

## StarFabric Compliant PCI Bus Expansion Chassis

(Short x 4Slots, Ivory)

### ECH(PCI)SF-H4A

(Long x 7Slots, Ivory)

### ECH(PCI)SF-F7A

(Long x 13Slots, Ivory)

### ECH(PCI)SF-F13A

The ECH(PCI)SF-H4A/F7A/F13A is an expansion chassis that adds PCI bus expansion slots to a PC by being connected to the PC via an optional expansion adapter [EAD(LPCI)SF] or [EAD(CB)SF]. The expansion adapter can connect the expansion chassis to the PC over a distance of up to 12m.



A photograph is ECH(PCI)SF-F7A.

#### Features

- Capable of adding PCI bus (5V/32-bit, 33MHz) slots.  
ECH(PCI)SF-H4A can add 4 slots.  
ECH(PCI)SF-F7A can add 7 slots.  
ECH(PCI)SF-F13A can add 13 slots.
- Accepting short-size PCI bus boards < ECH(PCI)SF-H4A >
- Accepting long-size PCI bus boards < ECH(PCI)SF-F7A/F13A >
- Power supply controllable in response to the turning on/off of the PC's power supply.
- Steel chassis suitable for use in fields.
- Built-in cooling fan.
- Rack-mountable with supplied brackets.

#### Product Configuration List

- Expansion chassis(One of the following) ... 1  
[ECH(PCI)SF-H4A, ECH(PCI)SF-F7A, ECH(PCI)SF-F13A]
- Power cable ... 1
- Slot cover(One of the following)  
ECH(PCI)SF-H4A ... 4, ECH(PCI)SF-F7A ... 7,  
ECH(PCI)SF-F13A ... 13
- Board fixed screw(One of the following)  
ECH(PCI)SF-H4A ... 4, ECH(PCI)SF-F7A ... 7,  
ECH(PCI)SF-F13A ... 13
- Rubber feet ... 4
- User's Manual (this booklet) ... 1
- Bracket for rack-mounted ... 2
- Bracket fixed screw for rack-mounted (One of the following)  
ECH(PCI)SF-H4A ... 4, ECH(PCI)SF-F7A/F13A ... 6

#### Expansion adapter

##### ◆ Expansion adapter (Option)

PCI Bus Expansion Adapter for CardBus PC-Slot : EAD(CB)SF

PCI Bus Expansion Adapter for Low Profile PCI PC-Slot

: EAD(LPCI)SF

Check the CONTEC's Web site for more information on these expansion adapters.

#### Connection cable

##### ◆ Connection cable (Option)

Connection cables (12-meter, STP-category, 5e straight cables) are bundled with the expansion adapter EAD(CB)SF, EAD(LPCI)SF.

The following options can also be available:

UTP-category, 5e straight cables (3m) : TP-03 \*1\*2

UTP-category, 5e straight cables (5m) : TP-05 \*1\*2

UTP-category, 5e straight cables (10m) : TP-10 \*1\*2

\*1: A pair of cables are required for connection.

\*2: When used in an environment susceptible to extraneous noise, UTP cables may cause link connection. It is advisable to use STP cables available on the market.

## Specification

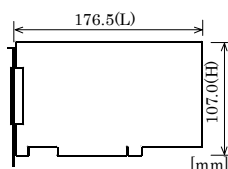
Item	ECH(PCDSF-H4A)	ECH(PCDSF-F7A)	ECH(PCDSF-F13A)
Compatible bus	PCI Local Bus Specification Rev2.2 (+5V type)		
Address space	32-bit memory address, I/O address		
Interrupt level	INTA to INTD		
Bus operating clock	33MHz (Max.)		
Number of user-available slots	4 slots (short size)	7 slots (long size)	13 slots (long size)
Acceptable board sizes (mm)	176.5(L) x 107(H)	313.8(L) x 107(H)	313.8(L) x 107(H)
Power supply			
Expansion slot supplied power (The output current must not exceed the value on the right.)	-5VDC 11.3A (Max.) +3.3VDC 6A (Max.) +12VDC 3A (Max.) -12VDC 0.7A (Max.)		-5VDC 18A (Max.) *2 +3.3VDC 15A (Max.) *2 +12VDC 9A (Max.) -12VDC 1A (Max.)
Maximum total power capacity	130W		230W
AC input line voltage *1	115/230VAC (selecting switch)		
AC line frequency	50 to 60Hz		
AC power input current	3A(115VAC)/1.5A(230VAC)		6A(115VAC)/4A(230VAC)
Outside dimensions of the AC adapter (mm)	210.0(W) x 138.0(H) x 235.0(L) (No fittings)	300.0(W) x 138.0(H) x 373.2(L) (No fittings)	424.0(W) x 156.0(H) x 373.2(L) (No fittings)
Weight	3.5 kg	5.0 kg	9.5 kg
AC cable	2.5m 3P		

\*1: AC input line voltage range: 90-132VAC and 180-250VAC

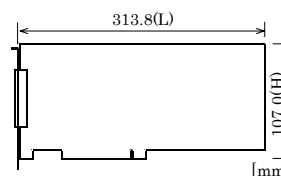
\*2: The sum of +5VDC and +3.3VDC must not exceed 90W.

