Data
Communication

Creating a connection between two interfaces is no longer a problem with the ATEN range of reliable cost-efficient, bi-directional converters. These are extremely useful in situations where the only port available uses an interface that is different from the device you need to connect to. In addition, there are some not-so-common standards that a converter can easily access which might otherwise be impossible or too expensive to consider. ATEN's range of converters has been designed to provide simple solutions to the problems of data loss and conversion difficulties.

We offer a wide range of auto switches and interface converters which include serial PCI cards and parallel line extenders. The Bitronics-capable models allow you to take advantage of enhanced parallel port features, such as bi-directional communication, higher data throughput, and printer control from the keyboard.

• Auto Switch

Share peripherals between computers.

• Printer Network

Simultaneous printing capability.

• RS-232 to RS-485/RS-422 Bi-directional Converter

Data transmission controlled by the RTS signal.

• Serial / Parallel Converter

Automatically adjusts signal strength to compensate for distance.

• Serial PCI Card

RS-232/RS-422/RS-485 converters and extenders are heavily represented in many enterprise fields.
• Telecommunications industry
• Auto-teller machines
• Airport check-in and flight schedule display systems
• Automatic postal machines

Data Communication

AF142
ParaHub

- Shares peripherals between computers
- Reversible operation for 1-in-2-out or 2-in-1-out
- Transfers files between computers
- Supports IEEE-1284 nibble mode
- Print job management is first come, first served
- Supports broadcast mode
- Selects ports by button and software code operation
- Non-powered
- HP Laser Jet, Canon, Epson and NEC Compatible

AF241
ParaHub

- Shares peripherals between computers
- Transfers files between computers
- Supports IEEE-1284 nibble mode
- Print job management is first come, first served
- Selects ports by button and software code operation
- Non-powered
- HP Laser Jet, Canon, Epson and NEC Compatible
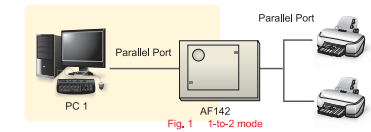
AS8144B
Bitronics Auto Switch

- Bi-tronics and Centronics compatible
- Reversible operation for 1-in-4-out or 4-in-1-out
- Supports IEEE-1284 nibble mode
- Print job management is first come, first served
- Supports broadcast mode
- Selects ports by button and software code operation
- Non-powered
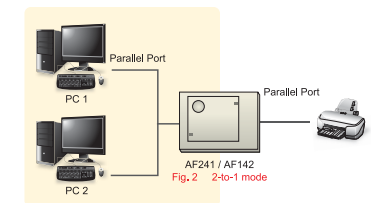- HP Laser Jet, Canon, Epson and NEC Compatible

AS248
Printer Network

- At least 24 PCs can share 8 Centronics printers with the AS248 network by means of 4-wire phone lines
- Simultaneous printing capability
- Works in bus/star/tree topologies
- Data transfer rate: 22 Kbytes per second
- Cable distance of up to 366 m (1200 ft)
- Easy Installation
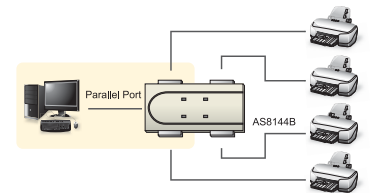- Selects printers by software code operation
- Non-powered

Setup (AF142)

Parallel Port
Parallel Port
PC 1
AF142
Fig. 1   1-to-2 mode

Setup (AF241)

Parallel Port
PC 1
Parallel Port
PC 2
AF241 / AF142
Fig. 2   2-to-1 mode

Setup (AS8144B)

Parallel Port
AS8144B

Setup (AS248)

AS248T   AS248T   AS248T   AS248R   AS248R
1200 Feet
Parallel Port
Parallel Port
01   # 02   # 64   # 1 ... 8
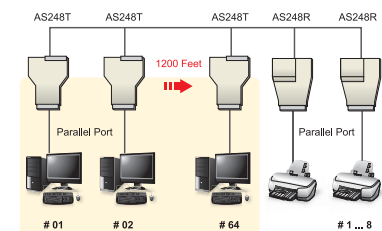
Accessories

1.

