ATC
ADVANCED TECHNOLOGY
®

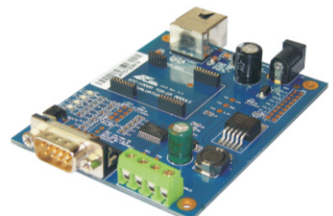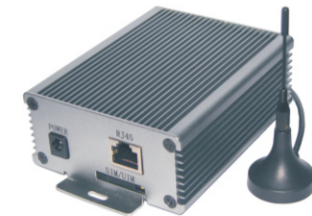## Shenzhen ATC Technology Co. Ltd
www.szatc.com

Total Solutions For Industrial Communication

Shenzhen ATC Technology Co. Ltd

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About us

As an experienced supplier of data communication products, Shenzhen ATC Technology Co. Ltd is counted on by many renowned buyers, such as ZTE, Car Part GmbH (from Germany), NOJA Power Switchgear Pty Ltd. (from Australia), and so on. Car Part GmbH commented on our products like this: "Your products can meet our market requests and the quality makes us satisfied. Hope you can keep the basic of success".

Our company product solutions include: Serial device networking solution, industrial control interface conversion solutions, USB to serial port solutions, optical fiber communication solutions, wireless GPRS/CDMA, RF solutions, Interface protection and lightning protection solutions, special requirements and customized solutions.

Every month, we can turn out 10,000 units of above products. Before production, our raw materials are checked again to make sure they are compliant with RoHS Directives. And all our output is CE-marked, finding good markets in many countries and regions including United Kingdom, Spain, Germany, Italy, Poland, Turkey, American, Canada, Brazil, Australia, Indonesia, Singapore, Malaysia, Vietnam and India.

Welcome to source high quality products at competitive prices from us.

ATC-2000

Connect serial devices to your Ethernet LAN
- Ethernet enable your serial devices
- Support 1-serial or 4-serial RS-232/422/485
- Support Web console
- No need to change COM software (included COM Virtual software)
- DIN mountable with accessory item

ATC-2000WF

Wireless 802.11b/g to Serial
- Wirelessly connect legacy serial devices to your LAN
- Remote device monitoring and diagnostics
- Easy plug-and-play installation and set-up Application Retail/Point-of-sale Building automation security.

ATC-850

High Speed Isolated USB to RS-232/422/485
- Easily fits into laptop carrying cases
- Protects from dangerous surges and spikes Monitor data; handy for troubleshooting
- No power supply required
- Industry standard USB protocol
- Easy installation conserves panel space

ATC-277SM

Single mode Fiber Optical Modem
- Immune to surges, spikes and ground loops
- Range up to 12.5 miles (20KM)
- Transmit (TD) and Receive (RD) lines supported
- Automatic RS-485 Send Data Control
- ST/SC Single-mode fiber cable connections
- DIN rail mount, terminal block serial connections
- Data rates up to 460 Kbps

Ethernet to serial

Wireless to serial

Serial converters

USB to serial

Fiber Optical to serial

Cabling and Accessories

5-Port Management Industrial Ethernet Switches ATC-405

Product Description

As the world's network and information technology becomes more mature, the trend is to use Ethernet as the major communications interface in many industrial communications and automation applications. Today's growing businesses are both placing more demands on and relying more on their network. Companies are putting more applications and demands on their Ethernet Infrastructure.

ATC-405 integrates a 5-port switches controller, SSRAM, and 5 10/100 Ethernet transceivers. Each of the transceivers compliers with the IEEE802.3, IEEE802.3u, and IEEE802.3x specifications. Those provide an economical solution for your industrial Ethernet connections. The ATC-405 switches increase the reliability and availability of your industrial Ethernet network. Models with an wide operating temperature range of -40 to 75°C are also available, and the switches support several reliable and intelligent functions, for different application, include router application, firewall, IEEE 802.1Q, IGMP snooping, policy-based QoS. Making the ATC-405 switches suitable for any harsh industrial environment.

The ATC-405 series switches can be installed easily on a DIN-Rail or in a distribution box.

Product Features

- Supports 10/100Mbps Auto Negotiation
- Up to 2K MAC address
- Support auto-polarity for 10Mbps
- Half/Full duplex traffic selection
- Provides broadcast storm protection
- Provides 5 Fast Ethernet ports with Auto MDI/MDI
- Class of Service-Port based, MAC address, VID, VLAN priority, IPv4 ToS, IPv6 DSCP,TCP/UDP
- Support Port mirror
- Support 16 VLAN (IEEE Std 802.1q)
- Support STP, RSTP and MSTP
- Provides compact size with DIN-rail/Wall mount, and IP30 metal mechanism
- Supports redundant 12 ~ 24 VDC power input
- Supports wide operating weight temperatures from -40 ~ 75° C
- Weight : 0.9Kg

Order Information

Model No.	Description	Ethernet Port No.
ATC-405	5-port 10/100Mbps Managed Industrial Ethernet switches	5
ATC-405U	5-port 10/100Mbps Unmanaged Industrial Ethernet switches	5

Low Cost TCP/IP To RS-232/422/485 Converter ATC-1000

The **ATC-1000** is a cost effective and highly integrated Serial-to-Ethernet Converter. Embedding a 8051CPU, 64KB OTP ROM, 32K bytes SRAM, 10/100Mbps Ethernet and serial port support handshake RTS, CTS. ATC-1000 Can control 1 x RS232/422/485 devices located virtually anywhere (via Ethernet or Internet).

Automatically finds devices in the network Configuration over Driver Panels, serial Port, WEB Browser, SNMP Automatic mode switching between Driver and RAW mode Support TCP/IP, UDP, DHCP.

Product Features

- RS-232/422/485 3-in-1 serial interface 300-230.4KBPS baud rate
- RS-485 conversion offers automatic data control
- Support 2, 4 wire RS-485
- All serial ports have built in 600W lightning surge protection
- 10/100M Ethernet, auto detect straight/cross cable
- Support protocols like TCP/IP, UDP, DHCP
- Support Windows XP,Win7 virtual com driver
- Power supply voltage:+9V to +24VDC
- Working temperature range : -20 ~ 70° C
- Certifications: CE.FCC RoHs approve
- Support standard DIN-rail, easy to install and fix
- Compact size (95×65×25mm)
- Weight : 0.45Kg

Application Fields

- LED INFO display equipments
- SCADA, measuring instruments and monitoring system
- Factory automation
- Building automation
- Check on work attendance/ Human resource management
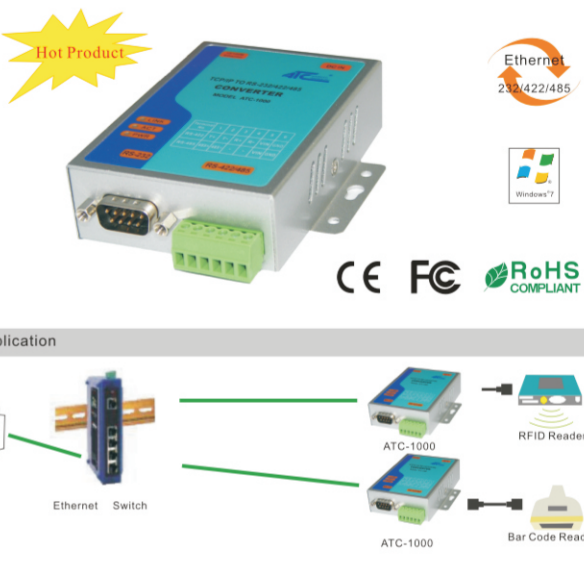
High-Performance TCP/IP To RS-232/422/485 Converter ATC-2000

The **ATC-2000** is a RS232/RS485 to TCP/IP converter integrated with a robust system and network management features designed for industrial equipment to be accessed and controlled via Intranet or Internet. By integrating RTOS (Real Time Operating System) and complete TCP/IP protocol stack capability, ATC-2000 provides not only a robust and high performance system to make your device connecting to Network, but also easy installation and Internet access.

The ATC-2000 Web Configuration is a breeze to operate and totally independent of the operating system platform you use.

Product Features

- Support 10/100Mbps Ethernet,Auto detect straight/cross cable
- Full Network Management via Web
- Support protocols like TCP/UDP, UDP, DHCP, PPOE, dynamic DNS
- Max TCP connection: 4 TCP in Server mode
- Allow to update new firmware
- Administrator password for security (Max length is 16 characters)
- Access password for security (Max length is 31 characters)
- RS-232/422/485 3-in-1 serial interface 1200 - 230.4 KBPS baud rate
- RS-485 conversion offers automatic data control.Support 2, 4 wire RS-485
- All serial ports have built in 600W lightning strike and surge protection
- Isolation protection up to 1.5KV on Ethernet port
- Support standard DIN-rail, easy to install and fix
- Power supply voltage:+9V to +24VDC
- Working temperature range:-40 ~ 70° C
- Compact size (95×65×25mm)
- Certifications: CE.FCC RoHs approve
- Weight : 0.45Kg
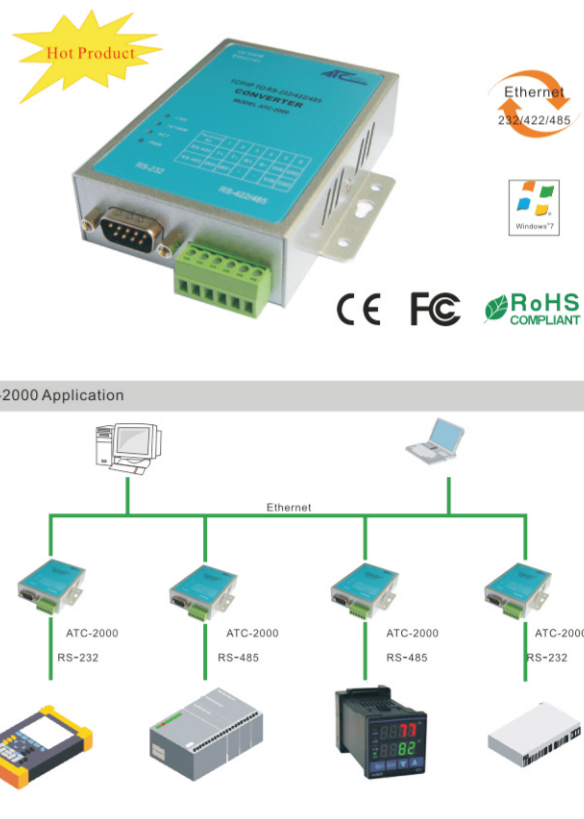
Ethernet to serial
Wireless to serial
Serial converters
USB to serial
Fiber Optical to serial
Cabling and Accessories

4-Serial Port device networking converter ATC-2004

Product Feature
- RS-232/422/485 4-in-1 serial Port interface300-230.4KBPS baud rate
- RS-485 conversion offers automatic data control
- Support 2, 4 wire RS-485
- All serial ports have built in 600W lightning protection
- 10/100M Ethernet, auto detect straight/cross cable
- Support protocols like TCP/IP, UDP, DHCP , PPPoE, Dynamic DNS
- Support standard DIN-rail, easy to install and fix
- Compact size (160x97x32 mm)

Driver Operating Mode
- Windows standard serial port Socket operating modes
- TCP Server operating mode
- TCP Client operating mode
- UDP operating modes
- Peer connection
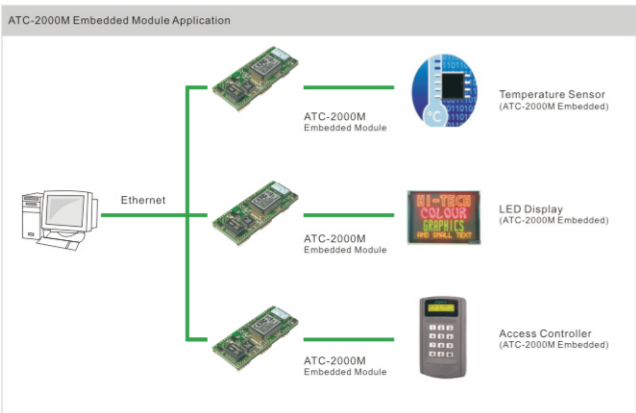- Podem mode

Application Fields
- LED INFO display equipments
- PLC control and management
- SCADA, measuring instruments and monitoring system
- CNC management
- Medical treatment/medication automation
- Factory automation
- Building automation
- Check on work attendance/ Human resource management