### ■ Outside dimensions of acceptable board (Max.)

< ECH(PCI)SF-H4A >



< ECH(PCI)SF-F7A/F13A >



### ■ Environmental specification

Item	Specification
Operating temperature	0 to 50°C
Operating humidity	20 to 80%RH(No condensation)
Storage temperature	0 to 60°C
Storage humidity	10 to 90%RH(No condensation)
Floating dust particles	Not to be excessive
Corrosive gases	None

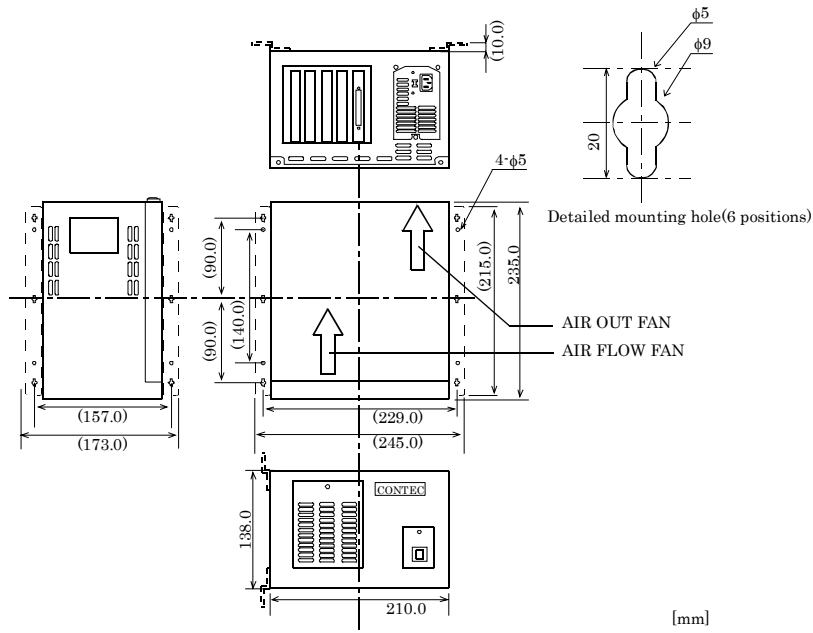
### ▼ CAUTION

The power supply and cooling fan in the ECH(PCI)BE-H4A/F7A/F13A are consumables, requiring replacement after use for a certain period of time. Although each of the parts should be replaced after use for the following period of time in principle, the life may be shortened depending on the operating environment. Keep in mind that the lives of the parts may be extremely shortened if they are used where it is either exposed to must dirt, metal chips or particles, or dust or affected by oil or corrosive gas.

- Power supply : About 5 years (in an office environment kept at a temperature of 25°C and a humidity of 60%)
- Fan : About 5 years (in an office environment kept at a temperature of 25°C and a humidity of 60%)
- Fan Filter : About 1 year (in an office environment kept at a temperature of 25°C and a humidity of 60%)

## Outside Dimensions

### Outside Dimensions < ECH(PCI)BE-H4A >

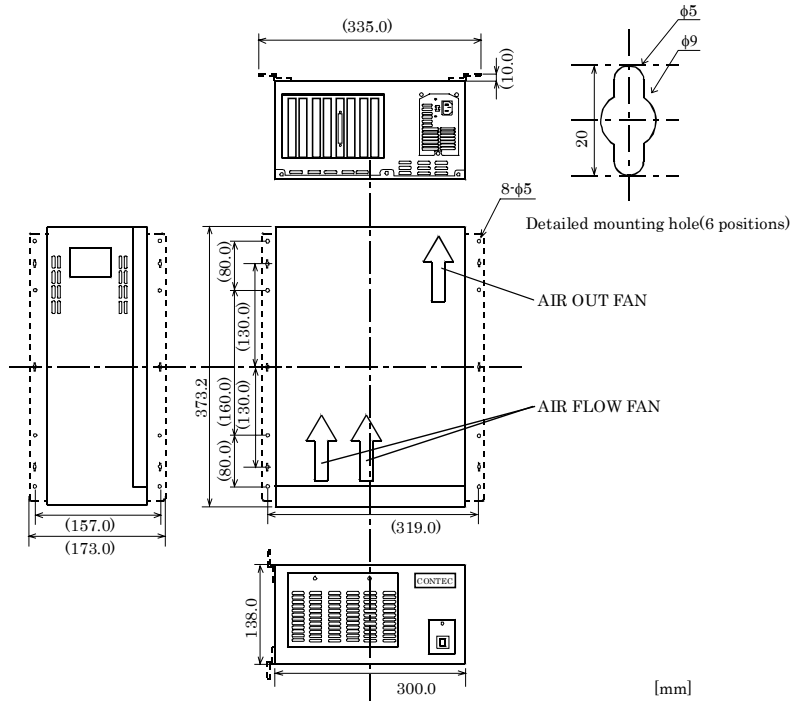


The parenthesized dimensions are measured with the rack mount brackets attached.

