



# Serial Communications

## SERIAL COMMUNICATIONS

Provides PC with RS-232C/422/485 serial communication ports.

Used as a communication interface with measurement devices, barcode readers, industrial AV equipment, UPS, printers and modems which are equipped with RS-232C/422A/485 serial communication port.

**Application** Communicating with measurement devices/controllers

**Description** RS-232C/RS-422A/RS-485 communication

**Application** Providing additional communication ports

**Description** Serial port

### Pictograms

#### Bus Specifications

**PCI Express**

Product is PCI Express standard compliant and can be used in the computer equipped with PCI Express bus expansion slot.

**PCI**

Product is PCI standard compliant and can be used in the computer equipped with PCI bus expansion slot.

**USB 2.0**

Product is USB standard compliant and can be used in the computer equipped with USB2.0/1.1 ports. Supports USB2.0 high-speed mode(480Mbps).

**Card Bus**

Product supports Cardbus that is a 32-bit PC card standard bus.

#### Board Size

**Low Profile**

Product is PCI standard/Low Profile compliant. A bracket for standard-size PCI slots is provided.

#### Supported Connectors

**78-pin D-SUB**

**37-pin D-SUB**

**9-pin D-SUB**

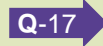
**44-pin D-SUB**

**25-pin D-SUB**

Indicates the number of pins and shapes of connectors used for external connection. The supported cables and accessories will vary depending on these specifications.

CONTEC provides a wide variety of cables and accessories to suit your needs, such as Branch cables for 9-pin/25-pin D-SUB, etc.

Cables and connectors



#### Communication standard / Number of channels

**RS-232C Xch**

Equipped with the indicated number of RS-232C compliant ports

**RS-422A/485 Xch**

Equipped with the indicated number of RS-422A and RS-485 - compliant

#### Maximum transfer speed

**XXX bps**

Maximum transfer speed that can be set

#### Supported softwares

##### Windows Driver

Includes Standard COM driver for Windows.

##### Linux Diver

Standard COM driver for Linux COM Setup Disk is also included.

##### Standard COM Driver / COM Setup Disk

Software for installing serial communication board in the operating system. Serial communication devices installed using COM Setup Disk will be recognized as standard PC serial ports (COM1, COM2...) when using Windows or Linux. Commercial applications that support serial ports can then be used.

#### Points

**Individual Isolated**

Features electric isolation between each channel as well as between communication lines and the PC. This prevents damage and malfunction from both signal interference between channels and communication line noise.