ATC-2004 Application

Ethernet

ATC-2004

Bar Code Reader | Time Clock | RFID | Camera
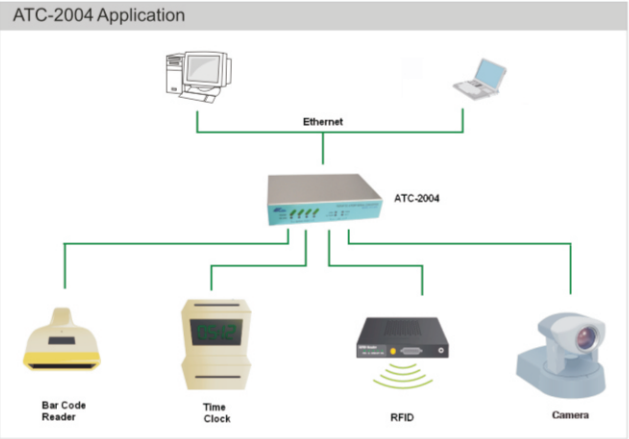
Industrial TTL interface 1- Serial Port embedded module ATC-2000M

Product Features
- A standard serial TTL interface, dual-in-line direct insert array 300-230.4KBPS baud rate
- Offer RS-485 conversion, offer automatic data control
- 10/100M Ethernet, auto detect straight/cross cable
- Support protocols like TCP/IP, UDP, DHCP , PPPoE, Dynamic DNS
- Single +5V power supply
- Compact size (65×27×10mm)

Ethernet TTL

ATC-2000M Embedded Module Application

Ethernet

Temperature Sensor (ATC-2000M Embedded)
ATC-2000M Embedded Module

LED Display (ATC-2000M Embedded)
ATC-2000M Embedded Module

Access Controller (ATC-2000M Embedded)
ATC-2000M Embedded Module

Low cost TCP/IP to Serial Embedded Module ATC-1000M

Product Description
Adds Ethernet connectivity for RS-232/422/485 devices, 10/100Mbps Ethernet; 230,400bps serial data rate, Supports TCP/Server, TCP/Client and UDP mode, Provides six TTL-level programmable digital I/Os, Web/Telnet/Serial consoles for device configuration, Windows utility included for device management.

Product Specifications
- **Form Factor**
Type: 30-pin dual-inline drop-in module
Pitch: 1.27mm
Dimensions: 37x27x12mm
- **Network Interface**
Type: 10/100BaseT, auto-detect
Protocols: TCP, UDP, HTTP, Telnet, IP, ICMP, ARP
IP addressing: DHCP, Static IP
- **Operation Modes**
TCP/Server, TCP/Client and UDP mode
- **Serial Interface (TTL-level)**
Signals: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
Baud: 300 to 230,400 bps
Parity: None, Even, Odd
Data bits: 7,8
Stop bit: 1,2
Flow control: None, RTS/CTS, XON/OFF
- **Programmable Digital I/O**
(Not Available on Standard version)
PIO0~PIO6: TTL level compatible
- **Configuration Methods**
Web console, Telnet Console and Serial Console
Windows utility (included in CD)
- **General**
Power input: 3.3VDC
Power consumption: 350mA@+3.3VDC
Operation temp.: -40~70° C , 5~95% RH
Storage temp.: -40~85° C , 5~95% RH
Regulation: CE/FCC compliant

Ethernet TTL

ATC-1000M Embedded Module Application

ATC-1000M Embedded Module
Power Meter ATC-1000M Embedded

Ethernet

ATC-1000M Embedded Module
Power Meter ATC-1000M Embedded

ATC-1000M Embedded Module
Power Meter ATC-1000M Embedded
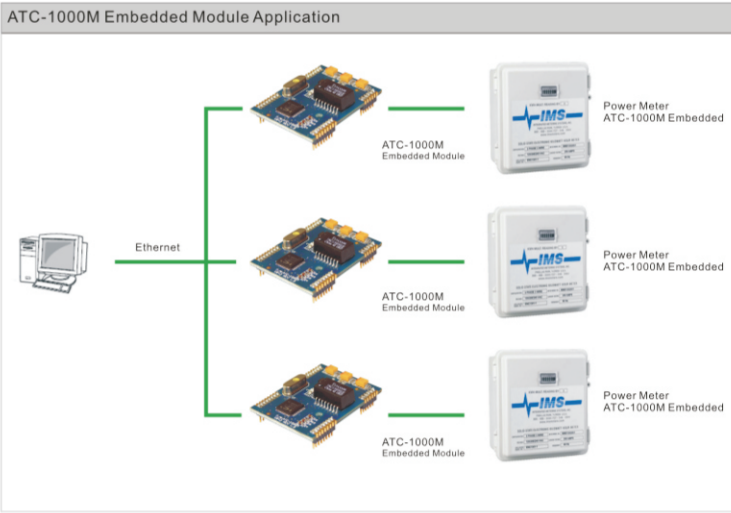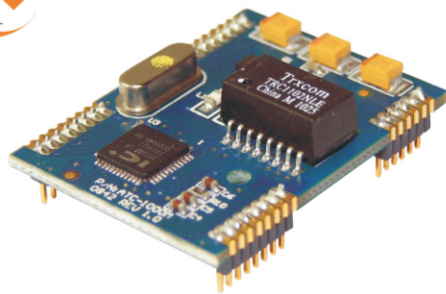
Evaluation Board for ATC-1000M

Evaluation board for ATC-1000M, including one ATC-1000M module, one carrier board, one power adapter and one CD-ROM with VSP driver.

Features
- ATC-1000M TTL interface single serial port embedded module
- DB-9 (pin) RS-232 connector
- RJ-45 standard Ethernet interface
- Built-in power unit
- Comprehensive software & hardware accessible to rapid evaluation

Windows®7
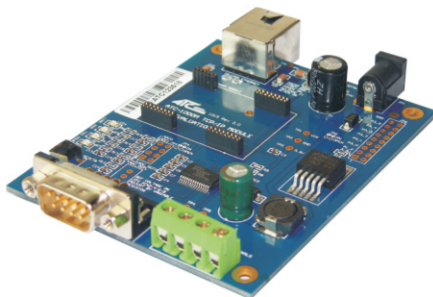
TCP/IP to 4-serial embedded module ATC-2004M

Product Features

- A standard serial TTL interface, dual-in-line direct insert array
- RS-232/422/485 4 serial Port interface 300-230.4KBPS baud rate offer RS-485 conversion, offer automatic data control
- 10/100M Ethernet, auto detect straight/cross cable
- Support protocols like TCP/IP, UDP, DHCP , PPPoE, Dynamic DNS
- Single +5V power supply
- Compact size (65×27×10mm)

Operating Modes

Driver operating modes
- Windows standard serial port Socket operating modes
- TCP Server operating mode
- TCP Client operating mode
- UDP operating modes

Special Operating Modes
- Peer connection

Application Fields

- LED INFO display equipments
- PLC control and management
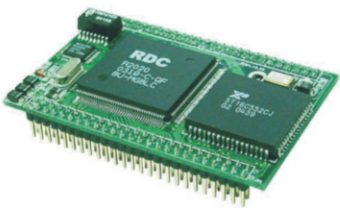- SCADA, measuring instruments and monitoring system
- CNC management
- Medical treatment/medication automation
- Factory automation
- Building automation
- Check on work attendance/ Human resource management

Order Information

Model Number	Description	Serial No.	Serial Type
ATC-1000M	Low Cost TCP/IP to serial Embedded Module	1	TTL
ATC-2000M	Industrial TCP/IP to Serial embedded module	1	TTL
ATC-2004M	TCP/IP to 4-serial embedded module	4	TTL
ATC-1000M/EVB	Evaluation board for ATC-1000M	1	RS-232/TTL
ATC-2000M/EVB	Evaluation board for ATC-2000M	1	RS-232/422/485
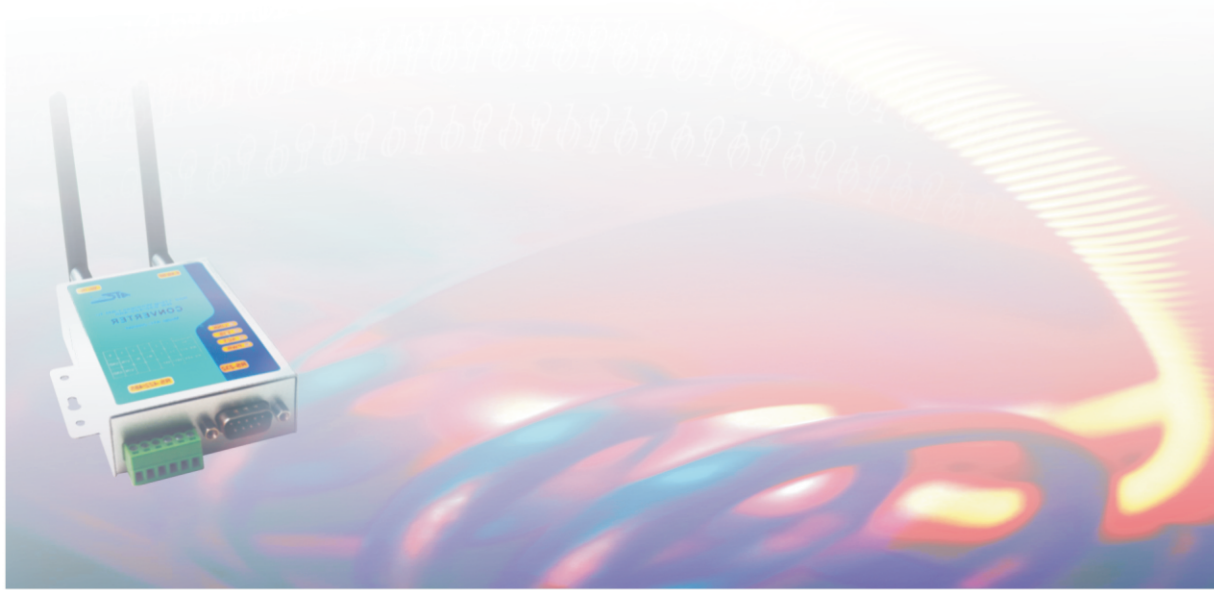
## 802.11b/g Wi-Fi to Serial Converter ATC-2001WF

Product Features

- Embedded 32-bit high-performance network processor and integrates real-time multitasking operating system.
- High-performance serial-to-WiFi module, supports 802.11b / g, supports the AP / AP Client / Bridge / Repeater and other wireless modes.
- Full wireless encryption: WEP/WPA/WPA2
- Support all the way 10/100M Ethernet interface, supports Auto-Midx.
- High-performance, high reliability, to ensure that all two-way serial baud rates up to full speed in the continuous transmission of data without packet loss
- Support high-speed serial baud rates up to 921600bps, while providing support Support RS232/RS485/RS422.
- Industry proven highly reliable full-featured TCP / IP protocol suite, complete data encryption protocol and algorithm support.
- DNS function remote dynamic IP connection
- PPPoE support for ADSL router directly into the Internet without
- Configuration Management offers a variety of channels, while supporting the AT commands serial port configuration, Web configuration, and management across any IP network segment configuration of device management software.
- Support local and remote network firmware upgrade serial
- Multi-user management and password protection.