#### ▼ CAUTION

- When using this chassis, keep it at least 20mm away from any object such as the wall for cooling purposes.
- Attaching rubber feet to the chassis makes it 3.6mm taller.

### Outside Dimensions < ECH(PCI)BE-F7A >

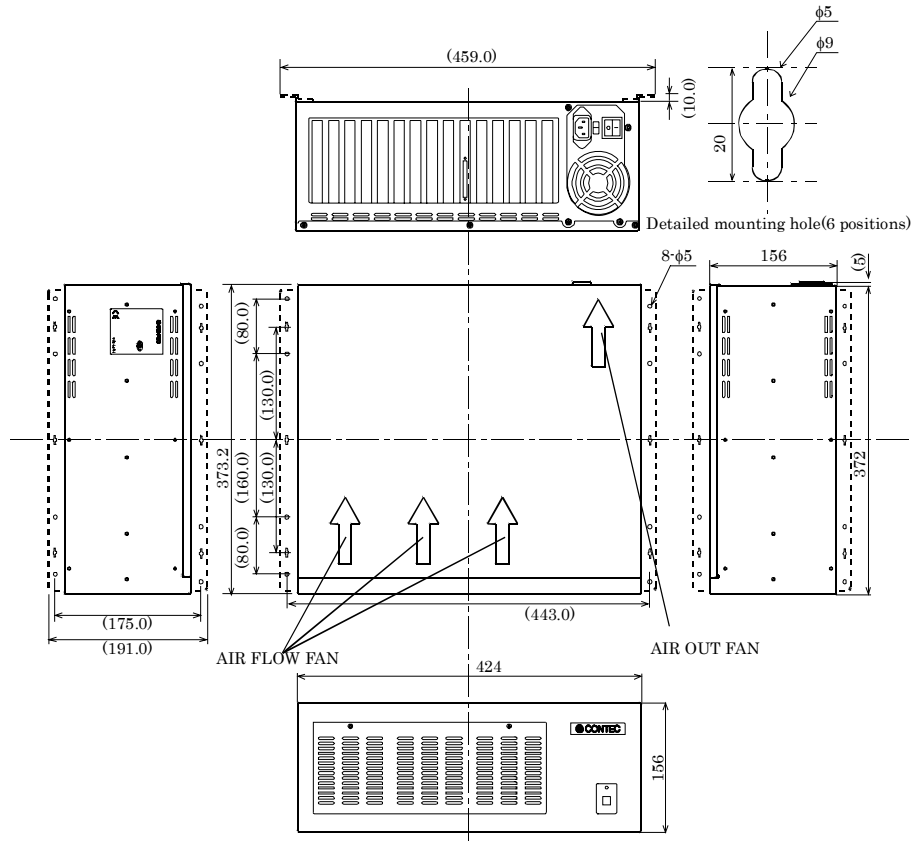


The parenthesized dimensions are measured with the rack mount brackets attached.

#### ▼ CAUTION

- When using this chassis, keep it at least 20mm away from any object such as the wall for cooling purposes.
- Attaching rubber feet to the chassis makes it 7mm taller.

Outside Dimensions < ECH(PCI)BE-F13A >



The parenthesized dimensions are measured with the rack mount brackets attached.

[mm]

▼ CAUTION

- When using this chassis, keep it at least 20mm away from any object such as the wall for cooling purposes.
- Attaching rubber feet to the chassis makes it 8mm taller.

Restrictions

ECH(PCI)BE-H4A/F7A/F13A has restrictions on the types of PCs and boards that can be used. Be sure to check the following restrictions before use.

< Restrictions of PC >

ECH(PCI)BE-H4A/F7A/F13A uses the PCI-to-PCI Bridge to extend the bus.

The PCI boards plugged in PCI slots in the ECH(PCI)BE-H4A/F7A/F13A are 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 board 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 board >

None of the following boards can be plugged into any expansion slot in the ECH(PCI)BE-H4A/F7A/F13A.

- Video display board (VGA board)
- Board to connect a PCI bus expansion chassis
- Board explicitly stated not to be used with the PCI-to-PCI Bridge
- Some boards, even PCI-compliant ones, may not work depending on their specifications

The specification, color, and design of a product may be changed without a preliminary announcement.