PCI Bus Expansion Chassis
Short size, 2-Slots
ECH-PCI-BE3-H2B
Short size, 4-Slots
ECH-PCI-BE3-H4B
Long size, 4-Slots
ECH-PCI-BE3-F4B

ECH-PCI-BE3-H2B



ECH-PCI-BE3-H4B



ECH-PCI-BE3-F4B



This product is an expansion chassis that adds expansion slots to a PC. Connecting an optional expansion adaptor (EAD(PCI)BE, EAD(LPCI)BE, EAD-BE-LPE) can add PCI bus slots onto the PC.

The installable card types are different depending on the chassis models, ECH-PCI-BE3-H2B, ECH-PCI-BE3-H4B are short-type [176.5 (L) x 107 (H) mm] PCI bus cards, ECH-PCI-BE3-F4B are long-type [313.8 (L) x 107 (H) mm] PCI bus cards.

As your PC is turned ON or OFF, the expansion chassis can also be turned ON or OFF, accordingly.

* Specifications, color and design of the products are subject to change without notice.
* The contents in this document are subject to change without notice.
* Visit the CONTEC website to check the latest details in the document.
* The information in the data sheets is as of June, 2026.

Features

PCI (5V/32bit 33MHz) bus slots can be added to your PC.
PCI bus slots (5V/32bit 33MHz) can be added to ECH-PCI-BE3-xxB.
- ECH-PCI-BE3-H2B can add two PCI bus slots.
- ECH-PCI-BE3-H4B and ECH-PCI-BE3-F4B can add four PCI bus slots.

This expansion chassis is connected to a PC using an optional expansion adapter.

PCI bus cards can be connected.
You can connect short-type [176.5 (L) x 107 (H) mm] PCI bus cards.
ECH-PCI-BE3-H2B can connect two PCI bus cards.
ECH-PCI-BE3-H4B can connect four PCI bus cars.
You can connect short-type [176.5 (L) x 107 (H) mm] and long-type [313.8(L) x 107 (H) mm] PCI bus cards.
ECH-PCI-BE3-F4B can connect four PCI bus cards.

Power-ON/OFF control of the expansion chassis can be linked to that of your PC.
As your PC is turned ON or OFF, the expansion chassis can also be turned ON or OFF, accordingly.

The compact design of the cabinet with a built-in cooling fan enables space-saving system construction.
Since the cabinet contains a built-in cooling fan, which achieves a compact design, you can build a system even in a limited space next to your PC.

A wide range of power supplies (10.8 - 31.2VDC) supported
As the product supports a wide range of power supplies (10.8 - 31.2VDC), the chassis can be used in a variety of power environments.

Specifications

Function specification < 1 / 2 >

Item	ECH-PCI-BE3-H2B	ECH-PCI-BE3-H4B	ECH-PCI-BE3-F4B
Compatible bus	PCI Local Bus Specification Rev2.2 (+5V type)		
Address space	32-bit memory address, I/O address		
Interrupt level	INTA - INTD		
Bus operating clock	33MHz (Max.)		
Number of user-available slots	2 slots (short size)	4 slots (short size)	4 slots (long size)
Acceptable card sizes (mm)	176.5(L) x 107(H)		313.8(L) x 107(H)
Expansion slot supplied power (The output current must not exceed the value on the right.)	+5VDC 7A (Max.) +3.3VDC 3A (Max.) +12VDC 1.5A (Max.) -12VDC 0.3A (Max.)	+5VDC 11.3A (Max.) +3.3VDC 6A (Max.) +12VDC 2A (Max.) -12VDC 0.5A (Max.)	
Maximum total power capacity	66.5W	106.3W *1 *2	
Power supply			
Rated input voltage	12 - 24VDC		
Range of input voltage	10.8 - 31.2VDC		
Current consumption *3	12VDC 8A (Max.), 24VDC 4A (Max.)	12VDC 13A (Max.), 24VDC 6A (Max.)	
Physical dimensions (mm)	88.0(W) x 144.0(H) x 248.0(L) (No protrusions)	129.0(W) x 144.0(H) x 248.0(L) (No protrusions)	129.0(W) x 144.0(H) x 358.0(L) (No protrusions)
Weight	1.6 kg	2.0 kg	2.5 kg

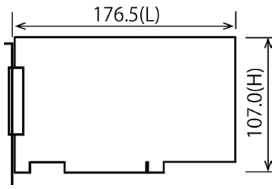
*1 When the input voltage is used at 12V, 0 - 25°C : 106.3W, 25 - 50°C : 83W.