Product Parameter

- High-speed, highly reliable serial to WiFi module
- 32-Bit RISC ARM7TDMI 55DMIPS
- 8MB RAM 1MB/4MB Code + 32KB Boot
- 10/100M Ethernet interface
- Provide high-speed RS-232/485/422 serial triple
- Baud rate from 110 - 460800bps
- Smart protocol suite:
  ETH, ARP, IP, UDP, TCP, ICMP, PING, BOOTP, AutoIP, DHCP, SNTP, DNS, SMTP, TFTP, TELNET, HTTP; SSH, SSL / TLS. Embedded WEB SERVER
- Data Encryption 128 -, 192 -, 256bit AES
- Work option for the TCP Server, TCP Client, UDP unicast and multicast
- Support Windows 95/98/ME/NT/2000/XP/2003/XP x64/2003 x64 COM driver, Linux real, TTY, UNIX operating system
- Operating voltage 8 ~ 24 VDC
- Weight : 0.45Kg
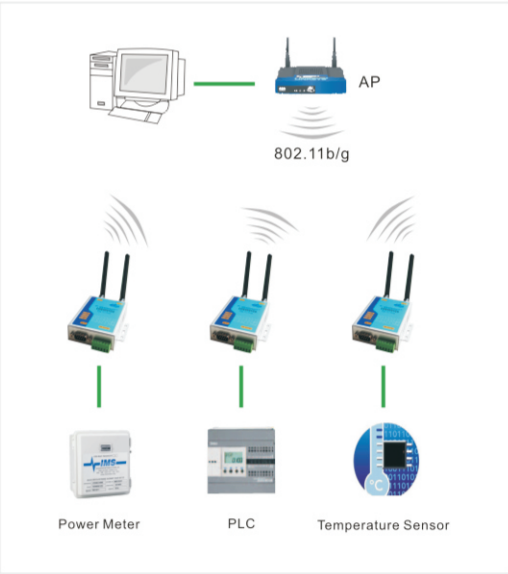
Wireless Conditions

Parameter	Specifications
Operating modes	AP / AP Client / Bridge / Repeater
Wireless standards	802.11b / g
Transfer rate11 Mbps	(802.11b) 54 Mbps (802.11g)
Transmission distance up to 300 meters	(@ 54 Mbps, in open areas)
Security	WEP / WPA / WPA2

Environmental Conditions

Parameter	Value
Temperature Range (Operating)	-40℃ ~ 70℃
Temperature Range (Storage)	-40℃ ~ 80℃
Relative Humidity (Operating)□	95%
Relative Humidity (Storage)	95%

Power Meter   PLC   Temperature Sensor

Ethernet to serial

Wireless to serial

Serial converters

USB to serial

Fiber Optical to serial

Cabling and Accessories

Wi-Fi(802.11b/g) To Serial Port Converter ATC-2000WF

General Introduction

The serial device networking (TCP/IP) has become a trend of industrial on-site networking. However, the on-site wiring construction and alternation cost have always been a bottle neck of serial device networking. With the growingly mature WLAN technology and falling cost of related hardware, the advantage of serial device networking has become quite obvious, which makes serial device wireless networking a must.

ATC-2000WF wireless serial port server offers wireless transceiver and high speed serial port, conforming to IEEE802.11b wireless network communication standard. The maximum standard transmission distance is 300M and further wireless communication can be achieved by additional high gain external antenna, which can not only prevent difficult wiring but also lower construction cost, specially suitable for devices like industrial environment and factory automation system, on-site monitoring system, etc.

Product Feature

- 802.11b industrial standard wireless network interface can achieve easy access to WLAN via wireless network card or AP
- The built in web server can be used for remote configuration, monitoring and maintenance of serial devices
- Offer 1- RS-232/422/485 serial
- Support TCP Server, TCP Client, UDP, Telnet, TFTP, DHCP, SNMP
- Support VPORTS mode, offer virtual serial port software
- Watch Dog time: 1 second automatic hardware reset
- 15KV ESD surge protection
- Integrated wireless net and serial port state LED display
- Power supply voltage: +9V to +24VDC
- Working temperature range: -40℃ to +70℃.
- Weight : 0.45Kg

Application Fields

- Factory automation system
- Distributed control system
- Other RS232/485/422 serial device wireless network

Wirelessly connect serial devices to your Ethernet LAN with 802.11b/g

802.11b/g

AP

PLC

RFID Reader
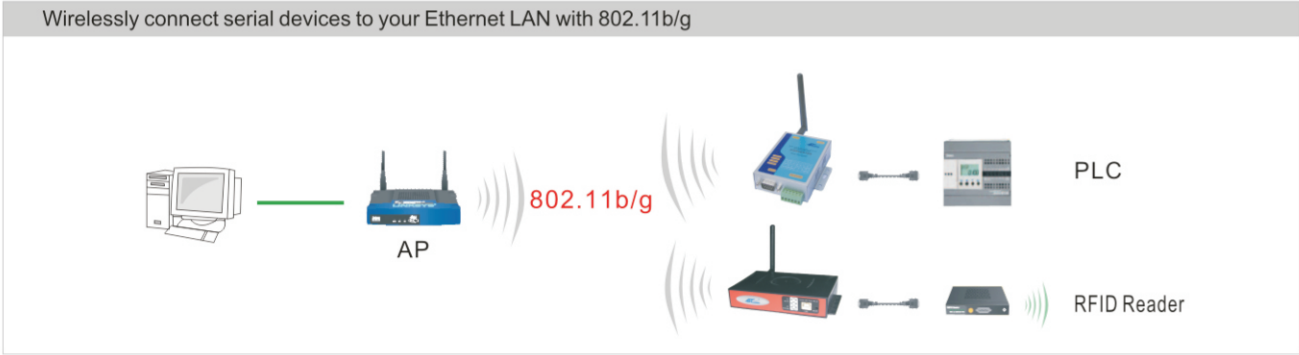
Order Information

Model No.	Description	Serial No.	Serial Type	Web Support
ATC-1000	Low Cost TCP/IP To RS-232/422/485 Converter	1	RS-232/422/485	YES
ATC-2000	Industrial TCP/IP to single port converter	1	RS-232/422/485	YES
ATC-2004	Industrial TCP/IP to 4 port converter	4	RS-232/422/485	YES
ATC-2000WF	Industrial wireless(802.11b/g) to single port converter	1	RS-232/422/485	NO
ATC-2001WF	Industrial wireless(802.11b/g) to single port converter	1	RS-232/422/485	YES
ATC-2002WF	Industrial wireless(802.11b/g) to Dual port converter	2	RS-232	YES
ATC-DK-32	DIN Kit Mount Adapter	–	–	–

RS-232/485 Mini Power Wireless Module (300m)   ATC-863

General Introduction

ATC-863 wireless digital transmission module offers standard RS-232, RS-485 and UART/TTL level interfaces for direct connection with computers, use's RS-485 equipments, SCM or other UART parts,

ATC-863 has adopted half duplex communication channel most suitable for point to multi-point communication mode. The primary station takes full control of communication harmony, and adopts data frames with address codes for data or command transmitting. The secondary station shall fully receive them and select response by comparing address codes; all the work shall be fulfilled by upper layer protocols, which shall ensure that only one wireless module in the communication network is in the transmitting state in any instant to avoid mutual interference. Therefore, the transmission channel built by ATC-863 is transparent to the user.

ATC-863 can also be applied to point to point communication, making it easier and smoothly upgrade wire (RS232/485/TTL) transmission mode in original system.

Technical Parameters

- Sight distance credible transmission distance is up to 300m (BER=10-3@9600bps);
- Offer byte-oriented transparent data adaptable to various user protocols;
- Can be applied to manifold communication combination methods like point to point, point to multi-point and multi-point to point;
- Automatically filtrate fake data generated in air, can transmit longer data frames;
- Modulation mode basing on FSK, adopts high efficiency forward error correction channel coding technology, anti-jamming data;
- 429.00~433.30MHzISM frequency range, need not apply for frequency pint;
- Micro-power transmission, maximum 100mW;
- Equipped with 50 ohm SMA antenna pedestal, offer manifold antenna options;
- Meanwhile offer RS-232/RS-485/ TTL level interface, optional I/O port;
- Effective speed 1200/2400/4800/9600/19200bps;
- Working temperature is -20℃~70℃(common)/-35℃~70℃(industrial class) ;
- Transmitting current: (A) =30mA Receiving current: =10mA(1200bps);
- Compact size (95×65×25mm)
- Weight : 0.45Kg

Pump station

Wireless modem   Pump station

Pump station

Wireless modem

433/868/915MHz

Wireless modem

Pump station

Control building

RS-232/485 Mini Power Wireless Module (500m)   ATC-871

General Introduction

ATC-871 wireless digital transmission module offers standard RS-232, RS-485 and UART/TTL level interfaces for direct connection with computers, use's RS-485 equipments, SCM or other UART parts,
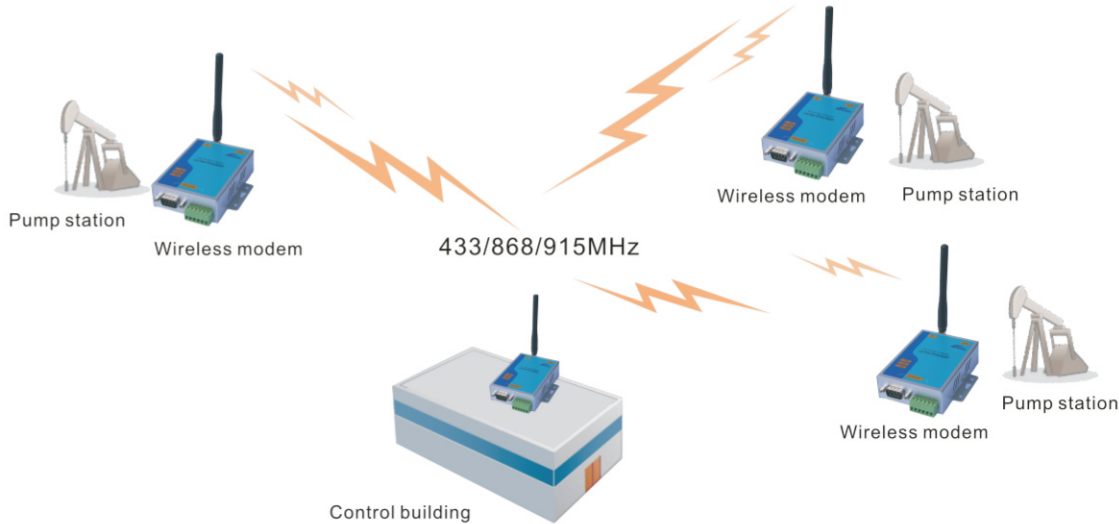
ATC-871 has adopted half duplex communication channel most suitable for point to multi-point communication mode. The primary station takes full control of communication harmony, and adopts data frames with address codes for data or command transmitting. The secondary station shall fully receive them and select response by comparing address codes; all the work shall be fulfilled by upper layer protocols, which shall ensure that only one wireless module in the communication network is in the transmitting state in any instant to avoid mutual interference. Therefore, the transmission channel built by ATC-871 is transparent to the user.

ATC-871 can also be applied to point to point communication, making it easier and smoothly upgrade wire (RS232/485/TTL) transmission mode in original system.

Technical Parameters

- Sight distance credible transmission distance is up to 500m(BER=10-3@9600bps);
- Offer byte-oriented transparent data adaptable to various user protocols;
- Can be applied to manifold communication combination methods like point to point, point to multi-point
- Automatically filtrate fake data generated in air, can transmit longer data frames;
- Modulation mode basing on FSK, adopts high efficiency forward error correction channel coding technology, anti-jamming data;
- 429.00~433.30MHzISM frequency range, need not apply for frequency pint;
- Micro-power transmission, maximum 100mW;
- Equipped with 50 ohm SMA antenna pedestal, offer manifold antenna options;
- Meanwhile offer RS-232/RS-485/ TTL level interface, optional I/O port;
- Effective speed 1200/2400/4800/9600/19200bps;
- Working temperature is -20℃~70℃(common)/-35℃~70℃(industrial class) ;
- Transmitting current: (A)=30mA (B)=130mA /receiving current: =10mA(1200bps);
- Compact size (95×65×25mm)

RS-232/485 Mini Power Wireless Module (1000m)   ATC-873

General Introduction

ATC-873 wireless digital transmission module offers standard RS-232, RS-485 and UART/TTL level interfaces for direct connection with computers, use's RS-485 equipments, SCM or other UART parts,

ATC-873 has adopted half duplex communication channel most suitable for point to multi-point communication mode. The primary station takes full control of communication harmony, and adopts data frames with address codes for data or command transmitting. The secondary station shall fully receive them and select response by comparing address codes; all the work shall be fulfilled by upper layer protocols, which shall ensure that only one wireless module in the communication network is in the transmitting state in any instant to avoid mutual interference. Therefore, the transmission channel built by ATC-873 is transparent to the user.