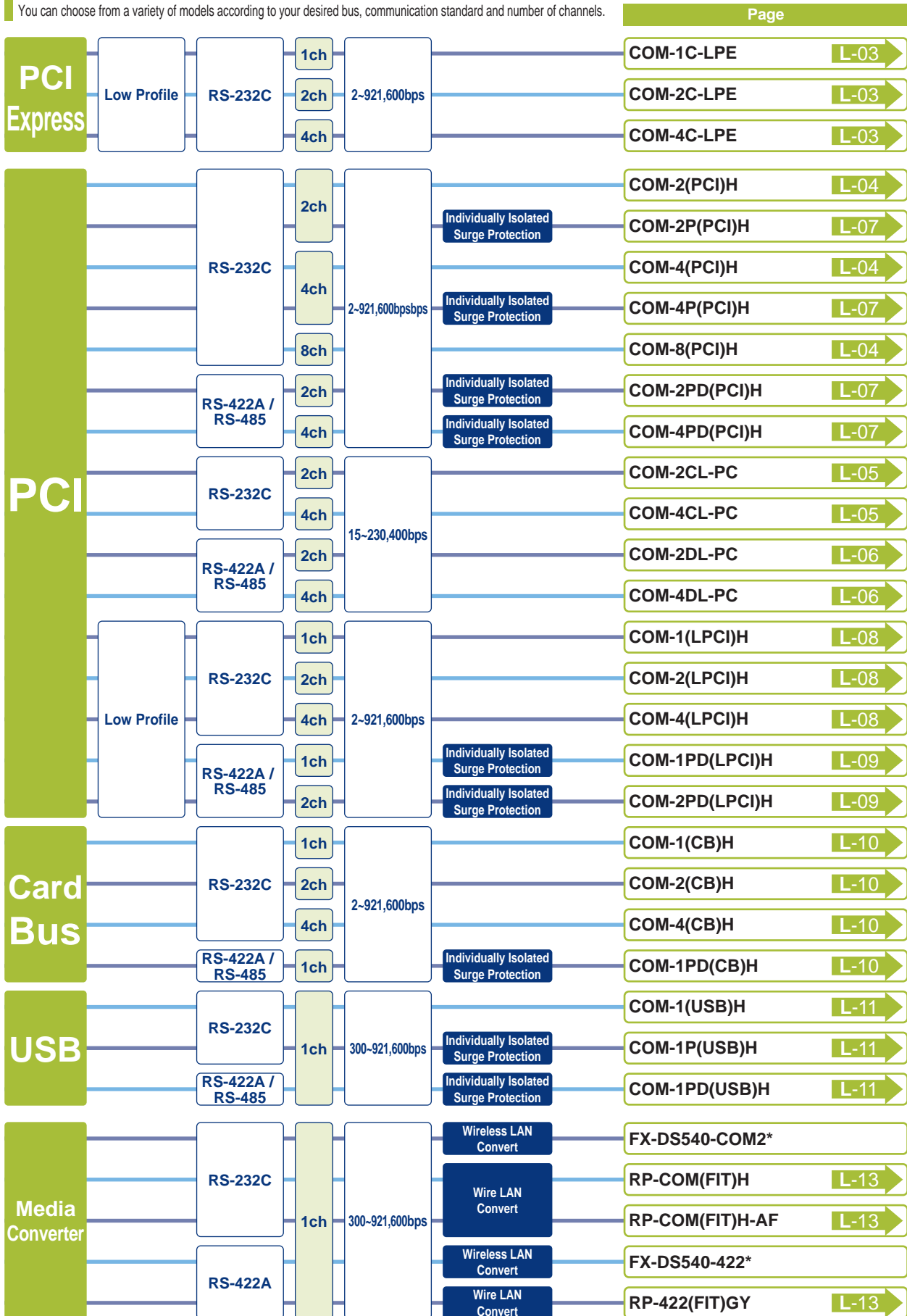
**Surge Protection**

All communication lines are equipped with surge protection circuits to prevent damage and malfunction caused by incoming voltage and current surges.

# Serial Communication

## Product Lineup

You can choose from a variety of models according to your desired bus, communication standard and number of channels.



- 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
- GPB Communication
- Remote I/O
- Expansion Unit / Bus Adapter
- Software
- Accessories & Cables
- Distributed Monitor & Control Network: F&ET
- Multi-Programmable Display
- Wireless LAN
- Remote Monitoring Solution
- Service & Products

## L-02

- Lineup
- PCI Express
- PCI
- PC Card
- USB
- ISA
- Media Converter

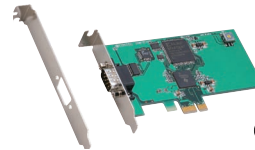
\* Domestic model. Contact our sales office for further information.

# Serial Communication

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- Service & Products

## PCI Express

Low Profile 9-pin D-SUB RS-232C 921.6 Kbps CE  
 Windows Driver Linux Diver



### 1 Port RS-232C COM-1C-LPE

- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception)
- 9-pin D-type male connector
- Low Profile PCI -compliant (includes bracket for use in standard PCI slot)

## PCI Express

Low Profile 44-pin D-SUB RS-232C 921.6 Kbps CE  
 Windows Driver Linux Diver



### 2 Port RS-232C COM-2C-LPE

- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Low Profile PCI -compliant (includes bracket for use in standard PCI slot)

## PCI Express

Low Profile 44-pin D-SUB RS-232C 921.6 Kbps CE  
 Windows Driver Linux Diver



### 4 Port RS-232C COM-4C-LPE

- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Low Profile PCI -compliant (includes bracket for use in standard PCI slot)

## L-03

- Lineup
- PCI Express
- PCI
- PC Card
- USB
- ISA
- Media Converter

Model	COM-1C-LPE	COM-2C-LPE	COM-4C-LPE
Interface type	RS-232C (Async.)		
Number of Channels	1ch	2ch	4ch
Speed	2~921,600bps *1*2		
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit		
Parity Check	even, odd, non-parity		
Controller	162850 compliant (FIFO buffer: I/O 128-byte per channel)		
Interrupts	1 *3		
Wiring Distance	15m (Max.)		
Isolation type	-		
Isolation voltage	-		
I/O Address	Any 32-byte boundary		
Power Consumption (Max.)	3.3VDC 300mA		3.3VDC 350mA
Bus / Dimensions (mm)	PCI Express Base Specification Rev. 1.0a x1 / 121.69(L)x67.90(H)		
Included cable length	-		
Connector	9-pin D-type male connector: DELIC-J9PAF-20L9 [JAE] or equivalent	44-pin D-type female connector: 103A-44FGTBBB3 [COXOC] or equivalent	
Options	Software: API-PAC(W32) Accessories: - Cables / Connectors: RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5-D9F, PCE44/9P2S, CN5-D44M, PCE44/9P4S, CN5-D44M		

Note: \*1: Selectable speed, 15~921,600bps, using Standard COM Drive Software Setup and API-PAC(W32)  
 \*2: Data transmission at high speed may not be performed normally depending on the environment including the type of status of connected material of cable and environment.  
 \*3: A single interrupt signal "INTA" is output as a collection of interrupt input signals from four channels.

As shown on the side of product's images, RoHS compliant is a CONTEC original marking for RoHS-compliant products.

# Serial Communication

Please see page Q-27 for optional accessories and cables/connectors, and page P-01 for supported software.