*2 When using the optional AC adaptor PWA-160AWD2, it is 0 - 40°C : 106.3W, 40 - 50°C : 100W.

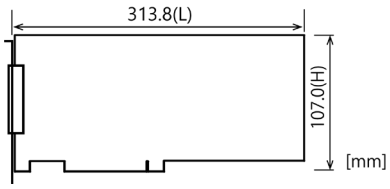
*3 This is the amount of current consumed when supplying the expansion slots with the maximum total power capacity.

Outside dimensions of acceptable card (Max.)

< ECH-PCI-BE3-H2B、ECH-PCI-BE3-H4B >



< ECH-PCI-BE3-F4B >

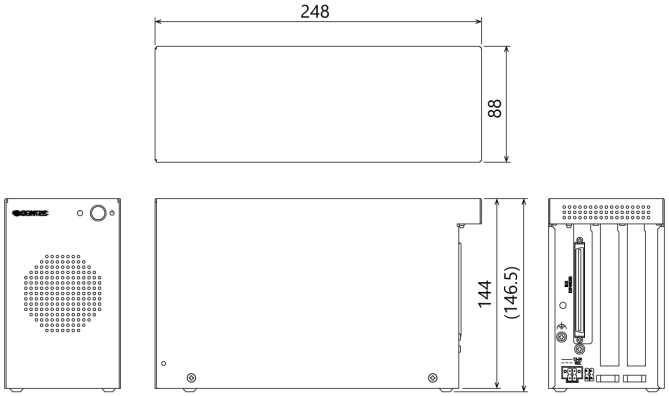


Environmental specifications

Item		Specification
Operating temperature		0 - 50ºC
Operating humidity		20 - 80%RH (No condensation)
Storage temperature		0 - 60ºC
Storage humidity		10 - 90%RH (No condensation)
Floating dust particles		Not to be excessive
Corrosive gases		None
Line-noise resistance	Line noise	AC line / ±2kV Signal line / ±1kV (IEC61000-4-4 Level 3, EN61000-4-4 Level 3)
	Static electricity resistance	Contact discharge / ±4kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2) Atmospheric discharge / ±8kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)
Grounding		Class D grounding (previous class 3 grounding)
Standard		VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A, RoHS Directive), UKCA

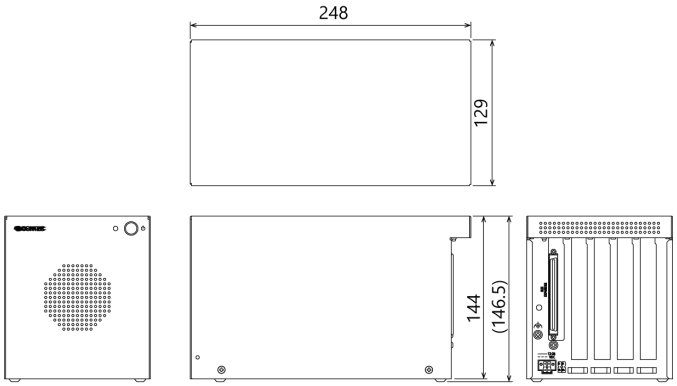
Physical Dimensions

ECH-PCI-BE3-H2B



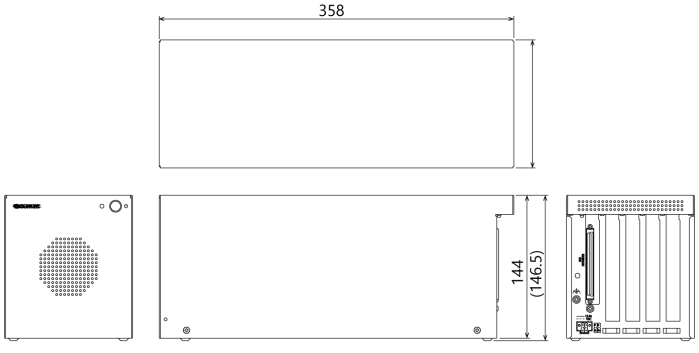
[mm]