ATC-873 can also be applied to point to point communication, making it easier and smoothly upgrade wire (RS232/485/TTL) transmission mode in original system

Technical parameters

- Sight distance credible transmission distance is up to 1000m(BER=10-3@9600bps)
- Offer byte-oriented transparent data adaptable to various user protocols
- Can be applied to manifold communication combination methods like point to point, point to multi-point
- point to point Automatically filtrate fake data generated in air, can transmit longer data frames
- Modulation mode basing on FSK, adopts high efficiency forward error correction channel coding technology, anti- jamming data
- 429.00~433.30MHzISM frequency range, need not apply for frequency pint
- Micro-power transmission, maximum 500mW
- Equipped with 50 ohm SMA antenna pedestal, offer manifold antenna options
- Meanwhile offer RS-232/RS-485/ TTL level interface
- Effective speed 1200/2400/4800/9600/19200/38400bps
- Working temperature is -20℃~70℃(common)/-35℃~70℃(industrial class)
- Transmitting current: =360mA /receiving current: =45mA(1200bps)
- Compact size: (95×65×25mm)

Application Fields

Industrial telecontrol, telemeter \wireless message recording Automaticu data acquisition systems, wireless label, wireless telecontrol, meteorology and hydrology monitoring Gate safety check on work attendance, POS system,u wireless monitoring of machine room facilities; Other wirelessu RS-232/485/TTL data communication
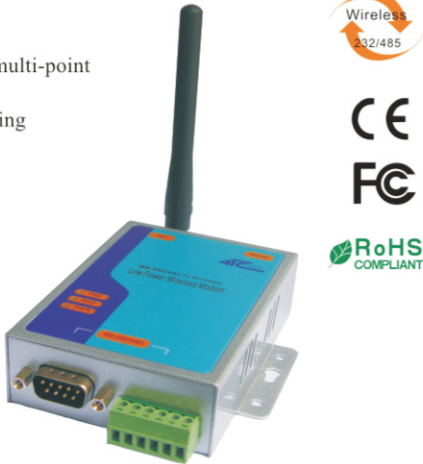
Zigbee to RS232/422/485 Converter

Introduction

The ATC-3200 is a cost effective and highly integratedSerial-to-Zigbee wireless Converter. Built on ZigBee technology, the ATC-3200 is ideal for a range of applications from simple RS-232 cable replacement to sophisticated multi-drop RS-485 networks and everything in between. Available in RS-232/RS-422/RS-485.

ZigBee is the global wireless language connecting dramatically different devices to work together and enhance everyday life. The ZigBee alliance is a non-profit association of more than 280 member companies driving development of ZigBee wireless technology. The alliance promotes world-wide adoption of ZigBee as the leading wirelessly networked, sensing and control standard for use in energy, home, commercial and industrial areas.
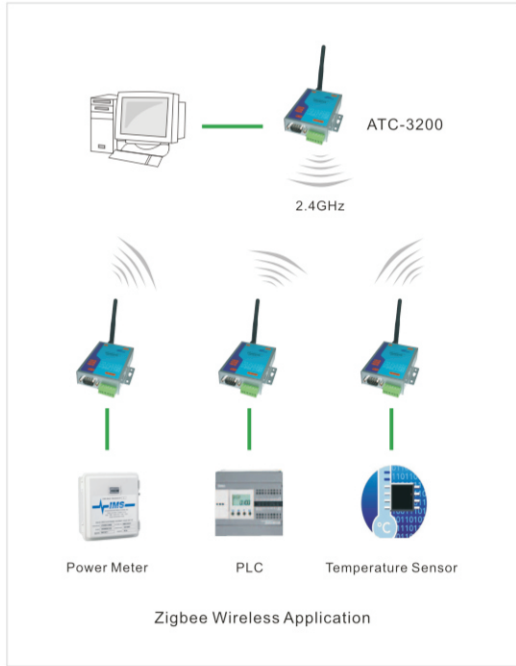
Features:

- Utilizes globally available 2.4 GHz ISM band
- Control and Configuration with UART commands.
- 65535 unique node addresses, IDs allow multiple large networks to coexist.
- Transmit Power Output, max. 12 dBm
- Complete IEEE 802.15.4 spec compliant
- Typical Receiver Sensitivity 102 dBm
- Typical Throughput rate 250,000 bps
- Obstructed signal range to 500 meters @ 12dBm/PA and -102dBm/LNA
- Multiple Low Power Operating modes
- 3-in-1 RS-232/422/485 interface Max.Baudrate to 115.2Kbps .
- Supports 2-wire and 4-wire RS-485 with AUTO-SENDbuilt-in terminator
- Supports industrial 24 VDC power input
- Terminal block accessories for easy RS-422/485 serial wiring
- Easy and powerful configuration program
- Approval CE, RoHS
- Weight : 0.45Kg

Applications

- Wireless remote control
- Building automation
- Personal area network
- Industrial control
- OEM equipment
- PC peripherals

ATC-3200

2.4GHz

Power Meter   PLC   Temperature Sensor

Zigbee Wireless Application

Order Information

Model No	Description	Frequency	Distance
ATC-863	RS-232/485 Mini Power Wireless Module	433/868/915MHz	300meter
ATC-871	RS-232/485 Mini Power Wireless Module	433/868/915MHz	500meter
ATC-873	RS-232/485 Mini Power Wireless Module	433/868/915MHz	1000meter
ATC-875	RS-232/485 Mini Power Wireless Module	433/868/915MHz	2000meter
ATC-3200	Zigbee to RS-232/422/485 Wireless Module	2.4GHz	500meter
GD230B	Wireless Data Transceiver	230/470MHz	10Km
GD230V	Wireless Data Transceiver	230/470MHz	10Km

10W Wireless Data Transceiver(10Km) GD230B

Product Features
- Programmable transmission power and squelch level and high frequency stability
- No extra software or programming needed to implement communication
- Transparent and direct asynchronous communication interface
- Long range
- Suitable for both master station and remote station
- Half-duplex or simplex
- Flexible configuration as point-to-point or point-to-multipoint
- Rapid and easy installation
- Easy integration into any OEM equipment
- Small size and low weight

Specifications
- Frequency range: VHF/UHF
- Channel spacing: 25KHz
- Modulation: GMSK/MSK/FSK
- Channel capacity: 16
- Channel selection: program through asynchronous interface
- Operating mode: Half-duplex or simplex
- Data 'transmission rate: 19200/9600/4800/2400/1200bps
- Data interface rate: 19200/9600/4800/2400/1200bps programmable
- Data interface bits: 8
- Data interface parity: None/Odd/Even programmable
- Data interface stop bit: 1
- Frequency stability: +1.5ppm or -1.5ppm
- Power supply voltage: DC 12V(11-14V)
- Current drain: 90mA when receiving 1.7A when transmitting at 10W
- Operating temperature:-40℃ to +70℃
- Dimensions 125mm×76mm×34mm:
- Weight: 370g

Transmitter:
- RF power output: 10W(1-100W programmable)
- Spurs/Harmonics rejection: 70dB
- Audio distortion: ≤2%
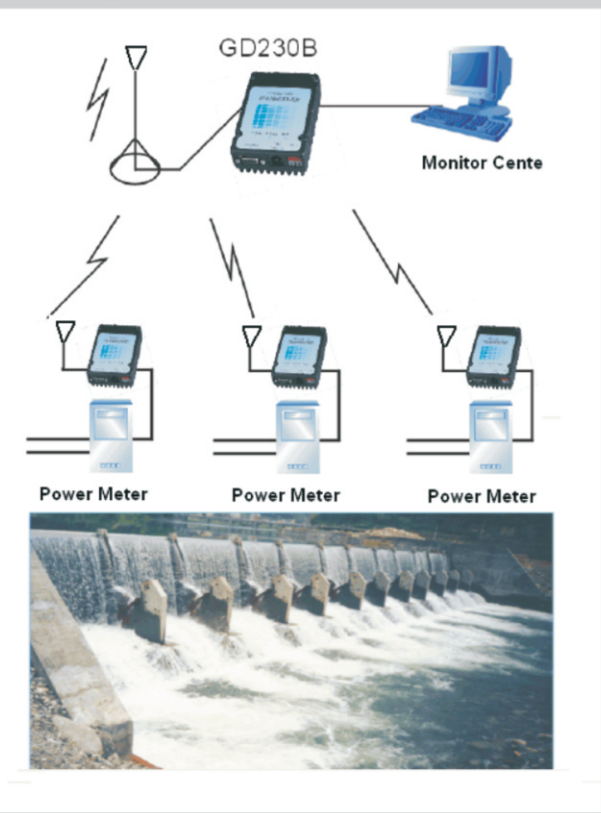- Output impedance: 50Ω

Receiver:
- Receiver sensitivity: 0.18(12dB SINAD)
- AF output power:0.5W
- Audio distortion:=3%
- Spur rejection:-70dB
- Image rejection:-80dB

Application Fields
Factory automation system

Distributed control system

Other RS232/485/422 serial device wireless network

GD230B Application

25W Wireless Data Transceiver(40Km) GD230V

Product Features
- Programmable transmission power and squelch level and high frequency stability
- No extra software or programming needed to implement communications
- Transparent and direct asynchronous communication interface
- Long range
- Suitable for both master station and remote station
- Half-duplex or simplex
- Flexible configuration as point-to-point or point-to-multipoint
- Rapid and easy installation
- Easy integration into any OEM equipment.
- Small size and low weight

Specifications
- Frequency range: VHF/UHF
- Channel spacing:25KHz
- Modulation: GMSK/MSK/FSK
- Channel capacity:16
- Channel selection: program through asynchronous interface
- Operating mode: Half-duplex or simplex
- Data transmission rate:19200/9600/4800/2400/1200bps
- Data interface rate:19200/9600/4800/2400/1200bps programmable
- Data interface bits:8
- Data interface parity: None/Odd/Even programmable
- Data interface stop bit:1
- Frequency stability:+1.5ppm or -1.5ppm
- Power supply voltage: DC 12V(11-14V)
- Current drain:90mA when receiving 5.0A when transmitting at 25W
- Operating temperature:-40℃ to +70℃
- Demensions:125mm×76mm×34mm
- Weight:370g

Transmitter:
- RF power output:25W(1-25W programmable)
- Spurs/Harmonics rejection:70dB
- Audio distortion:≤2%
- Output impedance:50Ω

Receiver:
- Receiver sensitivity:0.18μv(12dB SINAD)
- AF output power:0.5W
- Audio distortion:=3%
- Spur rejection:-70dB

Application Fields
Factory automation system

Distributed control system

Other RS232/485/422 serial device wireless network

GPRS Wireless Router   W3100GR

General Introduction

The W3100 Series GPRS Wireless Router, based on the 2.5G mobile communication technologies, is a sort of terminal equipment for real time data transmitting through the matured GSM network. It can provide standard Ethernet interface and support the special network of VPN with the inner standard TCP/IP protocol. It can transmit the real time industrial testing data efficiently.

Also it can realize wireless link between the GPRS network and the local area network or the equipments with standard 10BASE-T interface. It has the address transforming (NAT) function or other network service function. It can be used both in the medium or small enterprises and in family to land on the Internet. Either it can transmit mass industrial pictures or wireless POS data.

After connecting the router with the Ethernet, the user can visit the Internet With the NAT and DMZ function, it has one 10M LAN interface and can configure parameter through the UDP tools soft ware.

Product Features

- Support 800, 900/1800MHZ
- Real time clock
- The communication effect relies on the construction of the GPRS network
- Currently, the construction of the GPRS network has got matured.
- Stable data transmitting; with large quantity and high speed
  Character of the router:
- Transparent data transmission
- No need of background computer support
- Automatically dialing after drop from the net
- Support DMZ
- NAT router function
- Establishing a LAN with high speed Conveniently and fluently
- Easily operated
- Wakened remotely
- UDP controlling channels
  Technology standard:
  Power:
- Voltage: +9V~24VDC.
- Consumption: Max,300mA@+5VDC;Standby, 120mA@+5VDC
  Temperature
- Operation temperatue: -20~70℃
- Store temperature: -30~70℃
- RJ45 Interface and GPRS antenna interface
- TCP/UDP/IP/ICMP/PPP/PAP/DNS protocol agreement
- Measurement: 103mm×75mm×35mm(not including antenna and fixed parts)
  Interface
- Antenna: 50P/SMA Female
- SIM/UIM: 3V
- Ethernet interface: 10/100BaseT-RJ45 (Auto sense)

Solutions

Atmosphere environment monitoring data collection communication solutions
Remote gate safety/check on work attendance/POS wirelessu networking solutions basing on GPRS communication,
Oil well/pipe net realu time data collection and auto control system solutions
Remote communicationu solutions of LED screen for intelligent traffic

RoHS COMPLIANT   CE

CDMA wireless Router   W3100CR

General Introduction

CDMA 1X is the first phase of CDMA 2000(data rate higher than IS-95, but lower than 2Mbit/s).It runs IP protocol over packet data transmission network and supports up to 308kbit/s data. It is new type of service developed from CDMA IS-95 network to provide packet data. service for CDMA subscribe.