1. RJ116 Cable x 1 (AS248)

Data Communication

IC485S
RS-232/RS-485
Interface Converter
Monitor Configuration Support

- Data transmission controlled by the RTS signal
- DCE / DTE selectable
- Point-to-point, multidrop, and simplex/duplex link selection
- Four wire full duplex; two wire half duplex
- Compact size
- Cable distance up to 1200 m
- Monitor configuration support
- Supports baud rates up to 115.2kbps

IC485SI
RS-232/RS-485
Interface Converter
Signal and Power Isolation Support

- Data transmission controlled by the RTS signal
- DCE / DTE selectable
- Point-to-point, multidrop, and simplex/duplex link selection
- Four wire full duplex; two wire half duplex
- Compact size
- Cable distance up to 1200 m
- Signal and power isolation
- Supports baud rates up to 115.2kbps

IC485SN
RS-232/RS-485
Interface Converter
Non-Powered Operation

- Data transmission controlled by the RTS signal
- DCE / DTE selectable
- Point-to-point, multidrop, and simplex/duplex link selection
- Four wire full duplex; two wire half duplex
- Compact size
- Cable distance up to 1200 m
- Non-powered operation
- Supports baud rates up to 115.2kbps

IC485AI
RS-232 to RS-482/RS-485
Bidirectional Converter

- Automatic internal RS-485 bus supervision
- No external flow control signals for RS-485 required
- Transient suppression on RS-485 data lines
- DCE / DTE selectable
- Point-to-point, multidrop, and simplex operating modes
- Four wire full duplex; two wire half duplex
- LEDs for easy status monitoring
- Minimum 2000V isolation protection
- Compact size
- Cable distance up to 1200 m
- Supports baud rates up to 115.2kbps

IC485ZB
Serial-to-ZigBee Converter

- Provides a wireless link for RS-232, RS-422, and RS-485 serial data signals
- IEEE 802.15.4 Zigbee compliant
- Transmission range up to 100 m (Indoor/Urban) / 350 m (Outdoor Line-of-sight)
- Virtual COM port support – enables connected devices as if they were directly connected to a COM port on the local computer
- Supports an over-the-air data rate of 250 kbps
- Supports baud rates up to 115.2Kbps (non-standard baud rates may also be supported)
- 2.4Ghz ISM band radio frequency
- 16 Direct Sequence Software Selectable Channels
- Point-to-point and Point-to-multipoint network topologies supported
- Repeater mode extends range up to 700 m

SXP320A
RS-232/Centronics
Bidirectional Serial/Parallel
Converter

- DIP switch for direction setting
- Both hardware and XON/XOFF handshaking
- Easy installation
- Compact size

Non-Powered

SXP325A
Bidirectional Serial/Parallel Converter

- DIP switch for direction setting
- Both hardware and XON/XOFF handshaking
- Built-in buffer for efficient operation
- Easy installation
- Compact size

SXP500
RS-232/Parallel High Speed Bidirectional Converter
1.8 m Cable Built-in

- DIP switch for direction setting
- Both hardware and XON/XOFF handshaking
- Non-powered
- Easy installation
- Compact size
- Built-in 1.8 m cable
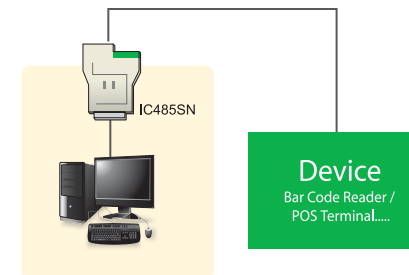
IC150
RS-232 Line Driver

- DCE/DTE switch selectable
- Full Duplex / Simplex Switch Selectable
- Analog loop back
- Non-powered
- Compact size

(Transmitter)

(Receiver)

IC164
Non-Powered / High Speed Parallel Data Extender

- Non-powered
- Easy to install and operate
- Compact size
- Cable distance up to 400 m

Setup (IC485SN)

IC485SN

Device
Bar Code Reader /
POS Terminal.....

