



# Silicon Disk Drive

Suitable for any application  
IDE/SCSI harddisk compatible Silicon Drive

Box-PCs

Panel-PCs

Flat Panel Displays

Silicon Disk Drives

Option

Box PCs & Panel PCs with Windows CE

Single Board Computer

Chassis / Backplane

Analog I/O

Digital I/O

Counter & Motion Controller

Serial Communication

GPIO Communication

Remote I/O

Expansion Unit / Bus Adapter

Software

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Distributed Monitor & Control Network: F&IT

Multi-Programmable Display

Wireless LAN

Remote Monitoring Solution

Service & Products

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## Silicon Disk Drive

Features

● **Fully Compatible With Standard IDE**

These silicon disk drives are interchangeable with 2.5 inch and 3.5 inch IDE hard disk drives.

● **Low power consumption**

These drives have a maximum power consumption of 500mW.

● **Noiseless**

Without the motor noise of a standard hard disk drive, these disks are exceptionally quiet.

● **Extremely Rugged and Reliable**

CONTEC's silicon disk drives provide exceptional robustness against environmental factors such as vibration, shock or signal interference. They are suitable for any application where high reliability is required.

### PC-ESD series [IDE]



2.5 inch Form Factor	PC-ESD500	512 MB
	PC-ESD1000	1 GB
	PC-ESD2000	2 GB
	PC-ESD4000	4 GB
	PC-ESD8000	8 GB



PC-ESD series 2.5 inch Form Factor

### 3.5-inch Bay-mount Adapter PC-HDADP(PC)

- The adapter is used to a 2.5-inch type of Silicon Disk Drive or Hard Disk Drive on the 3.5-inch Bay.



The silicon disk drive is optional.

### Specifications [IDE]

	PC-ESD series (2.5-inch)
Bus specification	ATA (IDE-AT 44-pin)
ATA bus transfer rate	10Mbyte/sec (Read), 9Mbyte/sec (Write)
Data reliability	Frequency of unrecoverable errors per bit: Less than 1 / 10 <sup>14</sup> reads
ECC	48 bits/sector *1
Max. limit on number of overwrites	100,000 times per physical overwrites
Rated voltage	5VDC±5%
Power Consumption	Sleep: 4mW (Typ.), Read: 500mW (max) / Write: 500mW (max)
Temperature	Operating: 0~60°C; Storage: -20~80°C
Humidity (Operating)	10 to 90%RH (no condensation)
Vibration / Impact resistance (Operating)	15G(Max.) / 1000G(Max.)
Dimensions (mm)	69.85(W) × 100(D) × 12.5(H)
Weight	Approx. 100g

\*1: Even 1bit error or 2bit error can also be detected.

# Silicon Disk Drive

## PC-RSD-PCI series [PCI board]



PCI Board	PC-RSD1000-PCI	CF 1GB
	PC-RSD2000-PCI	CF 2GB
	PC-RSD4000-PCI	CF 4GB (BTO)
	PC-RSD8000-PCI	CF 8GB (BTO)

\* Please use the following CONTEC compact flash for these boards.

Compact Flash (Fixed Disk Mode)	CF-1GB-R	CF 1GB
	CF-2GB-R	CF 2GB
	CF-4GB-R	CF 4GB
	CF-8GB-R	CF 8GB



Soon to be RoHS-compliant  
PC-RSD-PCI Series

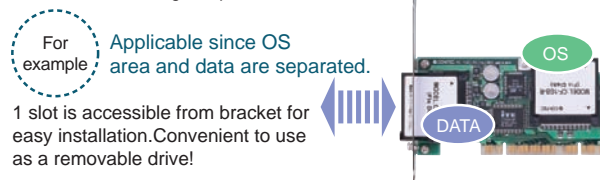
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### Compliant with PCI slots, High reliable, Bootable Solid State Disk.

Installable into PCI slot of the PC, usable as a hard disk drive. Usable as OS boot disk, these boards are suitable for any application where high reliability and environmental resistance are required. (e.g. 24/7 operation, high-temperature, vibration, shock)

### Supports Two CF card slots. Applicable as 2 drives.

Shipped with one CF card. 2 drive configuration or RAID functions are available when adding an optional CF card.



### Employs high reliability CF card (Fixed Disk Mode).

Employs high reliability Compact Flash card (Fixed Disk Mode) as a storage device. One CF card can be partitioned into two or more drives.



### Supports RAID feature.

RAID functions are available by adding a CF to the add-on CF slot and using the included utilities.

Striping (RAID 0)	Distributes data storage. Up-to twice the transfer rate.
Mirroring (RAID 1)	Duplicates data storage. Reduces disk error.
Spanning (JBOD)	Combines 2 CF cards as a 1 disk drive. Up to 16GB capacity by using two 8GB cards.