The W3100 Series CDMA Wireless Routers are terminal equipments for real time data transmitting through the matured CDMA/GSM network. They can provide standard Ethernet interface and can support the special network of VPDN/APN with the standard TCP/ IP protocol.

Also they can realize the wireless link between the CDMA network and the local area network or the equipments with standard 10BASET interface. It's very easy for medium or small enterprises to establish their long-distance LAN and to share long-distance data through the standard FTP network software.

They can be used as the wireless gateway and router between the remote controlling station and the center one , thus making it possible for the mutual accessing among the industrial Ethernet network equipments.

They can provide services such as dialing numbers according to the clients demand, closing the net link after receiving the instructions from the center station. Taking up the long-distance call, automatically logging on the internet after dialing the number

Product Features

- Support 800, 900/1800MHZ
- Real time clock
- The communication effect relies on the construction of the CDMA network
- Currently, the construction of the CDMA network has got matured.
- Stable data transmitting; with large quantity and high speed
  Character of the router:
- Transparent data transmission
- No need of background computer support
- Automatically dialing after drop from the net
- Support DMZ
- NAT router function
- Establishing a LAN with high speed Conveniently and fluently
- Easily operated
- Wakened remotely
- UDP controlling channels
- **Technology standard:**
  Power
- Voltage: DC+9V~24V
- Consumption : Max,300mA@+5VDC;Standby, 120mA@+5VDC
- Operation temperature: -20~70℃
- Store temperature: -30~70℃
- RJ45 Interface and CDMA antenna interface
- TCP/UDP/IP/ICMP/PPP/PAP/DNS protocol agreement
- Measurement: 103x75x35mm (not including antenna and fixed parts)
  Interface
- Antenna: 50P/SMA Female
- SIM/UIM: 3V
- Ethernet interface: 10/100BaseT-RJ45 (Auto sense)

RoHS COMPLIANT   CE

Application Fields
- Industrial video monitoring, wireless digital transmission;
- Gate safety system, ATM, POS, wireless network;
- Intelligent traffic

GPRS/CDMA Router Application
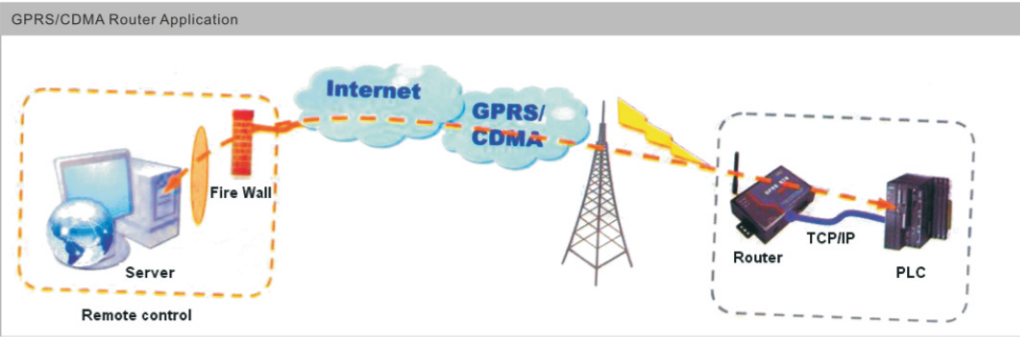
GPRS DTU wireless digital transmission device   W3100G

General Introduction

The W3100 series DTU is a kind of bidirectional-converter, which can convert the series communication of industrial RS232/RS485/TTL into wireless network communication of GPRS/GPRS.

It is based on the 2.5G network communicating platform, transmitting in the transparent way. There is no use for the users to Clearly know the complicated communicating theory of GPRS/GPRS. Neither does it usable to change the program to link the

original series equipments. It can be applied to the long-distance communication or control in the field of automatic electric power system, industrial monitoring, water conservancy, weather, environment protection, transportation, finance, securities, etc. product of this kind can save you both time and fund.

Product Features

● Support 900/1800MHZ
● Support thesignal of RTS CTS DTR DSR   simultaneously.
● Support the UDP/TCP protocol, and the TCP SERVER work mode
● Automatic re-dial function after off line
● Setting the communicating parameter flexibly by way of VB programmer
● Support transparent and non-transparent transmission.
● Find the center computer by static IP, domain name or SMS
● Power supply
● Voltage: DC+5V~24V
● Consumption: In use: 120mA@+12VDC;
● Idle: 40mA@+12VDC;
● Dormancy: 8mA@+12VDC;
● Working temperature: -35℃ ~ +75℃
● Relative Humidity: 95% (non-condensing)
    Interface
● Antenna: 50Ù/SMA Female
● SIM/SIM: 3V
● RS-232 interface(W3100G-01)/RS-485 interface(W3100G-02)
● Three-wire standard: RXD, TXD and GND
    Technology standard
● Transmitting in the transparent way
● Real time clock
● TCP/UDP/IP/ICMP/PPP/PAP/DNS protocol

Solutions

Atmosphere environment monitoring data collection communication solutions
Remote gate safety/check on work attendance/POS wirelessu networking solutions basing on GPRS communication,
Oil well/pipe net realu time data collection and auto control system solutions
Remote communicationu solutions of LED screen for intelligent traffic

Application Fields

● Industrial video monitoring, wireless digital transmission;
● Gate safety system, ATM, POS, wireless network;
● Intelligent traffic
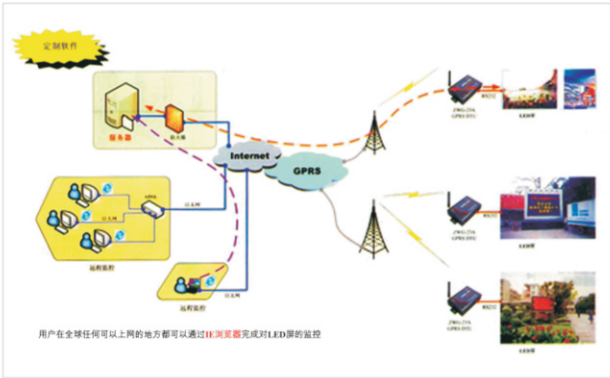
CDMA DTU wireless digital transmission device   W3100C

General Introduction

The W3100 series DTU is a kind of bidirectional-converter, which can convert the series communication of industrial RS232/RS485/TTL into wireless network communication of CDMA/CDMA.

CDMA 1X is the first phase of CDMA 2000(data rate higher than IS-95, but lower than 2Mbit/s). It runs IP protocol over packet data transmission network and supports up to 308kbit/s data. It is new type of service developed from CDMA IS-95 network to provide packet data service for CDMA subscribe. There is no use for the user to clearly know the complicated communicating theory of CDMA. Neither does it usable to change the program to link the original series equipments. It can be applied to the long-distance communication or control in the field of automatic electric power system, industrial monitoring, water conservancy, weather, environment protection, transportation, finance, securities, etc. product of this kind can save you both time and fund.

Product Features:

● Support 800MHZ
● Support thesignal of RTS CTS DTR DSR   simultaneously.
● Support the UDP/TCP protocol, and the TCP SERVER work mode
● Automatic re-dial function after off line
● Set the communicating parameter flexibly by way of VB programmed
● Support transparent and non-transparent transmission.
● Find the center computer by static IP, domain name or SMS
Power supply
● Voltage: DC+5V~24V
● Consumption: In use: 120mA@+12VDC;
● Idle: 40mA@+12VDC;
● Dormancy: 8mA@+12VDC;
● Working temperature: -35℃~+75℃
● Relative Humidity: 95% (non-condensing)
 Interface
● Antenna: 50/SMA Female
● SIM/SIM: 3V
● RS-232 interface (W3100C-01)/RS-485 interface (W3100C-02)
● Three-wire standard: RXD, TXD and GND
Technology standard
● Transmitting in the transparent way
● Real time clock
● TCP/UDP/IP/ICMP/PPP/PAP/DNS protocol
● Low power dissipation

Application Fields

● Industrial video monitoring, wireless digital transmission;
● Gate safety system, ATM, POS, wireless network;
● Intelligent traffic

Application Fields
● Industrial video monitoring, wireless digital transmission;
● Gate safety system, ATM, POS, wireless network;
● Intelligent traffic

Industrial Converter With Isolated

ATC-107N

CE
FC
RoHS COMPLIANT
ISOLATED
PORT-POWER

Industrial Class Wall-mounted
Photo-isolation Interface Converter

ATC-108N

CE
FC
RoHS COMPLIANT
ISOLATED

Industrial Class Wall-mounted
Photo-isolation Interface Converter

- **9-24 VDC operation**
- **3500 V, 2-way isolation on input/output**
- **CE/FCC approved**

- RS-232 connects to DB9 or RJ45 socket
- RS-422/485 connects to terminal block
- Modbus ASCII or RTU compatible
- Automatic Send Data Control
- RS-232 interface 600W surge protection
- RS-422/485 1000W surge protection
- LED indicators for power and data
- Power supply: serial port electricity stealing at RS-232 end.
- External power supply: connecting at RS-422/485 end
- Wide temperature ranges (-40 to 85℃)
- Full metal housing, anti-static, powerful anti-jamming capacity,
- high performance/price ratio
- Support standard DIN-rail, easy to install and fix,
- Compact size (95×65×25mm)

- **9-24 VDC operation**
- **Isolated DC/DC converter inside**
- **2500 V, 2-way isolation on input/output**
- **CE/FCC approved**

- RS-232 connects to DB9 or RJ45 socket
- RS-422/485 connects to terminal block
- Modbus ASCII or RTU compatible
- Automatic Send Data Control
- RS-232 interface 600W surge protection
- RS-422/485 1000W surge protection
- LED indicators for power and data
- Power supply: external power supply at RS-232 end.
- DC/DC Isolation power supply at RS-422/485 end
- Wide temperature ranges (-40 to 85℃)
- Full metal housing, anti-static, powerful anti-jamming capacity,
- high performance/price ratio
- Support standard DIN-rail, easy to install and fix,
- Compact size (95×65×25mm)

Standard Version Isolated Converter

CE
FC
RoHS COMPLIANT
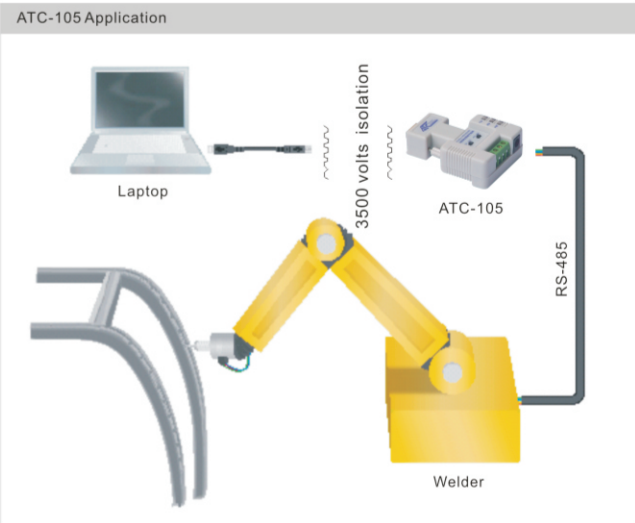ISOLATED

ATC-105 PORT-POWER   ATC-107 PORT-POWER   ATC-108

RS-232 to RS-422/485 Photoelectric Isolation Interface Converter   ATC-105

Product Features

- Interface feature: interface is compatible with EIA/TIA RS-232C, RS-422/485 standard
- Electric interface: RS-232C interface DB9 hole connector RS-422/485 interface 4-bit terminal
- Transmission media: twisted-pair cable or shielded cable
- Working mode: asynchronous half or full duplex
- Signal indication: three signal indication lights indicate TD, RD and PWR
- Power supply: serial port electricity stealing at RS-232 end. External power supply connecting at RS-422/485 end
- Isolation: isolation voltage 3500VRMS 500VDC sequence special built-in 400W lightning protection IC
- Transmission speed: 0-115.2K BPS
- The product has a few appearance and high efficiency serial port electricity stealing technology patents.
- Patent Certificate NO: (ZL03234984.X   ZL0334377.2)