Setup (SXP500)

Serial to Parallel
Serial Port
Parallel Port
Parallel Port
Serial Port
Parallel to Serial
SXP500

Accessories

1.

2.

3.

4.
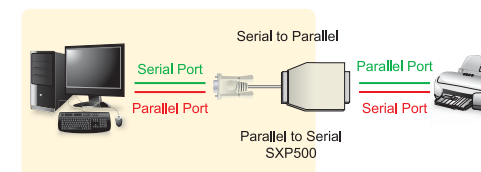
1. Power Adapters: DC9V x 1 (IC485S, IC485SI, IC485AI); AC9V x 1 (SXP320A, SXP325A)
2. RJ1116 Cable x 1 (IC164)
3. Software CD x 1 (IC485ZB)
4. USB Cable x 1 (IC485ZB)

Non-Powered

Non-Powered

Non-Powered

Data Communication

IC-102S
RS-232 2-Port PCI card

- Fully compliable with PCI Spec. Ver2.2 standard

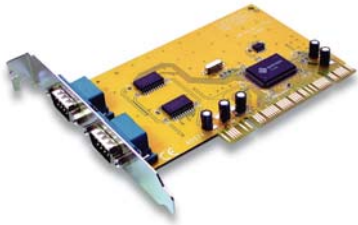- Supports both 64-bit & 32-bit PCI Bus and 3.3V & 5V connector keys

- High-speed serial port supports baud rates up to 921.6Kbps

- High-tech 128K FIFO can reduce CPU loading, interrupting and improving system performance dramatically

- Plug and Play, I/O address and IRQ assigned by BIOS

- Works with various types of DB9M / DB25M serial devices

- Ready for the Intel® Itanium® and AMD® Athlon ® 64R 64-bit CPU on the Microsoft Windows® XP 64-bit Edition Version 2003 and Windows® Sever 2003 for 64-bit Itanium based or Extended Systems

- Ideal for 56K V.90 external modems, ISDN terminal adapters, PDA, UPS, barcode scanners, and other high-speed serial port devices

- Supports Microsoft Windows NT, 2000, XP, Vista, 2003, DOS, and Linux

IC-104S
RS-232 4-Port PCI card

- Fully compliable with PCI Spec. Ver2.2 standard

- Supports both 64-bit & 32-bit PCI Bus and 3.3V & 5V connector keys

- High-speed serial port supports baud rates up to 921.6Kbps

- High-tech 128K FIFO can reduce CPU loading, interrupting and improving system performance dramatically

- Plug and Play, I/O address and IRQ assigned by BIOS

- Works with various types of DB9M / DB25M serial devices

- Ready for the Intel® Itanium® and AMD® Athlon ® 64R 64-bit CPU on the Microsoft Windows® XP 64-bit Edition Version 2003 and Windows® Sever 2003 for 64-bit Itanium based or Extended Systems

- Ideal for 56K V.90 external modems, ISDN terminal adapters, PDA, UPS, barcode scanners, and other high-speed serial port devices

- Supports Microsoft Windows NT, 2000, XP, Vista, 2003, DOS, and Linux
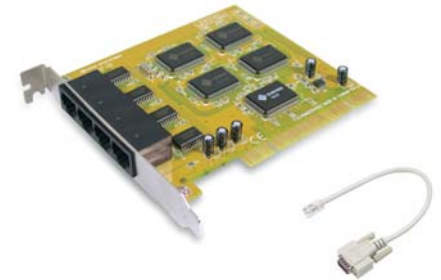

IC-108S
RS-232 8-Port PCI card

- Fully compliable with PCI Spec. Ver2.2 standard

- Supports both 64-bit & 32-bit PCI Bus and 3.3V & 5V connector keys

- High-speed serial port supports baud rates up to 921.6Kbps

- High-tech 128K FIFO can reduce CPU loading, interrupting and improving system performance dramatically