**PCI** 9-pin D-SUB x2 **RS-232C** **2ch** 921.6 Kbps   
**Windows Driver** **Linux Diver**

## 2 Port RS-232C COM-2(PCI)H

- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 9-pin D-type male connector
- 128-byte FIFO buffer (both transmission and reception) provided for each channel



**PCI** 37-pin D-SUB **RS-232C** **4ch** 921.6 Kbps   
**Windows Driver** **Linux Diver**

## 4 Port RS-232C COM-4(PCI)H

- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception) provided for each channel



**PCI** 78-pin D-SUB **RS-232C** **8ch** 921.6 Kbps   
**Windows Driver** **Linux Diver**

## 8 Port RS-232C COM-8(PCI)H

- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception) provided for each channel



Model	COM-2(PCI)H	COM-4(PCI)H	COM-8(PCI)H
Interface type	RS-232C (Async.)		
Number of Channels	2ch	4ch	8ch
Speed	2~921,600bps *1*2		
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit		
Parity Check	even, odd, non-parity		
Controller	162850 compliant (FIFO buffer: I/O 128 bytes per channel)		
Interrupts	1 *3		
Wiring Distance	15m (Max.)		
Isolation type	-		
Isolation voltage	-		
I/O Address	Any 32-byte boundary		Any 64-byte boundary
Power Consumption (Max.)	3.3VDC 100mA (Max.), 5VDC 100mA (Max.)		3.3VDC 150mA (Max.), 5VDC 150mA (Max.)
Bus / Dimensions (mm)	PCI (32bit, 33MHz, 5V or 3.3V*4) / 121.69(L)x105.68(H)		
Included cable length	-		
Connector	9-pin D-type male connector: DELC-J9PAF-20L9 [JAE] or equivalent	37-pin D-type female connector: DCLC-J37SAF-20L9 [JAE] or equivalent	78-pin D-type female connector
Options	Software API-PAC(W32) Accessories - Cables / Connectorss RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5-D9F	CCU-78F/25M *5, RSS-78M/37M PCE37/9PS, PCE37/25PS, CN5-D37M	CCU-78F/25M *6, RSS-78M PCE78/9PS, PCE78/25PS, CN5-D78M

Note:

\*1: Selectable speed, 15~921,600bps, using Standard COM Drive Software Setup and API-PAC(W32)  
 \*2: Data transmission at high speed may not be performed normally depending on the environment including the type of status of connected material of cable and environment.  
 \*3: A single interrupt signal "INTA" is output as a collection of interrupt input signals from four channels.  
 \*4: Power voltage is set by jumper. (5VDC or 3.3VDC)  
 \*5: Optional cable RSS-78M/37M is required.  
 \*6: Optional cable RSS-78M is required.

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## L-04

- Lineup
- PCI Express
- PCI
- PC Card
- USB
- ISA
- Media Converter

# Serial Communication

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**PCI** 9-pin D-SUB RS-232C 230.4 Kbps  
2ch  
Windows Driver

## 2 Port RS-232C COM-2CL-PCI

**NEW**

- Functions as a standard COM board when used under Windows
- Up to 16 boards can be added with settings of COM1~256
- 64-byte FIFO buffer (both transmission and reception) provided for each channel
- 9-pin D-type male connector



**PCI** 37-pin D-SUB RS-232C 230.4 Kbps  
4ch  
Windows Driver

Branch cable included

## 4 Port RS-232C COM-4CL-PCI

**NEW**

- Functions as a standard COM board when used under Windows
- Up to 16 boards can be added with settings of COM1~256
- 64-byte FIFO buffer (both transmission and reception) provided for each channel



## L-05

Model	COM-2CL-PCI	COM-4CL-PCI
Interface type	RS-232C (Async.)	
Number of Channels	2ch	4ch
Speed	15~230,400bps *1*2	
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit	
Parity Check	even, odd, non-parity *1	
Controller	162850 compliant (FIFO buffer: I/O 64 bytes per channel)	
Interrupts	1 *3	
Wiring Distance	15m (Max.)	
Isolation type	-	
Isolation Voltage	-	
I/O Address	Any 1024-byte boundary	
Power Consumption (Max.)	5VDC 100mA	5VDC 120mA
Bus / Dimensions (mm)	PCI (32bit, 33MHz*) / 121.69(L)x88.0(H)	
Connector	9-pin D-type male connector: 2031-2-9-P [gallant] or equivalent	37-pin D-type female connector: 2031-2-37-S [gallant] or equivalent
Software	-	
Options	Accessories -	CCU-78F/25M*5, RSS-78M/37M
Cables / Connectors	RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5-D9F	PCE37/9PS (bundled), PCE37/25PS, CN5-D37M

Note: \*1: Software selectable  
\*2: Data transmission at high speed may not be performed normally depending on the environment including the type of status of connected material of cable and environment.  
\*3: A single interrupt signal "INTA" is output as a collection of interrupt input signals from four channels.  
\*4: This board requires power supply at +5 V from an expansion slot (it does not work on a machine with a +3.3V power supply alone).  
\*5: Requires use of optional cable RSS-78M/37M

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# Serial Communication

Please see page Q-27 for optional accessories and cables/connectors, and page P-01 for supported software.

**PCI** 9-pin D-SUBx2 RS-422A/485 2ch 230.4 Kbps  
Windows Driver

## 2 Port Non-isolated RS-422A/485 COM-2DL-PCI

**NEW**

- Functions as a standard COM board when used under Windows
- Up to 16 boards can be added with settings of COM1~256
- 64-byte FIFO buffer (both transmission and reception) provided for each channel



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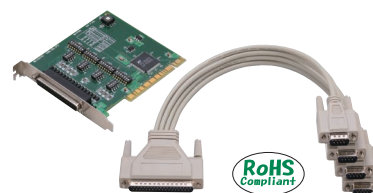
**PCI** 37-pin D-SUB RS-422A/485 4ch 230.4 Kbps  
Windows Driver

