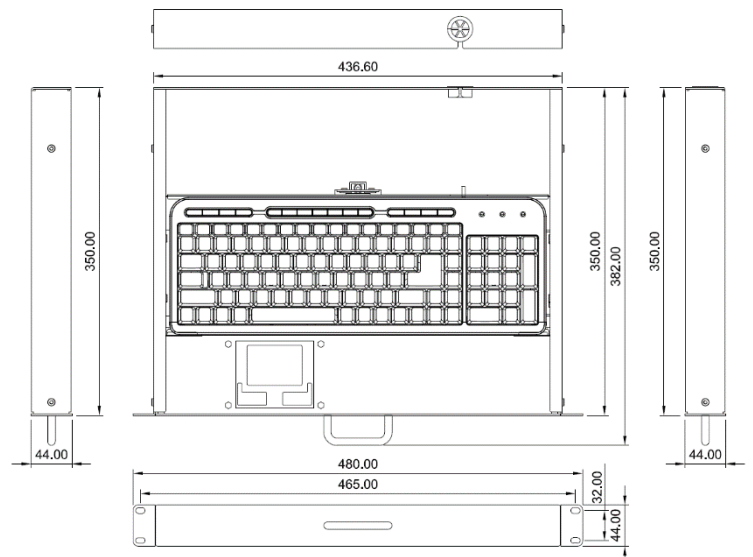
### Dimension

- 436.6 (W) x 350 (D) x 44 (H) mm

### Gross Weight

- 8Kgs

## Mechanical Drawing



## Ordering Information

**KD-100R-BLK**

1U Keyboard Drawer with USB Touchpad and keyboard, black color

[www.aicsys.com](http://www.aicsys.com)