- Plug and Play, I/O address and IRQ assigned by BIOS

- Works with various types of DB9M / DB25M serial devices

- Ready for the Intel® Itanium® and AMD® Athlon ® 64R 64-bit CPU on the Microsoft Windows® XP 64-bit Edition Version 2003 and Windows® Sever 2003 for 64-bit Itanium based or Extended Systems

- Ideal for 56K V.90 external modems, ISDN terminal adapters, PDA, UPS, barcode scanners, and other high-speed serial port devices

- Supports Microsoft Windows NT, 2000, XP, Vista, 2003, DOS, and Linux

IC-104SA
RS-232 4-Port PCI card

- Fully compliable with PCI Spec. Ver2.2 standard

- Supports both 64-bit & 32-bit PCI Bus and 3.3V & 5V connector keys

- High-speed serial port supports baud rates up to 921.6Kbps

- High-tech 128K FIFO can reduce CPU loading, interrupting and improving system performance dramatically

- Plug and Play, I/O address and IRQ assigned by BIOS

- Works with various types of DB9M / DB25M serial devices

- Assign serial ports Re-Map to ISA address 3F8, 3E8, 2F8, 2E8 under DOS, NT operation system for special devices working on COM1 and COM2

- Ready for the Intel® Itanium® and AMD® Athlon® 64R 64-bit CPU on the Microsoft Windows® XP 64-bit Edition Version 2003 and Windows® Sever 2003 for 64-bit Itanium- based or Extended Systems

- Ideal for 56K V.90 external modems, ISDN terminal adapters, PDA, UPS, barcode scanners, and other high-speed serial port devices

- Supports Microsoft Windows NT, 2000, XP, Vista, 2003, DOS, and Linux

At a Glance

Auto Switch

Model No.		AF142	AF241	AS8144B	AS248T	AS248R
Connectors	Input	3 x DB-25 (F)	3 x DB-25 (F)	5 x DB-25 (F)	1 x DB-25 (M)	2 x 6P4C Jack
	Output				2 x 6P4C Jack	1 Centronics C-36 (M)
LEDs	Printer Activity	2 (Red)	2 (Red)	4	N/A	N/A
Port Selection	Input	(2 >1) Auto / Manual PC Selection	Auto / Manual PC Selection	(4 >1) Auto / Manual PC Selection	Auto / Manual	Auto / Manual
	Output	(1 >2) Software /Manual Printer Selection	N/A	(1 > 4) Software / Manual Printer Selection		
Input Arbitration		First Come First Served (2>1)	First Come First Served	First Come First Served (4>1)	First Come First Served	First Come First Served
File Transfer		Yes (2>1)	Yes	N/A	N/A	N/A
Broadcast		Yes (1>2)	No	Yes (1>4)	N/A	N/A
Timeout Selection		15, 45 Seconds (2>1)	15, 45 Seconds (2>1)	15, 45 Seconds (4>1)	5, 10, 25, 60 Second	
Power Consumption		DC9V, 0.9W (Max.)	DC9V, 0.9W (Max.)	DC9V, 0.45W (Max.)	DC9V, 0.02W	
Signal Range		6 m (Max)	6 m (Max)	6 m (Max.)	366 m (Max.)	
Data Transfer Rate		N/A	N/A	N/A	22 Kbytes/ Sec. (Max.)	
Auto Form feed Selection		N/A	N/A	N/A	Enable / Disable	
Environment	Operating Temp.	0–50°C				
	Storage Temp.	-20–60°C				
	Humidity	0–80% RH, Non-condensing				
Physical Properties	Housing	Plastic				
	Weight	0.15 kg	0.15 kg	0.24 kg	47 g	50 g
	Dimensions (L x W x H)	10.20 x 8.50 x 2.60 cm		17.50 x 9.60 x 3.10 cm	8.20 x 5.40 x 2.60 cm	7.60 x 5.30 x 2.10 cm