Branch cable included

## 4 Port Non-isolated RS-422A/485 COM-4DL-PCI

**NEW**

- Functions as a standard COM board when used under Windows
- Up to 16 boards can be added with settings of COM1~256
- 64-byte FIFO buffer (both transmission and reception) provided for each channel



Model	COM-2DL-PCI	COM-4DL-PCI
Interface type	RS-422A/RS-485 (Non-isolated), Full-duplex or Half-duplex communication mode	
Number of Channels	2ch	4ch
Speed	15~230,400bps *1*2	
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit	
Parity Check	even, odd, non-parity *1	
Controller	162850 compliant (FIFO buffer: I/O 64 bytes per channel)	
Interrupts	1 *3	
Wiring Distance	1200m (Max.)	
Isolation type	-	
Isolation Voltage	-	
I/O Address	Any 1024-byte boundary	
Power Consumption (Max.)	5VDC 340mA	5VDC 640mA
Bus / Dimensions (mm)	PCI (32bit, 33MHz*4) / 121.69(L)×88.0(H)	
Connector	9-pin D-type male connector: 2031-2-9-P [gallant] or equivalent	37-pin D-type female connector: 2031-2-37-S [gallant] or equivalent
Software	-	
Options	-	
Accessories	-	
Cables / Connectors	CN5-D9F	PCE37/9PS (bundled) , CN5-D37M

\*1: Software selectable  
 \*2: Data transmission at high speed may not be performed normally depending on the environment including the type of status of connected material of cable and environment.  
 \*3: A single interrupt signal "INTA" is output as a collection of interrupt input signals from four channels.  
 \*4: This board requires power supply at +5 V from an expansion slot (it does not work on a machine with a +3.3V power supply alone).

Note:

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## L-06

- Lineup
- PCI Express
- PCI
- PC Card
- USB
- ISA
- Media Converter

# Serial Communication

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Wireless LAN
Remote Monitoring Solution
Service & Products

**PCI** 9-pin D-SUB x2 RS-232C 2ch 921.6 Kbps Individual Isolated Surge Protection CE

**Windows Driver** **Linux Driver**

## 2 Port Isolated RS-232C COM-2P(PCI)H

- Channels individually insulated / signals are surge protected
- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception) provided for each channel
- 9-pin D-type male connector



**PCI** 37-pin D-SUB RS-232C 4ch 921.6 Kbps Individual Isolated Surge Protection CE

**Windows Driver** **Linux Driver**

## 4 Port Isolated RS-232C COM-4P(PCI)H

- Channels individually insulated / signals are surge protected
- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception) provided for each channel



**PCI** 9-pin D-SUB x2 RS-422A/485 2ch 921.6 Kbps Individual Isolated Surge Protection CE

**Windows Driver** **Linux Driver**

## 2 Port Isolated RS-422A/485 COM-2PD(PCI)H

- 2 RS-422A/RS485-compliant channels
- On-board isolated circuit provides safe communication, even over long distances
- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception) provided for each channel



**PCI** 37-pin D-SUB RS-422A/485 4ch 921.6 Kbps Individual Isolated Surge Protection CE

**Windows Driver** **Linux Driver**

## 4 Port Isolated RS-422A/485 COM-4PD(PCI)H

- 4 RS-422A/RS485-compliant channels
- On-board isolated circuit provides safe communication, even over long distances
- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception) provided for each channel



L-07

Lineup
PCI Express
PCI
PC Card
USB
ISA
Media Converter

Model	COM-2P(PCI)H	COM-4P(PCI)H	COM-2PD(PCI)H	COM-4PD(PCI)H
Interface type	RS-232C (Async. & Isolated)		RS-422A/RS-485 (Isolated), Full-duplex or Half-duplex communication mode	
Number of Channels	2ch	4ch	2ch	4ch
Speed	2~921,600bps *1*2			
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit			
Parity Check	even, odd, non-parity			
Controller	162850 compliant (FIFO buffer: I/O 128 bytes per channel)			
Interrupts	1 *3			
Wiring Distance	15m (Max.)		1200m (Max.)	
Isolation type	Channel Isolation & Bus Isolation			
Isolation Voltage	Channel Isolation: 1000VDC, Bus Isolation: 1000VDC	Channel Isolation: 500VDC, Bus Isolation: 1000VDC	Channel Isolation: 1000VDC, Bus Isolation: 1000VDC	Channel Isolation: 500VDC, Bus Isolation: 1000VDC
I/O Address	Any 32-byte boundary			
Power Consumption (Max.)	5VDC 600mA	5VDC 1000mA	5VDC 550mA	5VDC 950mA
Bus / Dimensions (mm)	PCI (32bit, 33MHz, 5V or 3.3V*4) / 121.69(L)x105.68(H)			PCI (33MHz, 5V or 3.3V*5) / 121.69(L)x106.68(H)
Included cable length	-			
Connector	9-pin D-type male connector: DELC-J9PAF-20L9 [JAE] or equivalent	37-pin D-type female connector: DCLC-J37SAF-20L9 [JAE] or equivalent	9-pin D-type male connector: DELC-J9PAF-20L9 [JAE] or equivalent	37-pin D-type female connector: DCLC-J37SAF-20L9 [JAE] or equivalent
Options	Software: - Accessories: - Cables / Connectors: RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5-D9F	PCE37/9PS, PCE37/25PS, CN5-D37M	CN5-D9F	PCE37/9PS, PCE37/25PS, COM-4M CABLE(PC)1, CN5-D37M

Note: \*1: Selectable speed, 15~921,600bps, using Standard COM Drive Software Setup and API-PAC(W32)  
 \*2: Data transmission at high speed may not be performed normally depending on the environment including the type of status of connected material of cable and environment.  
 \*3: A single interrupt signal "INTA" is output as a collection of interrupt input signals from four channels.  
 \*4: This board requires power supply at +5V from an expansion slot (it does not work on a machine with a +3.3V power supply alone).  
 \*5: Optional cable RSS-78M/37M is required.