### Lead Free. Designed for RoHS compliancy.

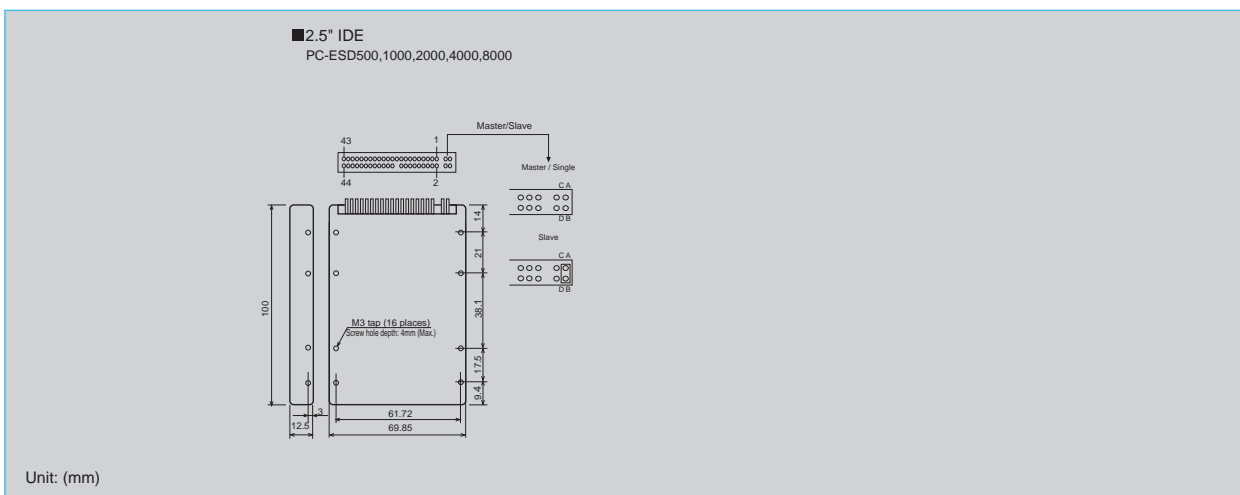
Designed environmentally-conscious: lead-free and (scheduled to) conform to the RoHS Directive.

## Specifications [PCI board]

RAID controller	PC-RSD-PCI series ITE IT8212F、RAID 0/1/JBOD
CF slot	Two (2) CF card Slot: Type I (Internal slot: Primary Master, External slot: Secondary Master) Indicator: One (1) Accessing LED (red) Not Hot Swappable Supply voltage: +3.3VDC 0.5A (max) for each slot
Power consumption(max)	5V 350mA. - When second CF installed: 5V 450mA
Temperature	Operating: 0~50°C; Storage: -25~80°C
Humidity (Operating)	10~90%RH (no condensation)
Impact resistance (Operating)	15G (max)
Concurrent use	One board
PCI bus specification	PCI(32bit,33MHz,5V or 3.3V <sup>*1</sup> )
Dimensions (mm)	119.91(L) x 63.41(H)
Weight	70g (including one CF)
Supported OS	Windows XP Embedded, Windows XP Professional, Windows 2000 Professiona, MS-DOS 6.2 <sup>*2</sup> , PC-DOS 2000 J7.0/V <sup>*2</sup> , PC DOS 7 <sup>*2</sup>

\*1: Requires +5V power from PCI bus slot.  
\*2: Does not support RAID function

## Dimensions



Please see the specification of each device for Write access mean time before failure. Manuals can be downloaded from our website at <http://www.contec.com/download/>.

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## Options

### 3.5" External FDD (Included cable: 60cm) PC-FDD25BH



● For use with IPC-BX/xx, PT630 and 620 series



### 3.5" internal FDD PC-FDD25



### 3.5" IDE 80GB/160GB HDD PC-HDD80G-3

NEW



The product is different from the picture.

### PC-HDD160G-3

NEW

### 2.5" IDE 40GB HDD PC-HDD40G

NEW



The product is different from the picture.

This product is not guaranteed for 24hour operation. In some case the lifetime of this HDD becomes quite shortly by non-stop operation. We recommend our Silicon Disk Drive for 24 hour operation.

### 3.5" to 2.5" Adapter PC-HDADP(PC)

● For mounting 2.5" silicon disk or hard disk drive in a 3.5" bay



Silicon Disk Drive in the picture is optional.

### General I/O Terminal Block (Included cable: 50cm) IPC-PSD-20

● For IPC-BX/xx, PT630 and 620 series when using RAS connector



### HDD interface board (ISA bus-compliant) PC-HDU(PC) IDE & HD interface board

● Half-size ISA interface board for mounting IDE type 2.5" hard disk and 2.5" silicon disk drive.



#### Specifications

IDE I/F	40-pin Pin Header (Included cable: 20cm)
Number of Slots	1 slot
Board size (mm)	160(L)×122(H)

## Optional Accessories for Digital Displays

### Connecting cable

IPC-P4CL-3.5 3.5m

IPC-P4CL-2H 2m

IPC-P4CL-08 80cm



### LCD Interface board for SBCs (ISA Bus Type) ADPLCD(PC)H



## Optional Accessories for Panel Link Displays

### Connecting cable

IPC-PL2020-050 5m

IPC-PL2020-020 2m



### Panel Link Interface board for SBCs ADPLNK(PC)H



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