Function		SXP320A	SXP325A	SXP500
Connectors		1 x DB-25 (F)	1 x DB-25 (F)	1 x DB-9 (F)
		1 x C-36 (M)		
Power		1 x AC Jack	1 x AC Jack	N/A
LEDs		Power	Power	Power
Interface Exchange	In	Serial or Parallel		
	Out	Parallel or Serial		
Serial Communication Mode		DCE only		
Microcontroller		ASIC		
Function keys		Reset	Reset	N/A
Memory Buffer Size		N/A	512K bytes	N/A
Baud Rates		1200-115200 bps	1200-115200 bps	1200-921600 bps
Data Compression		8.5:1	8.5:1	N/A
Environment	Operating Temp.	0–50°C		
	Storage Temp.	-20–60°C		
	Humidity	0–80% RH, Non-condensing		
Physical Properties	Housing	Plastic		
	Weight	0.12 kg		
	Dimensions (L x W x H)	10.10 x 6.20 x 2.55 cm		7.20 x 5.80 x 1.10 cm

Model No.		IC485S	IC485SI	IC485SN	IC485AI	IC485ZB
Connectors		1 x DB-25 (F)				1 x DB-9 (M)
		RS-485/RS-422 Four Terminal Block				2 x Terminal Block
		1 x RJ-11 (F)	Grounding Tab	1 x RJ-11 (F)	Grounding Tab	1 x USB (F)
Power		1 x DC Jack				1 x DC Jack, 1 x Terminal Block
Switches	SW1	DCE, DTE	DCE, DTE	DCE, DTE	DCE, DTE	RS232, RS485
	SW2	TxON, Rx ON	TxON, Rx ON	TxON, Rx ON	Segment 1-3: Baud Rate; Segment 4: Reserved; Segment 5&6: Data Format (bits); Segment 7&8: RS-422 / RS-485 Operating Mode	Coordinator / Device
		TxRTS, RxRTS	TxRTS, RxRTS	TxRTS, RxON		
		TxRTS, RxON	TxRTS, RxON	TxDTR/RTS, RxDSR/ON		
LEDs		N/A				TX/RX, Link , Power
Power Consumption		DC9V 1.35W (Max.)	DC9V 1.8W (Max.)	DC9V 0.9W (Max.)	DC9V 0.9W (Max.)	DC5.3V
Signal Range		1200 m (4000') (Max.)				100 m (Indoor); 350 m (Outdoor)
Baud Rates		Up to 100 Kbps Under 1200 m (4000')				1200-115200 bps
Environment	Operating Temp.	0–50°C				
	Storage Temp.	-20–60°C				
	Humidity	0–80% RH, Non-condensing				
Physical Properties	Housing	Plastic				
	Weight	60 g				56 g
	Dimensions (L x W x H)	5.40 x 7.45 x 1.85 cm				10.80 x 4.00 x 1.80 cm

Model No.		IC150	IC164
Connectors		1 x DB-25 (F) 1 x Terminal Block	1 x DB-25 (F) / 1 x C-36 (M)
		1 x RJ-11 (F)	
Power		N/A	1 x DC Jack
Signal Range		10 km (Max.) @ 110bps; 800 m (Max.) @19200 bps	400 m (1300') (Max.)
Switch	SW1	DCE, DTE Loop Back Select	N/A
	SW2	Full Duplex / Simples Select	N/A
Data Transfer Rate		N/A	21 Kbytes/Sec
Baud Rates		100-19200 bps	N/A
Power Consumption		Power from RS-232 interface	DC 9V, 0.4W (Min)
Environment	Operating Temp.	0–50°C	
	Storage Temp.	-20–60°C	
	Humidity	0–80% RH, Non-condensing	
Physical Properties	Housing	Plastic	
	Weight	60 g	45 g / 50 g
	Dimensions (L x W x H)	5.40 x 7.45 x 1.85 cm	8.20 x 5.40 x 2.60 cm / 7.60 x 5.30 x 2.10 cm