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# Serial Communication

Please see page O-21 for optional accessories and cables/connectors, and page N-01 for supported software.

**PCI** Low Profile 9-pin D-SUB RS-232C 1ch 921.6 Kbps CE  
Windows Driver Linux Diver

## 1 Port RS-232C COM-1(LPCI)H

- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception)
- 9-pin D-type male connector
- Low Profile PCI-compliant (includes bracket for use in standard PCI slot)



**PCI** Low Profile 44-pin D-SUB RS-232C 2ch 921.6 Kbps CE  
Windows Driver Linux Diver

## 2 Port RS-232C COM-2(LPCI)H

- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Low Profile PCI-compliant (includes bracket for use in standard PCI slot)



**PCI** Low Profile 44-pin D-SUB RS-232C 4ch 921.6 Kbps CE  
Windows Driver Linux Diver

## 4 Port RS-232C COM-4(LPCI)H

- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Low Profile PCI-compliant (includes bracket for use in standard PCI slot)



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## L-08

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Model	COM-1(LPCI)H	COM-2(LPCI)H	COM-4(LPCI)H
Interface type	RS-232C (Async.)		
Number of Channels	1ch	2ch	4ch
Speed	2~921,600bps *1*2		
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit		
Parity Check	even, odd, non-parity		
Controller	162850 compliant (FIFO buffer: I/O 128 bytes per channel)		
Interrupts	1 *3		
Wiring Distance	15m (Max.)		
Isolation type	-		
Isolation voltage	-		
I/O Address	Any 32-byte boundary		
Power Consumption (Max.)	5VDC 150mA		
Bus / Dimensions (mm)	PCI (32bit, 33MHz, 5V or 3.3V) / 121.69(L)x63.41(H)		
Included cable length	-		
Connector	9-pin D-type male connector: DELC-J9PAF-20L9 [JAE] or equivalent	44-pin D-type female connector: 103A-44FGTB33 [COXOC] or equivalent	
Options	Software API-PAC(W32)		
Accessories	-		
Cables / Connectorss	RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5D9F	PCE44/9P2S, CN5-D44M	PCE44/9P4S, CN5-D44M

\*1: Selectable speed, 15~921, 600bps, using Standard COM Drive Software Setup and API-PAC(W32)  
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- Box PCs & Panel PCs with Windows CE
- Single Board Computer
- Chassis / Backplane
- Analog I/O
- Digital I/O
- Counter & Motion Controller
- Serial Communication
- GPIB Communication
- Remote I/O
- Expansion Unit / Bus Adapter
- Software
- Accessories & Cables
- Distributed Monitor & Control Network: F&EIT
- Multi-Programmable Display
- Wireless LAN
- Remote Monitoring Solution
- Service & Products

PCI

Low Profile

9-pin D-SUB

RS-422A/485  
**1ch**

**921.6 Kbps**

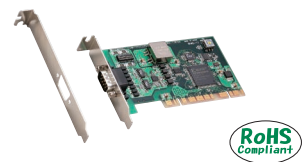
Individual Isolated

Surge Protection

CE

Windows Driver

Linux Driver



## 1 Port Isolated RS-422A/485

### COM-1PD(LPCI)H

- 1 RS-422A/RS485-compatible channels
- On-board isolated circuit provides safe communication, even over long distances
- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception)
- Low Profile PCI-compliant (includes bracket for use in standard PCI slot)



PCI

Low Profile

44-pin D-SUB

RS-422A/485  
**2ch**

**921.6 Kbps**

Individual Isolated

Surge Protection

CE

Windows Driver

Linux Driver



## 2 Port Isolated RS-422A/485

### COM-2PD(LPCI)H

- 2 RS-422A/RS485-compatible channels
- On-board isolated circuit provides safe communication, even over long distances
- Functions as a standard COM board when used under Windows or Linux
- Up to 16 boards can be added with settings of COM1~256
- 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Low Profile PCI-compliant (includes bracket for use in standard PCI slot)



