Bluetooth® RS-232 Serial Port Adapter

FEATURES

- Embedded Bluetooth ® Protocol Stack
- Host or Client roles supported
- External, removeable Stub Antenna (Allows mounting in metal case)
- Range up to 30m with Bluetooth® Class 2 adapters
- Range up to 100m with Bluetooth® Class 1 adapters
- Bluetooth 1.2 compliant

SERIAL INTERFACE

- Standard SUB-D 9polig connector with automatic DTE/DCE detection
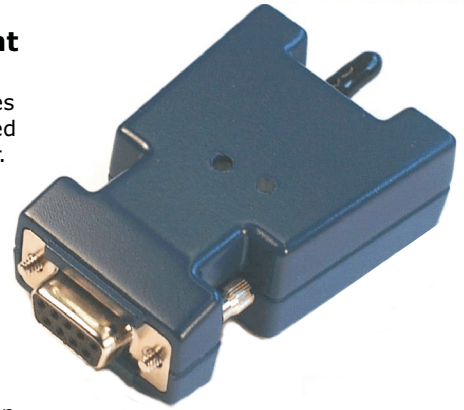- Baudrates 1200 Baud - 230Kbps

PROTOCOLS

- L2CAP
- SDP
- RFCOMM

BLUETOOTH® PROFILE

- Generic Access Profile (GAP)
- Service Discovery Profile (SDP)
- Serial Port Profile (SPP)
- LAN Access
- Dial Up Networking
- Fax

The Transparent Cable Replacement

The BlueSerial Bluetooth adapter allows devices with RS232 compatible interfaces to be connected to other Bluetooth devices in the simplest manner. Adapters of the BlueSerial series offer other advantages, such as automatic device support for modems or ISDN-TA's. In addition, the small RS232 Bluetooth adapters automatically recognise the TX/RX signals as well as Hardware Handshake, which means zero modem cables and DTE or DCE bridges can be eliminated. A wireless set-up / configuration is also possible within the Bluetooth range. The BlueSerial adapter is available with housing and an optional integrated NiMH battery, as well as in the form of a complete OEM module (5 volt technology) on a 45 x 18 mm circuit board for installation in devices.

In contrast to many other manufacturers of Bluetooth modules or evaluation kits, the BlueSerial provides you with a completely assembled, ready-to-use universal module with SPP (serial port profile), so it is not necessary to worry about programming profiles.
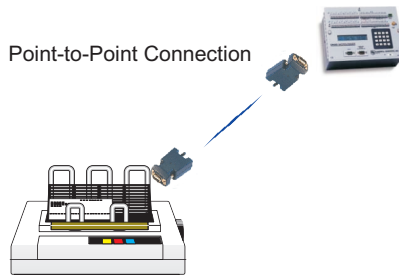
Why serial adapters?

The serial RS232 interface remains very popular and is used particularly often in industrial applications due to the standardisation of the interface. However, cables between devices often are a disturbance or hinder the user's ability to move around. Bluetooth is ideally suited to do away with obstructing cables. The serial Bluetooth adapters are active devices with their own processors; so that they can also be used as alternatives to cables between devices and meters, sensors, control units, etc. after a one-time „pairing" procedure is performed.

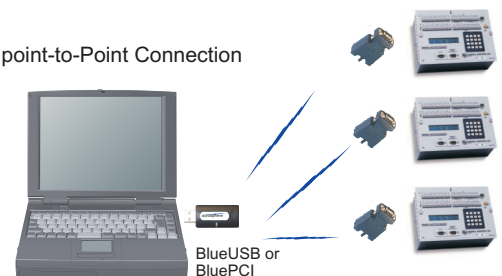### Some examples of possible applications follow:

- Commercial Systems, POS, Barcodescanner, printers, POS, CreditCard terminals
- Sensors and measurement devices, building technology
- Computer peripherals (Modem, ISDN, DSL, serial printer, Plotter, mobile phones + PDA)
- Industrial control, robotics, access control, parking lot control, signal controls
- Medical technology, analyses (Glukometer, Breathcontrol aso.)
- Military technology, save, non disturbish data/voice, target control systems, Telemetrics
- Embedded Systems, Mainboards, lock systems, Navigation systems
- Technical Service, system configuration (ex. phone/PBX systems, Diagnostic systems)
- Automotive, car diagnostics, CAN-Bus control