ATC-105 Application

Laptop   3500 volts isolation   ATC-105   RS-485   Welder

RS-232 to RS-422/485 Photoelectric Isolation Interface Converter   ATC-107

Product Features

- Point to point, point to multi-point communication
- Support RS-232 to RS-422/485 conversion, conversion modes can be selected automatically
- Automatic direction control of transmitting data (TXD),zero-latency design
- Photoelectric isolation enhance type (isolation voltage 3500V 1S pulse/500V sequence)
- Point to multi-point, allow to connect 32 RS-422 or RS-485 interface device
- Data communication speed 0-115.2KBPS,
- Electric interface: DB25 and six-bit terminal Block.
- Full metal housing, anti-static, powerful anti-jamming capacity. External power supply connecting at RS-422/485 end

RS-232 to RS-422/485 Photoelectric Isolation Interface Converter   ATC-108

Product Features

- Point to point, point to multi-point communication
- Support RS-232 to RS-422/485 conversion, conversion modes can be selected automatically
- Automatic direction control of transmitting data (TXD),zero-latency design
- Photoelectric isolation enhance type (isolation voltage 3500V 1S pulse/500V sequence), special DC/DC module, RS-422/485 lightning protection on 1000W each line
- Point to multi-point, allow to connect 128 RS-422 or RS-485 interface device
- Data communication speed 0-115.2KBPS,
- Electric interface: both ends of ATC-108 are DB9 male and female.
- Full metal housing, anti-static, powerful anti-jamming capacity

RS-422/485 Isolated Repeaters and HUB

ATC-109   ☑ISOLATED☑

☑ISOLATED☑   ATC-109N   Hot Product

ATC-1204   ☑ISOLATED☑

ATC-131   ☑ISOLATED☑

RS-422/485 Photoelectric Isolation Data Repeaters ATC-109

Product Features

● Point to point, point to multi-point communication
● Support RS-232 to RS-422/485 conversion , conversion modes can be selected automatically
● Automatic direction control of transmitting data (TXD),zero-latency design
● Photoelectric isolation enhance type (isolation voltage 3500V impulse/500V sequence) RS-232 interface 600W, RS-422/485 1000W lightning protection on each line
● Point to multi-point, allow to connect 128 RS-422 or RS-485 interface device
● Data communication speed 0-115.2KBPS,
● Electric interface: RS-232 RJ-45 port (attached with DB9 female to RJ-45 cable) RS-422/485 interface is DB9 male connector or 6-bit terminal block
● Power supply: external power supply at RS-232 end. DC/DC Isolation power supply at RS-422/485 end
● Full metal housing, anti-static, powerful anti-jamming capacity, high performance/price ratio
● Support standard DIN-rail, easy to install and fix,
● Compact size (95×65×25mm)
● Weight:0.45Kg

ATC-109N RS-485 Repeater Application

RS485   RS485   RS485

ATC-109N

PLC

Inverter 1   Inverter 2

Motor 1   Motor 2
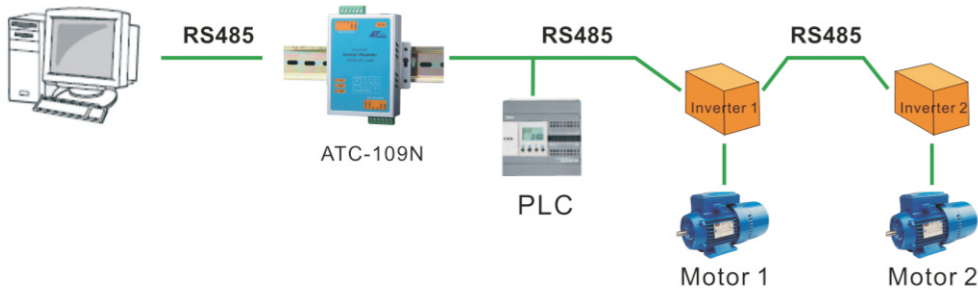
RS-422/485 Photoelectric Isolation Data Repeaters ATC-109N

Product Features

● Can prolong the communication distance of RS-422/RS-485 bus network
● Increase the number of RS-422/RS-485 bus network device
● Automatic data direction control, zero-latency design
● Photoelectric isolator and DC/DC module, can offer 3500V isolation voltage and effectively prevent lightning strike and common code interference
● High efficiency lightning protection tube can effectively inhibit lightning and ESD, and offer 1000W lightning strike & surge protection power on each line.
● Can greatly enhance the credibility of the whole RS-422/485 network
● Full metal housing, anti-static, powerful anti-jamming capacity

4-port RS-485 hub (HUB) ATC-1204

Product Features

● Star topology: offer more flexible RS-485/RS-422 star bus structure with RS-485 interface input/output adopting independent drive modes. Change the original single bus structure into network structure which can greatly enhance the stability for engineering construction and system
● Industrial class photoelectric isolation: offer over 3KV of photoelectric isolation to all RS-485 interfaces, and effectively solve the transmission problems caused by outside lightning strike, surge and potential difference
● Automatic data direction control: solve data direction problem through hardware, judge and control data transmission direction automatically
● Short/open circuit protection: possess RS-485 port malfunction alarming function, and can cut off malfunctioned port automatically, which can ensure the isolation of malfunctioned RS-485 PORT connected with it in order to ensure the proper operation of devices in other net segments

RS-232 serial port photoelectric isolator   ATC-131

Product Features

● Protect serial port, inhibit static and surge, prevent ground loop and surge damaging devices
● Adopt latest high voltage photoelectric parts, powerful anti-jamming capacity
● Support RS-232 asynchronous communication standard, direct insert into RS-232 interface serially, convenient operation
● Transmission speed up to 57.6kbps
● Compact size, optional manifold signals and suitable for various devices.

Performance Parameters

●Interface: Conform to EIA RS-232 and CCITT V.24asynchronous protocols
●Connector: Both sides use DB9 connectors
●Transmission mode: Asynchronous, full duplex, fully transparent
●Isolation voltage : 2500V sequence or 7500V impulse
●Speed: Maximum 57.6 kps
●Power supply: supply electricity from RS-232 port (TXD,RTS OR DTR)
●Size: 6.8×5.5×1.6cm / 6.8×3.4×1.6cm
●Weight: 50g
●Working environment: -20~ 70℃ (0%95% RH)
●Housing: ABS plastic

Port Powered Converter

ATC-101

ATC-106N

ATC-102

ATC-106NH

ATC-106

Hot Product

ATC-155

ATC-106A

232
422/485

RoHS COMPLIANT

CE FC

PORT-POWER

Ported Powered RS-232 to RS-485 Converter Applicaton

ATC-106   PLC

485+ → 485+
485- → 485-
GND → GND

Port Powered RS-232 to RS-422 Interface Converter   ATC-101

Product Features
- DB9-S/P space saving connector
- Interface is compatible with EIA/TIA RS-232C and RS-422 standard
- High efficiency serial port electricity stealing technology, need no external power supply, real three line (TD, RD, GND) Mode communication
- Communication speed: 0-115.2KBPS
- Transmission distance: 0-1200 meter @24AWG

Port Powered RS-232 to TTL Converter   ATC-102

Product Features
- B9-S/P space saving connector
- Compatible RS-232C, standard TTL level data interface
- High efficiency serial port electricity stealing technology, need no external power supply, real three line (TD, RD, GND) Mode communication
- Communication speed: 0-115.2KBPS
- Can provide customized products with handshake signal

Port Powered RS-232 to RS-485 Interface Converter (4-bit terminal)   ATC-106

Product Features
- DB9-S/P space saving connector
- RS-232C data interface fully compatible with PC
- DB9 connector and 4-bit terminal are optional to RS-485 interface
- Automatic direction control of transmitting data (TXD), zero-latency design
- Working mode: asynchronous half or full duplex
- High efficiency serial port electricity stealing technology, need no external power supply, real three line (TD, RD, GND) mode communication
- Communication speed: 0-115.2KBPS
- Transmission distance: 0-1200 meter@24AWG

Photoelectric isolation long distance transceiver   ATC-155

Product Features
- Prolong the communication distance of serial port RS-232 to 12 kilometers
- Balance current transmission, powerful anti-jamming capacity
- Adopt photoelectric isolation to prevent devices damaged by ground loop and surge
- Isolation voltage up to 3500V
- Support RS-232asynchronous communication standard
- Directly insert RS-232interface, convenient operation
- Need no external power supply
- Use special communication line and common lead.
- Transmission speed up to 57.6kbps
- Full duplex or simplex mode, compact size

Performance Parameters
- Interface: one port conforms to EIA RS-232 and CCITT V.24 Asynchronous protocol, the other uses special 4-core cooper wire
- Connector: one side of RS-232 uses DB9 hole connector The circuit side uses DB9 pin connector
- Transmission mode: asynchronous, full duplex or simplex
- Distance: 24AWG lead for 12KM @600BPS
    24AWG lead for 1KM @38.4KBPS
    24AWG lead for 100M @57.6KBPS
- Isolation voltage : 3500@1S or 7500V impulse
- Speed: maximum asynchronous 57.6KBPS
- Power supply: serial port self power supply
- Size: 6.8x3.4x1.6cm
- Weight: 40g
- Working environment: -20 to 65℃ (0%to95%RH)
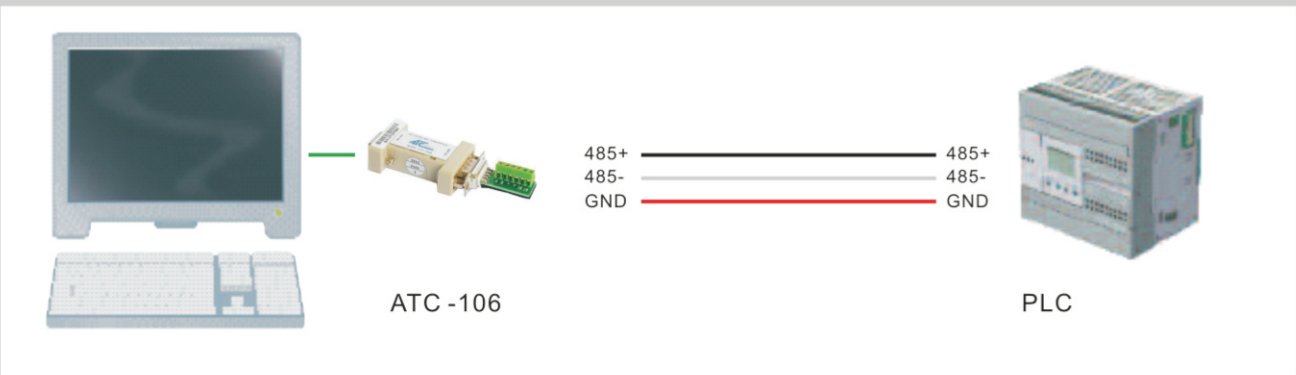
Order Information: (Port Power Converters)

Model No.	Description	Node Number	Price
ATC-101	Port Powered RS-232 to RS-422 Interface Converter	32	
ATC-102	Port Powered RS-232 to TTL converter	--	
ATC-106	Port Powered RS-232 to RS-485 Interface Converter	32	
ATC-106N	Port Powered RS-232 to RS-485 Interface Converter	32	
ATC-106NH	High Speed Port Powered RS-232 to RS-485 Interface Converter	32	
ATC-106A	Low Cost Port Powered RS-232 to RS-485 Interface Converter	32	
ATC-155	Photoelectric isolation long distance transceiver	--	

Model No.	RS-232 Connector	RS-485 Connector	Port Power By	Special Features
ATC-101	DB9 Female	DB9 Male	TD, DTR, RTS	115.2Kbps, 6 bit board removable terminal blocks
ATC-102	DB9 Female	DB9 Male	TD, DTR, RTS	115.2Kbps, 6 bit board removable terminal blocks
ATC-106	DB9 Female	DB9 Male	TD, DTR, RTS	115.2Kbps, 4 bit board removable terminal blocks
ATC-106N	DB9 Female	DB9 Male	TD, DTR, RTS	115.2Kbps, 6 bit board removable terminal blocks
ATC-106NH	DB9 Female	DB9 Male	TD, DTR, RTS	460.0Kbps, 4 bit board removable terminal blocks
ATC-106A	DB9 Female	DB9 Male	TD, DTR, RTS	115.2Kbps, 4 bit board removable terminal blocks
ATC-155	DB9 Female	---	TD, DTR, RTS	57.6Kbps, Transmit distance up to 12KM