## L-09

- Lineup
- PCI Express
- PCI
- PC Card
- USB
- ISA
- Media Converter

Model	COM-1PD(LPCI)H	COM-2PD(LPCI)H		
Interface type	RS-422A/RS-485 (Isolated), Full-duplex or Half-duplex communication mode			
Number of Channels	1ch	2ch		
Speed	2~921,600bps *1*2			
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit			
Parity Check	even, odd, non-parity			
Controller	162850 compliant (FIFO buffer: I/O 128 bytes per channel)			
Interrupts	1 *3			
Wiring Distance	1200m (Max.)			
Isolation type	Bus Isolation	Channel Isolation & Bus Isolation		
Isolation voltage	Bus Isolation: 300VDC	Channel Isolation: 300VDC, Bus Isolation: 300VDC		
I/O Address	Any 32-byte boundary			
Power Consumption (Max.)	5VDC, Terminator OFF: 200mA / Terminator ON: 300mA	5VDC, Terminator OFF: 300mA / Terminator ON: 550mA		
Bus / Dimensions (mm)	PCI (32bit, 33MHz, 5V or 3.3V*4) / 121.69(L)x63.41(H)			
Included cable length	-			
Connector	9-pin D-type male connector: DELC-J9PAF-20L9 [JAE] or equivalent	44-pin D-type female connector: 103A-44FGTB3B3 [COXOC] or equivalent		
Options	Software	API-PAC(W32)		
	Accessories	-		
	Cables / Connectorss	RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5D9F	PCE44/9P2S, CN5-D44M	

Note: \*1: Selectable speed, 15~921,600bps, using Standard COM Drive Software Setup and API-PAC(W32)  
 \*2: Data transmission at high speed may not be performed normally depending on the environment including the type of status of connected material of cable and environment.  
 \*3: A single interrupt signal "INTA" is output as a collection of interrupt input signals from four channels.  
 \*4: This board requires power supply at +5 V from an expansion slot (it does not work on a machine with a +3.3V power supply alone).

As shown on the side of product's images, RoHS compliant is a CONTEC original marking for RoHS-compliant products.

# Serial Communication

- 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**
- GPB Communication
- Remote I/O
- Expansion Unit / Bus Adapter
- Software
- Accessories & Cables
- Distributed Monitor & Control Network: F&IT
- Multi-Programmable Display
- Wireless LAN
- Remote Monitoring Solution
- Service & Products

**Card Bus** 9-pin D-SUB RS-232C 921.6K bps CE

1ch Windows Driver Linux Driver

## 1 Port RS-232C COM-1(CB)H

- Functions as a standard COM board when used under Windows XP/Server 2003/2000/Me/98 or Linux
- 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Maximum 2pcs. can be mounted on the same PC (for Windows XP, Server 2003, 2000)

Connection cable included



**Pb Free**  
Soon to be RoHS-compliant

**Card Bus** 9-pin D-SUBx2 RS-232C 921.6K bps CE

2ch Windows Driver Linux Driver

## 2 Port RS-232C COM-2(CB)H

- Functions as a standard COM board when used under Windows XP/Server 2003/2000/Me/98 or Linux
- 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Maximum 2pcs. can be mounted on the same PC (for Windows XP, Server 2003, 2000)

Connection cable included



**Pb Free**  
Soon to be RoHS-compliant

**Card Bus** 9-pin D-SUBx4 RS-232C 921.6K bps CE

4ch Windows Driver Linux Driver

## 4 Port RS-232C COM-4(CB)H

- Functions as a standard COM board when used under Windows XP/Server 2003/2000/Me/98 or Linux
- 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Maximum 2pcs. can be mounted on the same PC (for Windows XP, Server 2003, 2000)

Connection cable included



**Pb Free**  
Soon to be RoHS-compliant

**Card Bus** 9-pin D-SUB RS-422A/485 921.6K bps Individual Isolated Surge Protection CE

1ch Windows Driver Linux Driver

## 1 Port Isolated RS-422A/485 COM-1PD(CB)H

- Functions as a standard COM board when used under Windows XP/Server 2003/2000/Me/98 or Linux
- On-board isolated circuit provides safe communication, even over long distances
- 128-byte FIFO buffer (both transmission and reception) provided for each channel
- Maximum 2pcs. can be mounted on the same PC (for Windows XP, Server 2003, 2000)

Connection cable included



**Pb Free**  
Soon to be RoHS-compliant

Model	COM-1(CB)H	COM-2(CB)H	COM-4(CB)H	COM-1PD(CB)H
Interface type	RS-232C(Async.)			RS-422A/RS-485 (Async.&Isolated)
Number of Channels	1ch	2ch	4ch	1ch
Speed	2~921,600bps *1*2			
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit			
Parity Check	even, odd, non-parity			
Controller	162850 compliant (FIFO buffer: I/O 128 bytes per channel)			
Interrupts	1 *3			
Wiring Distance	15m (Max.)			1200m (Max.)
Isolation type	-			Bus Isolation
Isolation Voltage	-			300VDC
I/O Address	Any 32-byte boundary			
Power Consumption (Max.)	3.3VDC 100mA		3.3VDC 200mA	3.3VDC, Terminator OFF: 300mA / Terminator ON: 500mA
Bus / Dimensions (mm)	PC Card Standard CardBus / Type II			
Included cable length	250mm			
Connector	9-pin D-type male connector: DELC-J9PAF-20L9[JAE] or equivalent			
Options	Software	API-PAC(W32)		
	Accessories	-		
	Cables / Connectors	RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5-D9F		

Note: \*1: Selectable speed, 15~921,600bps, using Standard COM Drive Software Setup and API-PAC(W32)  
 \*2: Data transmission at high speed may not be performed normally depending on the environment including the type of status of connected material of cable and environment.  
 \*3: A single interrupt signal "INTA" is output as a collection of interrupt input signals from four channels.

As shown on the side of product's images, Pbfree **Pb Free** is a CONTEC original marking for lead-free products.