ECH-PCI-BE3-H4B



[mm]

ECH-PCI-BE3-F4B



[mm]

⚠ CAUTION

When using this product, keep it at least 20mm away from any object such as the wall for cooling purposes.

Included Items

Product ...1
Slot Cover
ECH-PCI-BE3-H2B ... 2,
ECH-PCI-BE3-H4B, ECH-PCI-BE3-F4B ... 4
Card Fixed Screw
ECH-PCI-BE3-H2B ... 2,
ECH-PCI-BE3-H4B, ECH-PCI-BE3-F4B ... 4
Supply Connector ... 1
Please Read The Following ... 1

⚠ CAUTION

For operating this product, power supply (12 - 24VDC) is required separately.

Combinations of Expansion Adapters and Expansion Chassis

The expansion adapters and expansion chassis can be used in the following combinations:

Expansion adapter	Expansion chassis ECH-PCI-BE3					
	-H2B	-H4B	-F4B	-H7A	-F7A	-F13A
EAD(PCI)BE	○	○	○	○	○	○
EAD(LPCI)BE	○	○	○	○	○	○
EAD-BE-LPE	○	○	○	○	○	○

Optional Products

Product Name	Model type	Description
PCI Bus Expansion Adapter for PCI Bus PC-Slot	EAD(PCI)BE	
PCI Bus Expansion Adapter for Low Profile PCI PC-Slot	EAD(LPCI)BE	
PCI Bus Expansion Adapter for Low Profile PCI Express PC-Slot	EAD-BE-LPE	
Switching AC Adapter 24VDC 6.6A	PWA-160AWD2	

* Visit the CONTEC website for the latest optional products.

Restrictions

This product is used in a combination with the optional expansion adapter. The following restrictions apply to the situation when the expansion adapter is connected to the expansion chassis. This product has restrictions on the types of PCs and cards that can be used. Be sure to check the following restrictions before use.

< Restrictions of PC>
This product use the PCI-to-PCI Bridge to extend the bus. The PCI cards plugged in PCI slots in this product is recognized if the PCI-to-PCI bridge is recognized by the BIOS in the PC used. Ask the PC vendor for whether the BIOS recognizes the PCI-to-PCI bridge.

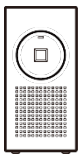
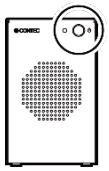
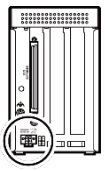
< Restrictions on transfer rate >
When the expansion chassis accommodates a card that performs high-speed transfer such as bus mastering, the overall transfer rate may be lower than that of PCI bus slots in the main unit of a desktop PC. This is caused by bus extension by the PCI-to-PCI Bridge. The transfer rate may vary with the system configuration and the type of the PC.

< Restrictions of PCI card>
None of the following cards can be plugged into any expansion slot in this product.
- Video display card (VGA card)
- Card to connect a PCI bus expansion chassis
- Card explicitly stated not to be used with the PCI-to-PCI Bridge
- Some cards, even PCI-compliant ones, may not work depending on their specifications.

Differences from Conventional Products

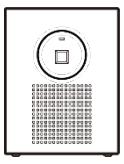
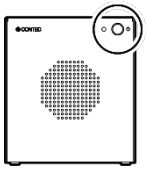
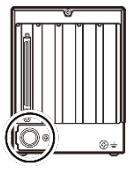
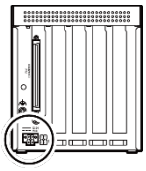
Differences between the ECH(PCI)BE-H2B and ECH(PCI)BE-F2B

This product is the successor to the previous ECH(PCI)BE-H2B / F2B. Therefore, it can be used in basically the same way.