Order Information: (Isolated Converter & Repeaters)

Model No.	Description	RS-232/485 Connector	RS-422/485 Connector	Node Number	Price
ATC-105	RS-232 to RS-422/485 Isolated Converter with 600W Surge Protection	DB9 Female	Terminal Block	128	
ATC-107	RS-232 to RS-422/485 Isolated Converterwith 400W Surge Protection	DB25 Female	Terminal Block	32	
ATC-107N	Industrial Class Wall Mounted RS-232 to RS-422/485 Isolated Interface Converter 1000W Surge Protection	DB9 Female/RJ45	DB9 male Terminal Block	256	
ATC-108	RS-232 to RS-422/485 Isolated Converter with 1000W Surge Protection	DB9 Female	DB9 male	128	
ATC-108N	Industrial Class Wall Mounted RS-232 to RS-422/485 Isolated Interface Converter 1000W Surge Protection	DB9 Female/RJ45	DB9 male Terminal Block	256	
ATC-109	RS-422/485 Photoelectric solation Data Repeaters With 1000W SurgeProtection	DB9 Female	DB9 male	128	
ATC-109N	Industrial Class Wall Mounted RS-422/485 Photoelectric Isolation Data Repeaters With 1000W Surge Protection	Terminal Block	Terminal Block	256	
ATC-1204	4-Port RS-485 Hub with Net Error Alarm	DB9 Female/RJ45	RJ45 Socket	128	

USB to Single Port RS-232 Converter ATC-810

Product Features
- Compatible with USB1.1,2.0 highest speed can reach 12 Mbps
- Supports remote wake up and power supply management
- Supports hot plug and PnP,Need no I/O location and IRQ setting, friendly UI
- Supports RS-232 handshake protocol, support full duplex data operating mode
- RS-232 serial port transmission speed maximum 460.8Kbps
- RS-232 serial port TXD,RXD offer 600W lightning strike & surge protection power on each line.
- Operating environment: -40 to 70℃, 10 to 90% relative humidity, non-condensing.

Low Cost USB to RS-232 Converter   ATC-810A

Product Features
- Compatible with USB1.1, USB 2.0 highest speed can reach 12 Mbps
- Supports remote wake up and power supply management
- Supports hot plug and PnP, Need no I/O location and IRQ setting, friendly UI
- Supports RS-232 full handshake protocol, support full duplex data operating mode
- RS-232 serial port transmission speed maximum 115.2Kbps

Low Cost USB to RS-232 Converter   ATC-810B

Product Features
- Compatible with USB1.1, highest speed can reach 12 Mbps
- Supports remote wake up and power supply management
- Supports hot plug and PnP, Need no I/O location and IRQ setting, friendly UI
- Supports RS-232 full handshake protocol, support full duplex data operating mode
- RS-232 serial port transmission speed maximum 115.2Kbps

USB to Single Port RS-485 Converter   ATC-820

Introduction
The ATC-820 module is a cost-effective way to convert RS485 industrial buses to a USB interface. When connected to a PC USB port the ATC-820 module is automatically detected and is installed as a native COM port which is compatible with any existing serial communication application. Multiple modules can be installed when using USB hubs thus allowing a hassle-free configuration of a multi serial system without any IRQ or DMA configuration.
They have 600W protect between the USB port and RS485 protects the PC from spykes or possible misconnections in the communication bus

Product Features
- Compatible with USB1.1, USB2.0 highest speed can reach 12Mbps
- Supports remote wake up and power supply management
- Supports hot plug and PnP
- Needs no I/O location and IRQ setting, friendly UI
- Supports RS-485 interface and 600W Surge protect on each line
- RS-485 serial port transmission speed maximum 920Kbps, automatic data (TXD) direction control, zero-latency design
- RS-485 interface DB9 Male connector and terminal block adaptor for RS-485
- Operating environment: -40 to 70℃, 10 to 90% relative humidity, non-condensing.

Ethernet to serial

Wireless to serial

Serial converters

USB to serial

Fiber Optical to serial

Cabling and Accessories

Ethernet to serial

Wireless to serial

Serial converters

USB to serial

Fiber Optical to serial

Cabling and Accessories

USB to Single Port RS-485 Converter   ATC-820B

Product Features

- Compatible with USB1.1, USB2.0 highest speed can reach 12Mbps
- Supports remote wake up and power supply management
- Supports hot plug and PnP
- Needs no I/O location and IRQ setting, friendly UI
- Supports RS-485 interface and 600W Surge protect on each line
- RS-485 serial port transmission speed maximum 920Kbps, automatic data (TXD) direction control, zero-latency design
- RS-485 interface RJ-45 connector
- Operating environment: -40 to 70℃, 10 to 90% relative humidity, non-condensing.

USB to TTL converter   ATC-830

Features

- Computer interface: USB V1.1 2.0 Plug and Play.
- Operational system virtual serial port driver.
- Supports Windows 98/ME/XP/2000/CE, MAC & Linux 2.4.20 or superior.
- Field Interfaces: TTL logic
- Transmission rate: from 300 bps to 1Mbps.
- Maximum TTL cable length : 15 m
- Power: from the USB port.
- Consumption: <100 mA.
- logic protection: 600W.
- USB connection: Mini-B connector.120mm cable with the module.
- TTL logic connector: DB 9 Male type accepting
- ABS enclosure: 55 x 35 x 15 mm(not include cable)
- Operating environment: -40 to 70℃, 10 to 90% relative humidity, non-condensing.

USB to RS-422 converter ATC-840

Introduction

The ATC-840 module is a cost-effective way to convert RS422 industrial buses to a USB interface. When connected to a PC USB port the ATC-840 module is automatically detected and is installed as a native COM port which is compatible with any existing serial communication application. Multiple modules can be installed when using USB hubs thus allowing a hassle-free configuration of a multi serial system without any IRQ or DMA configuration. They have 600W protect between the USB port and RS422 protects the PC from spykes or possible misconnections in the communication bus.

Product Feature

The ATC-840 converter can be configured for RS422 four-wire (Full Duplex) networks. When operating in four-wire RS422 the data transfer control is automatically
done by the converter . The ATC-840 has a 384 byte receive buffer with an adjustable timeout and a 128 byte transmit buffer with auto-transmit control. The ATC-840 makes it easier to add RS422 devices to your system with easy plug-and-play.
- Computer interface: USB 1.1 2.0 Plug and Play.
- Operational system virtual serial port driver.
- Supports Windows 98/ME/XP/2000/CE/Vista, MAC & Linux 2.4.20 or superior.
- Field Interfaces: RS-422 Full Duplex ,
- Automatic flow control for RS422 Full Duplex.
- Transmission rate: from 300 bps to 1Mbps.
- MaximumRS-422 cable length : 1200 m
- Maximum number of devices in the RS422 network: Full Duplex to 32 devices
- Power: from the USB port.
- Consumption: <100 mA.
- RS-422 bus protection: 600W.
- USB connection: Mini-B connector. 100mm cable with the module.
- RS-422 connector: DB 9Male
- ABS enclosure: 60 x 57 x 24 mm(not include cable)
- Operating environment: -40 to 70℃, 10 to 90% relative humidity, non-condensing.

High Speed Isolated USB to RS-232/422/485 Converter ATC-850

Introduction

The ATC-850 module is a cost-effective way to convert
RS485 industrial buses to a USB interface. When connected to a PC USB port the ATC-850 module is automatically detected and is installed as a native COM port which is compatible with any existing serial communication application. They have 600W protect between the USB port and RS-232 /422/485 protects. The ATC-850 has a 384 byte receive buffer with an adjustable timeout and a 128 byte transmit buffer with auto-transmit control. The ATC-850 makes it easier to add RS485 devices to your system with easy plug-and-play.

Features

- Computer interface: USB 1.1 2.0 Plug and Play.
- Operational system virtual serial port driver.
- Supports Windows 98/ME/XP/2000/CE/Vista, MAC & Linux 2.4.20 or superior.
- Field Interfaces:RS-232,RS-422,RS-485 Half Duplex ,
- Automatic flow control for RS485 Half Duplex.
- Transmission rate: RS232 from 300 bps to 460.8Kbps. RS485 from 300 bps to 921.6Kbps.
- Maximum RS-485 cable length : 1200 m
- Maximum number of devices in the RS485 network: Half Duplex to 32 devices
- Power: from the USB port.
- Consumption: <200 mA.
- Isolation: Isolation voltage 3500VRMS 500VDC sequence
- USB port RS-232/422/485 bus protection: 600W.
- USB connection: USB -B female connector. 1m USB-A to USB-B cable.
- RS-232 connector:DB9 male
- RS-422/485 connector: 6-bit terminal socket
- Metal case size: 105x85 x27 mm
- Operating environment: -40 to 70℃, 10 to 90% relative humidity, non-condensing.

ATC-850 Application

PLR
RS-485
PC
ATC-850
RS-232
HMI
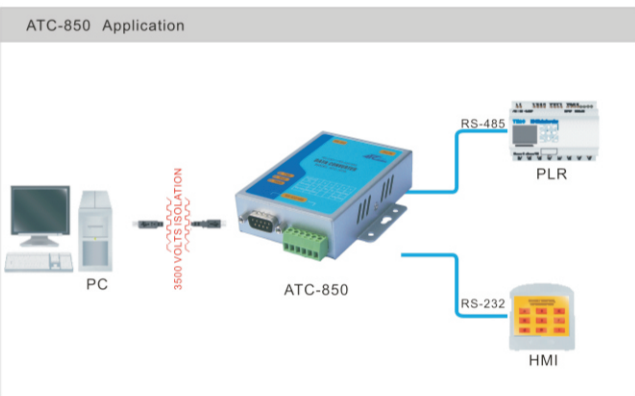
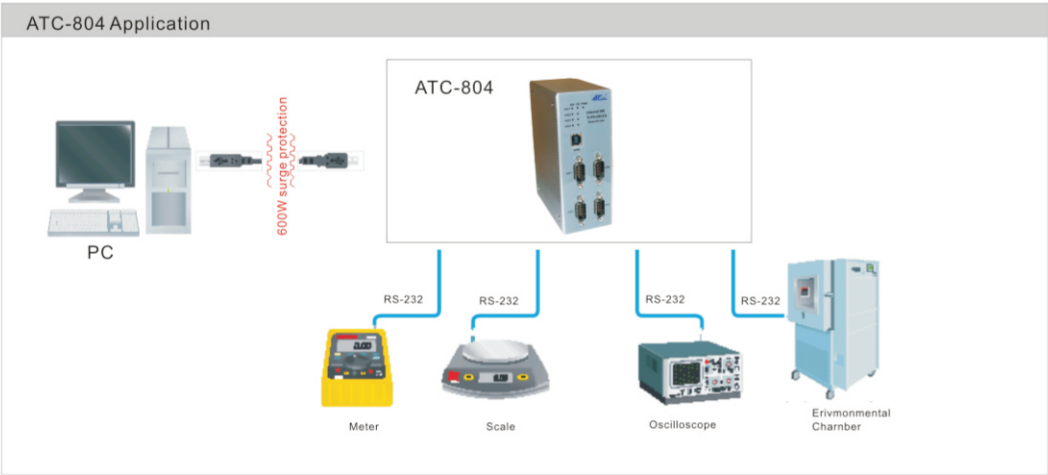## USB to 4- Serial Port RS-232 Converter ATC-804

Introduction

With USB to serial series product connect to your computer.
No longer would the usage of a serial RS-232 device be restricted by the availability of the connectable ports on the desktop. Laptop or work station system. Users no have the
Ability to convert the connection of their serial peripherals
Into USB (Universal Serial Bus) compatible without making any changes to the applications written for them .The
Adapter is compatible with both USB 2.0 and 1.1 specifications. The USB Full Speed connection offers data transfer rate up to 12Mbps and each port provides transmission rate up to 920Kbps.
USB to Serial series product utilized the high quality I/O
Chipset, which had passed the Microsoft WHQL certification as well it is the most compatible and the most reliable. it supports both bus power on external power via an adapter. Bus power is adapted for laptop or workstation connections that support 500mA output for USB device.
USB to serial HUB series come with the 1 and 4ports in RS-232 for connection with devices such as barcode
Scanner, POS device, PDA, printer and other mobile devices, we offer the most complete of USB to I/O Adapter for all your connection needs!