## L-10

- Lineup
- PCI Express
- PCI
- PC Card
- USB
- ISA
- Media Converter

# Serial Communication

Box-PCs
Panel-PCs
Flat Panel Displays
Silicon Disk Drives
Option
Box PCs & Panel PCs with Windows CE
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Distributed Monitor & Control Network: F&EIT
Multi-Programmable Display
Wireless LAN
Remote Monitoring Solution
Service & Products

**USB 2.0** 9-pin D-SUB RS-232C 921.6 Kbps 1ch Windows Driver



## 1 Port RS-232C Micro Converter COM-1(USB)H

- 128byte transmission and 384byte reception
- Functions as a standard COM board when used in Windows XP/Sever 2003/2000
- 9-pin D-SUB connector (female) is used allowing direct connection with modem  
The attached gender-changer enables connection with 9-pin D-SUB connector (female) cable (\* Installed in the factory setting)

**USB 2.0** 9-pin D-SUB RS-232C 921.6 Kbps Individual Isolated Surge Protection 1ch Windows Driver



## 1 Port Isolated RS-232C Micro Converter COM-1P(USB)H

- 128byte transmission and 384byte reception
- Functions as a standard COM board when used in Windows XP/Sever 2003/2000
- Port is isolated from PC and protected against surge
- 9-pin D-SUB connector (female) is used allowing direct connection with modem  
The attached gender-changer enables connection with 9-pin D-SUB connector (female) cable (\* Installed in the factory setting)

**USB 2.0** 9-pin D-SUB RS-422A/485 921.6 Kbps Individual Isolated Surge Protection 1ch Windows Driver



## 1 Port Isolated RS-485/RS422A Micro Converter COM-1PD(USB)H

- 9-pin D-SUB connector (male) is used allowing connection with 9-pin D-SUB connector (female) cable.
- 128byte transmission and 384byte reception
- Functions as a standard COM board when used in Windows XP/Sever 2003/2000
- Port is isolated from PC and protected against surge

## L-11

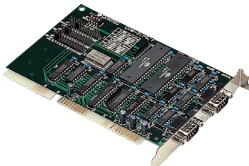

Lineup
PCI Express
PCI
PC Card
USB
ISA
Media Converter

Model	COM-1(USB)H	COM-1P(USB)H	COM-1PD(USB)H
Interface type	RS-232C (Async.)		RS-422A/485 (Async.)
Number of Channels	1		
Speed	300-921,600bps *1*2		
Data type	5/6/7/8 Bit, 1/1.5/2 Stop Bit		
Parity Check	even, odd, non-parity		
Controller	FT232BM (FIFO buffer: 128-byte transmission, 384-byte reception)		
Interrupts	-		
Wiring Distance	15m (Max.)		1200m (Max.)
Isolation type	-	Bus Isolation	
Isolation Voltage	-	300VDC	
Operation guaranteed voltage	5V±5% *3		
Power Consumption (Max.)	5VDC 50mA	5VDC 280mA	5VDC 350mA
Bus / Dimensions (mm)	USB Specification 1.1/2.0/ 78.3(W)×20.5(D)×36.5(H), 91.0(W)×20.5(D)×36.5(H) (when gender changer connecting)		USB Specification 1.1 / 2.0/ 68.3 (W)×20.5(D)×36.5(H)
Connector	USB: USB A connector RS-232C: 9-pin male D-type connector (female)		USB: USB A connector RS-422A/485: 9-pin male D-type connector
Options	Software - Accessories - Cables / Connectors RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9M, RSC-25F/9F, CN5-D9M, CN5-D9F CN5-D9M, CN5-D9F		

Note: \*1: Data transmission at high speed is dependent upon the environment including the type and status of connected equipment, cabling and operable environment.  
\*2: Software Selectable  
\*3: It doesn't correspond to Low-power Bus-powered Function (4.4V operation).

● Gender changer  
The interface connector of this product is a 9 pin D-SUB (female) connector. The product is shipped with the gender changer attached to the interface connector. When connecting the product with a screw-locked (female) cable, leave the gender changer attached to the connector. When connecting the product to a device having a 9 pin D-SUB (male) connector using a straight cable, remove the gender changer and connect the product directly to the device.  
<COM-1(USB)H, COM-1P(USB)H included>

# Serial Communication

<b>ISA</b>	<b>Model</b>	<b>2 Port RS-232C</b>	<b>High Speed 2 Port Isolated RS-422A/RS485</b>
		<b>COM-2(PC)F</b>	<b>COM-2PD(PC)H</b>
			
<b>SPECIFICATIONS</b>			
Interface type		RS-232C	RS-422A, RS-485
Channels		2ch	
Access Speed		50~115,200bps	50~921,600bps
Data type		5/6/7/8 Bit, 1/1.5/2 Stop Bit	
Parity check		even, odd, non-parity	
Function Setting			
Controller		16550 compliant	
Interrupts		Compatible mode: Two of IRQ 3~7, 9~12, 14 or 15 Enhanced mode: One of IRQ 3~7, 9~12, 14 or 15	
Wiring distance		15m (Max.)	1.2km (Max.)
Isolation type		-	Bus isolation
Isolation Voltage		-	1000VDC
I/O address		Any 16-byte boundary	
Power consumption (Max.)		5VDC 420mA, +12VDC 60mA, -12VDC 50mA	5VDC 480mA
Connector		9-pin male D-type: DELC-J9PAF-20L9[JAE] or equivalent	
Bus / Dimensions (mm)		AT Bus / 163.0(L) x 107.0(H)	AT Bus / 163.0(L) x 122.0(H)
Options	Software	API-PAC(W32)	
	Accessories	-	
	Cables / Connectors	RSS-9M/F, RSC-9F, RSS-25M/9F, RSC-25F/9F, CN5-D9F	RSS-9M/F, RSS-25M/9F, CN5-D9F
CE mark		○	○