Item	ECH(PCI)BE-H2B / F2B	ECH-PCI-BE3-H2B
Expansion slot supplied power	+5VDC 7A (Max.) +3.3VDC 3A (Max.) +12VDC 1.5A (Max.) -12VDC 0.3A (Max.)	+5VDC 7A (Max.) +3.3VDC 3A (Max.) +12VDC 1.5A (Max.) -12VDC 0.3A (Max.)
Rated input voltage	100 - 240VAC	12 - 24VDC
Power switch position		
Power input position		
Paint color	Black	Silver
Physical dimensions (mm)	ECH(PCI)BE-H2B 71.0(W) x 144.0(H) x 222.0(L) ECH(PCI)BE-F2B 71.0(W) x 144.0(H) x 360.0(L)	88.0(W) x 144.0(H) x 248.0(L)
Weight	ECH(PCI)BE-H2B 1.2kg ECH(PCI)BE-F2B 1.6kg	1.6kg

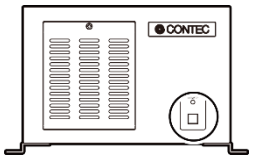
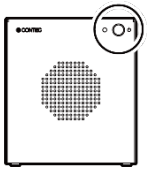
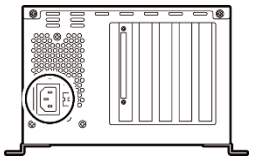
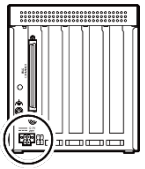
Differences between the ECH(PCI)BE-H4B and ECH(PCI)BE-F4B

This product is the successor to the previous ECH(PCI)BE-H4B / F4B. Therefore, it can be used in basically the same way.

Item	ECH(PCI)BE-H4B / F4B	ECH-PCI-BE3-H4B / F4B
Expansion slot supplied power	+5VDC 7A (Max.) +3.3VDC 3A (Max.) +12VDC 1.5A (Max.) -12VDC 0.3A (Max.)	+5VDC 11.3A (Max.) +3.3VDC 6A (Max.) +12VDC 2A (Max.) -12VDC 0.5A (Max.)
Rated input voltage	100 - 240VAC	12 - 24VDC
Power switch position		
Power input position		
Paint color	Black	Silver
Physical dimensions (mm)	ECH(PCI)BE-H4B 112.0(W) x 144.0(H) x 222.0(L) ECH(PCI)BE-F4B 112.0(W) x 144.0(H) x 360.0(L)	ECH-PCI-BE3-H4B 129.0(W) x 144.0(H) x 248.0(L) ECH-PCI-BE3-F4B 129.0(W) x 144.0(H) x 358.0(L)
Weight	ECH(PCI)BE-H4B 1.5kg ECH(PCI)BE-F4B 2.0kg	ECH-PCI-BE3-H4B 2.0kg ECH-PCI-BE3-F4B 2.5kg

Differences between the ECH-PCI-BE2-H4A

This product is the successor to the previous ECH-PCI-BE2-H4A. It can be used in basically the same way except that it cannot be fixed to a rack mount.

Item	ECH-PCI-BE2-H4A	ECH-PCI-BE3-H4B
Expansion slot supplied power	+5VDC 11.3A (Max.) +3.3VDC 6A (Max.) +12VDC 3A (Max.) -12VDC 0.5A (Max.)	+5VDC 11.3A (Max.) +3.3VDC 6A (Max.) +12VDC 2A (Max.) -12VDC 0.5A (Max.)
Rated input voltage	100 - 240VAC	12 - 24VDC
Power switch position		
Power input position		
Fixing bracket	Yes	No
Paint color	Black	Silver
Physical dimensions (mm)	210.0(W) x 138.0(H) x 235.0(L)	129.0(W) x 144.0(H) x 248.0(L)
Weight	3.5kg	2.0kg