Ethernet to serial
Wireless to serial
Serial converters
USB to serial
Fiber Optical to serial
Cabling and Accessories

Features

- Computer interface: USB V1.1 2.0 Plug and Play.
- Operational system virtual serial port driver.
- Supports Windows 98/ME/XP/2000/CE, MAC & Linux 2.4.20 or superior.
- Field Interfaces: RS-232
- Transmission rate: from 300 bps to 1Mbps.
- Power: from the USB port or external power.
- Consumption: <300 mA.
- RS-232 protection: +3000VESD.
- USB connection: USB-B connector. 150mm cable with the module.
- RS-232 connector: DB9 Female
- Aluminum enclosure: 270 x80 x 24 mm(not include cable)
- Operating environment: -40 to 70 ℃

ATC-804 Application

Order Information:

Model No.	Description	Serial No.	Serial Type
ATC-810	High Speed USB to Single Port RS-232 Converter	1	RS-232
ATC-810A	Low Cost USB to Single Port RS-232 Converter	1	RS-232
ATC-810B	Low Cost USB to Single Port RS-232 Converter	1	RS-232
ATC-820	High Speed USB to Single Port RS-485 Converter	1	RS-485
ATC-820B	USB to Single Port RS-485 with RJ45 Converter	1	RS-485
ATC-830	USB to Single Port TTL Converter	1	5V TTL
ATC-840	High Speed USB to Single Port RS-422 Converter	1	RS-422
ATC-850	High Speed Isolated USB to RS-232/422/485 Converter	1	RS-232/422/485
ATC-804	USB to 4 serial Port RS-232 converter	4	RS-232

Multi-Mode Optical Fiber MODEM   ATC-277MM

Product Features

- Adopt multi-mode optical fiber and the working distance up to 2Km
- Support point to point or ring (point to multi-point) networking
- Support manifold asynchronous communication protocols including RS-232, RS-422 and RS-485
- Can use any two of RS-232,RS-422 or RS-485 interface together
- Support 2 wire (half duplex) and 4 wire (full duplex) RS-485working mode
- RS-422/485 Communication speed up to 460KBPS
- Adopt ST optical fiber interface

## Single Mode Optical Fiber MODEM   ATC-277SM

Description

The MODEL 277SM was designed to provide the most versatile connection possible between any asynchronous serial equipment using Fiber Optic cable. It allows any two pieces of asynchronous serial equipment to communicate full or half-duplex over two fibers at typical distances up to 20KM. The converter can also be set up in "Repeater" mode to create a multi-drop master/slave configuration, allowing one serial device to talk to multiple slave devices around a fiber ring.

RS-232 data signals at up to 115.2K bps and RS-422, or RS-485 data signals at up to 115.2K bps are supported. Different standards can be mixed and matched to allow RS-232 devices to connect to your RS-422 or RS-485 system. This means the MODEL 277SM can replace converters and isolators when connecting remote devices, while providing the EMI/RFI and transient immunity of optical fiber.

The MODEL 277SM supports both the Transmit and Receive data lines, and provides full hardware control of the RS-422/485 driver with automatic Send Data Control circuit. Timeouts are auto detect between 0.10 and 2.2 ms. All serial connections are provided on the DB-9 female connector or 6-bit terminal, while the single-mode fiber is connected via two SC connectors. The unit is powered by 9VDC at 140 mA max.

Product Features

- Adopt single mode optical fiber and the working distance up to 20KM
- Support point to point or ring (point to multi-point) networking
- Support manifold asynchronous communication protocols including RS-232, RS-422 and RS-485
- Can use any two of RS-232,RS-422 or RS-485 interface together
- Support 2 wire (half duplex) and 4 wire (full duplex) RS-485working mode
- Communication speed up to 115.2KBPS(RS-232/422/485)
- Adopt SC/ST optical fiber interface only

ATC-277SM Application
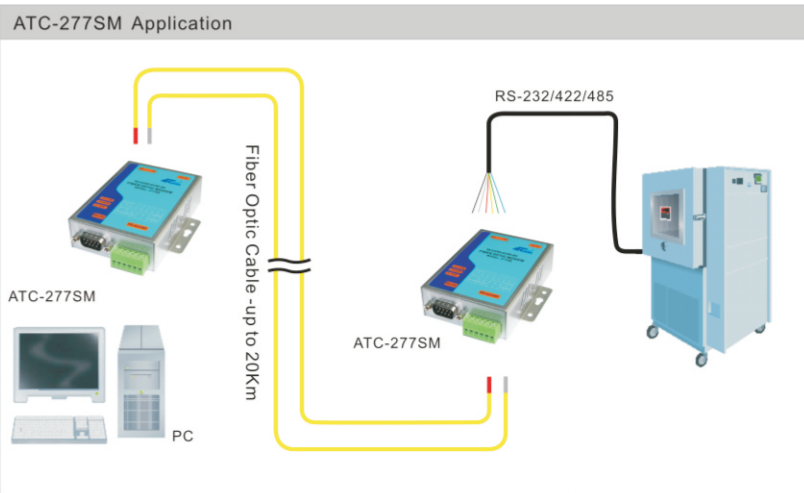
10/100M Base-T Ethernet Media Converter   NMC-3300

Product Features

- Meeting IEEE802.3u 10/100BaseTX and 100BaseFx standards
- Plug-and-Play installation
- Auto-Negotiation for 10/100M TP port speed
- High quality and excellent reliability
- Full-duplex 10/100Mbps Ethernet operation up to 120Km
- Two RJ45 ports for installation easily
- 9 diagnostic and monitoring LEDs for the status of power, FX link/ACT, TX link/ACT
- Half-duplex and full-duplex identify automatically
- Stand-alone with external power adapter
- RJ-45 ports for installation easily

Order Information

Table 1:

Type	FiberType	Wavelength(nm)	Fiber Length(Km)
NMC3301	SM	1310	20
NMC3302	SM	1310	40
NMC3303	SM	1310	60
NMC3304	SM	1550 DFB LD	100
NMC3305	MM	1310/850	2

100 Base-T BI-DI Ethernet Media Converter   NMC3312/13

Product Features

- Meets IEEE802.3u 100BaseTX and 100BaseFX standards
- Plug-and-Play installation
- 2Wavelength WDM Technology
- High quality and excellent reliability
- Full-duplex 100Mbps Ethernet operation up to 20Km
- Two RJ45 ports for installation easily
- 6 diagnostic and monitoring LEDs for the status of power, FX link/ACT, TX link/ACT
- Half-duplex and full-duplex identify automatically
- Stand-alone with external power adapter

Order Information

Table 1:

Type	FiberType	Wavelength(nm)	Fiber Length(Km)
NMC3212	SM	1310T/1550R	20
NMC3213	SM	1550T/1310R	20

10/100 Base-T BI-DI Ethernet Media Converter   3312/13

Product Features

- Meets IEEE802.3u 100BaseTX and 100BaseFX standards
- Plug-and-Play installation
- 2Wavelength WDM Technology
- High quality and excellent reliability
- Full-duplex 100Mbps Ethernet operation up to 20Km
- Two RJ45 ports for installation easily
- 9 diagnostic and monitoring LEDs for the status of power, FX link/ACT, TX link/ACT
- Half-duplex and full-duplex identify automatically
- Stand-alone with external power adapter

Order Information

Table 1:

Type	FiberType	Wavelength(nm)	FiberLength(Km)
NMC3312	SM	1310T/1550R	20
NMC3313	SM	1550T/1310R	20

1000M bi-di Ethernet Media Converter   NMC3672/3673

Product Features

- Meets IEEE802.3u 1000BaseTX and 1000BaseFX standards
- Plug-and-Play installation
- 2 Wavelength WDM Technology
- 220VAC or -48VDC Internal power supply
- Full-duplex 1000Mbps Ethernet operation up to 20、40Km
- Two RJ45 ports for installation easily
- 6 diagnostic and monitoring LEDs for the status of power, FX link/ACT, TX link/ACT
- Half-duplex and full-duplex identify automatically
- Stand-alone with external power adapter

Order Information

Table 1:

Type	Fiber Type	Wavelength(nm)	Fiber Length(Km)
NMC3672	SM	1310T/1550R	20
NMC3673	SM	1550T(DFB)/1310R	20
NMC3674	SM	1310T/1550R	40
NMC3675	SM	1550T(DFB)/1310R	40

Ethernet
to serial

Wireless
to serial

Serial
converters

USB to
serial

Fiber Optical
to serial

Cabling and
Accessories

Category 5 cables

Applications with custom pin-outs are a snap with our wide variety of modular jacks. B&B Electronics also has a large selection of Ethernet patch cords in a wide variety of lengths and colors.
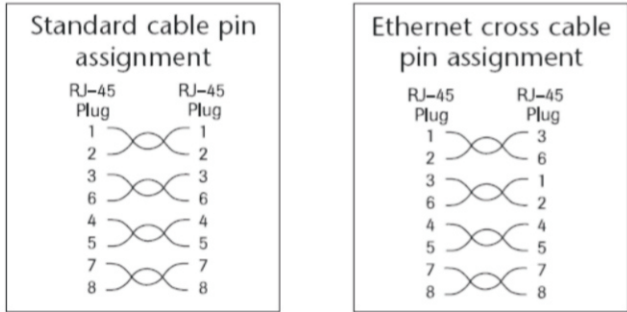
Features

- Category 5e compliant for minimum 10/100 Base-T performance
- Made from 24 AWG stranded conductors for flexibility in the field
- Molded boots provide strain relief and snag-free protection
- 50 micro-inches of gold plating meets FCC requirements and provides robust interface
- PVC jacket provides durability and flexibility
- Shielded PVC jacket provides durability, flexibility and improved EMI immunity
- Beige, black, blue, red and green available for ease of identifying specific networks (only beige available for STP)

UTP Patch Cord Assemblies

Length	Cable Color				
	BEIGE	BLACK	BLUE	RED	GREEN
3 ft (0.91m)	C5A3FBG	C5A3FBK	C5A3FBL	C5A3FRD	C5A3FGR
7 ft (2.1m)	C5A7FBG	C5A7FBK	C5A7FBL	C5A7FRD	C5A7FGR
10 ft (3.0m)	C5A10FBG	C5A10FBK	C5A10FBL	C5A10FRD	C5A10FGR
14 ft (4.3m)	C5A14FBG	C5A14FBK	C5A14BL	C5A14RD	C5A14GR

Ethernet Cross-Over Cables – UTP patch cord

Standard cable pin assignment

RJ-45 Plug   RJ-45 Plug
1   1
2   2
3   3
6   6
4   4
5   5
7   7
8   8

Ethernet cross cable pin assignment

RJ-45 Plug   RJ-45 Plug
1   3
2   6
3   1
6   2
4   4
5   5
7   7
8   8

Serial communications cables

For the ever-popular RS-232 communication devices, you will find the right cable. DB9 or DB25 connectors are the most common. Straight through cables, null modem cables, and gender changers can be found here.

USB cables

USB cables have a maximum length of 5 meters. B&B Electronics offers type A male to type B male cables and a USB extension cable that has a type A male to type A female configuration.

Null modems and test adapter

Easily test your communication cables and ports for proper operation. Troubleshoot applications with simple-to-use testers and null modem adapters.

Gender Reversers

Convert ports: male to female, female to male

1. Convert a female port to a male port or a male port to a female port
2. Offered for DB9 connector
Interfaces with gold plated contacts for high reliability
3. 1.9 cm (.75 in) thick to fit into tight spaces

Null Modem Adapters

Features DB25 null modems

1. Interconnect devices with similar RS-232 ports
2. Reverse Pin 2 (Transmit Data) and Pin
3. (Receive Data)
Many popular configurations

Features DB9 null modem

1. Ideal for port-powered converters
2. Connect two devices with similar DCE 232 ports
3. Connects TD to RD, DTR to DSR and RTS to CTS
4. Transfers port power from the host to the peripheral