Type of connections :

Point-to-Point Connection

Multipoint-to-Point Connection

BlueUSB or BluePCI

Specifications

Bluetooth Interface
Supported Bluetooth Profiles :

- Serial Port Profile (SPP)
- Dial Up Networking (DUN)
- LAN Access Profile (LAP)
- Generic Access Profile (GAP)
- Service Discovery Profile (SDP)
- FAX

Bluetooth Qualification

All products are Bluetooth qualified according to the
Bluetooth 1.2 specification

Configuration- Software

Configuration-Software for Windows 98, Windows 2000
Windows NT 4 and Windows XP used to configure :

- RS-232 parameters
- Bluetooth settings
- Remote peer handling
- Security settings
- ... and more

Environmental

Storage temperature   : -10°C to +85°C
Recommended operating conditions   : -10°C bis 75°C
Maximum operating temperature   : -40°C bis 70°C
Humidity   : 5% bis 95% (non condensing)

Class II Products

	Standard Version	Power Supply at Pin 9	Battery Version	Mounting Version	Rugged IP65
Short description	Standard Version	Power Supply at Pin 9	Battery Version	Mounting Version	Rugged IP65
Output power	+4 dBm (up to 30m)	+4 dBm (up to 30m)	+4 dBm (up to 30m)	+4 dBm (up to 30m)	+4 dBm (up to 30m)
Power connector type	DC-Plug 1.3mm centerpin (+)	Pin 9 Ring Indicator Pin	DC-Plug 1.3mm centerpin (+) or 700mAh NiMH Battery up to 8 hours	DC-Plug 1.3mm centerpin (+) or Customized	DC-Plug 1.3mm centerpin (+)
Power supply	4…10VDC 100mA (max)	4…10VDC 100mA (max)	4…10VDC 100mA (max)	4…10VDC 100mA (max)	8…42VDC 100mA (max) or Customized
Serial connector	Female SUB-D 9 automatic DTE/DCE	Female SUB-D 9 automatic DTE/DCE	Female SUB-D 9 automatic DTE/DCE	Female SUB-D 9 automatic DTE/DCE	Female SUB-D 9 automatic DTE/DCE
Serial interface	RS-232, 1200 to 230 kBaud, Baud rate, Parity and Data Bits fixed or over Bluetooth protocol				
Antenna	MMCX 50 Ohm Stub Antenna	MMCX 50 Ohm Stub Antenna	MMCX 50 Ohm Stub Antenna	MMCX 50 Ohm Stub Antenna	SMA 50 Ohm Swivel Antenna or Customized
Housing	Plastic	Plastic	Plastic	No	Aluminium IP65
Dimensions (mm)	H/L/W 22/62/42	H/L/W 22/62/42	H/L/W 22/62/42	H/L/W 22/62/42	H/L/W 35/100/60
Weight (gr.)	30 gr.	30 gr.	70 gr.	30 gr.	110 gr.

Class I Products

	Standard Version	Power Supply at Pin 9	Battery Version	Mounting Version	Rugged IP65
Short description	Standard Version	Power Supply at Pin 9	Battery Version	Mounting Version	Rugged IP65
Output power	+20 dBm (up to 100m)	+20 dBm (up to 100m)	+20 dBm (up to 100m)	+20 dBm (up to 100m)	+20 dBm (up to 100m)
Power connector type	DC-Plug 1.3mm centerpin (+)	Pin 9 Ring Indicator Pin	DC-Plug 1.3mm centerpin (+) or 700mAh NiMH Battery up to 8 hours	DC-Plug 1.3mm centerpin (+) or Customized	DC-Plug 1.3mm centerpin (+)
Power supply	4…10VDC 100mA (max)	4…10VDC 100mA (max)	4…10VDC 100mA (max)	4…10VDC 100mA (max)	8…42VDC 100mA (max) or Customized
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Weight (gr.)	30 gr.	30 gr.	70 gr.	30 gr.	110 gr.

BlueSerial - July 2004 - All Specifications are subject to change without notice