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- Service & Products

## L-12

- Lineup
- PCI Express
- PCI
- PC Card
- USB
- ISA
- Media Converter

# Serial Communication

## Media Converter

● **RS-232 / RS-422A serial communication protocol is converted to Ethernet**

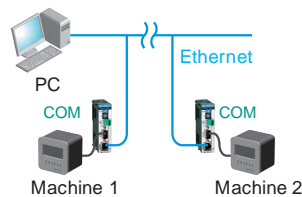
● **Choice of three operation modes to suit your specific needs**

● **Add a COM port on your PC - [Virtual COM Mode]**

In this mode, the unit is used as a COM port in a Windows® PC.

Via Ethernet, you can operate a remote device as if it were right next to you. Access by socket communication is also supported.

■ **Add a COM port on your PC**



You can use up to 100m UTP cable between PC and HUB, or HUB and this converter.

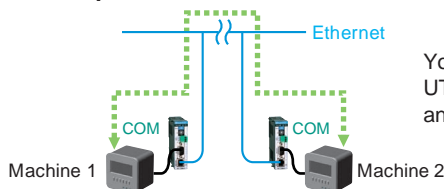
● **Replace a Serial Cable Connection - [Transparent Mode]**

In this mode, data from connected devices is transferred as is, without any changes.

You can replace serial cables with Ethernet without changing communication software settings.

Up to 254 units can be installed on the same line.

■ **Replace a Serial Cable**



You can use up to 100m UTP cable between HUB and this converter.

● **N-to-N Packet Communication Using Dedicated Commands - [Modem Mode]**

This mode is used for creating communication programs and conducting packet communications using dedicated commands.

You can conduct communications to multiple units (N-to-N) by appending packets with the device ID. 254 units can be installed on the same line.

### RS-232C Media Converter

RS-232C ↔ Ethernet (Wire LAN)

● Add-on device modules COM-2(FIT)GY (for RS-232C 2ch) and COM-1PD(FIT)GY (for RS-422A/RS-485 1ch) can be freely combined to allow up to three units to be added for extension

● DHCP client function

**RP-COM(FIT)H**

● Corresponding to the wide input power supply (10 - 30VDC)

**RP-COM(FIT)H-AF**

● 5VDC and PoE supporting the use of IEEE802.3af-compatible devices, enabling power to be supplied from UTP cables



RP-COM(FIT)

Windows Diver

AC Adapter

### RS-422A Media Converter

RS-422A ↔ Ethernet (Wire LAN)

**RP-422(FIT)GY**



Windows Diver

AC Adapter



L-13

# Serial Communication

Model	RP-COM(FIT)H	RP-COM(FIT)H-AF	RP-422(FIT)GY
<b>Serial standard</b>			
Interface type	RS-232C		RS-422A
Data Speed	300~921,600bps		
Connector	9-pin male D-type connector		
<b>Wire LAN</b>			
Ethernet Standard	IEEE802.3(10BASE-T)/ IEEE802.3u(100BASE-TX)	IEEE802.3(10BASE-T)/ IEEE802.3u(100BASE-TX)/ IEEE802.3af (PoE)	IEEE802.3(10BASE-T)/ IEEE802.3u(100BASE-TX)
Data Speed	10/100Mbps		
Access Method	CSMA/CD		
Transmission Format	Half Duplex / Full Duplex		
Number of ports	1 (10BASE-T / 100BASE-TX)		
Power Supply	10.0 - 30.0VDC ±5% (AC adapter is purchased separate)	5VDC±5% (AC adapter is purchased separate)	5VDC±5% (AC adapter included)
Power Consumption (Max.)	12.0VDC 0.2A, 24.0VDC 0.1A	0.4A (Max.)	0.5A (Max.)
Add-on module	RS-232C 2ch add-on : COM-2(FIT)GY For RS-422A/485 1ch add-on : COM-1PD(FIT)GY Combine COM-2(FIT)GY or COM-1PD(FIT)GY up to three freely		-
Dimensions (mm)	25.2(W)×64.7(D)×94.0(H) (Exclusive of protrusions)		
Weight	100g (3.5oz)		

## Options

RP-COM(FIT)H / RP-COM(FIT)H-AF	
<b>Add-on device modules</b>	
COM-2(FIT)GY	RS-232C 2ch
COM-1PD(FIT)GY	RS-422A/RS-485 1ch
<b>AC adapter</b>	
POA201-10	Output: 12V 1A <RP-COM(FIT)H>
POA200-20	Output: 5V 2A <RP-COM(FIT)H-AF>

RP-COM(FIT)H-AF	
<b>PoE power supply unit</b>	
POW-CB30(af)	Supplying power Unit from UTP cables support PoE
POW-CBM4(af)	Multi Port Supplying power Unit with swithing HUB support PoE

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