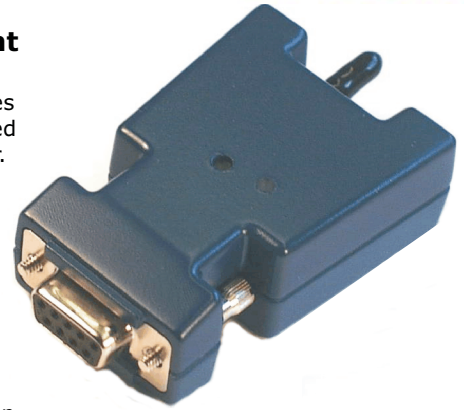




Bluetooth® RS-232 Serial Port Adapter

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. OEM modules with DIL or MicroMatch connector are available as well.



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 :



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 2.1 + EDR, 1.1 + 1.2

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



Class I + II Products

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 Bluetooth 2.1 + EDR specification

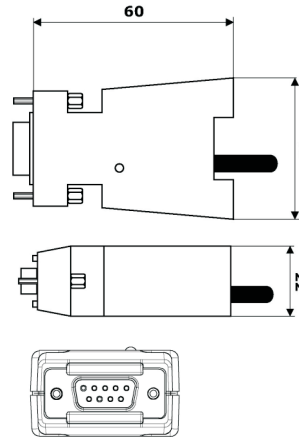
Configuration- Software

Configuration-Software for Win 98, 2000 Win NT4, XP, Vista, 7 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)



Serial Connector Pin Out

Pin no.		Direction when connected to a DTE (PC)	Direction when connected to a DCE (Modem)
1	CD	output	input
2	RX	output	input
3	TX	input	output
4	DTR	input	output
5	Ground	-	-
6	DSR	output	input
7	RTS	input	output
8	CTS	output	input
9	RI	output	input

Class II (30m / 100ft) Products



Short description	Standard Voltage Input 4...10VDC Version	High Voltage Input 8...42VDC Version	Battery Version	Mounting OEM Version	Rugged IP65 Version
P/N	BT-BluSer2	BTBluSer2H	BT-BluSeA2	BT-BluOEM2	BTBluIP652
Output power	+4 dBm (up to 30m/100ft)	+4 dBm (up to 30m/100ft)	+4 dBm (up to 30m/100ft)	+4 dBm (up to 30m/100ft)	+4 dBm (up to 30m/100ft)
Power connector type	DC-Plug or Pin9 1.3mm centerpin (+)	DC-Plug 1.3mm	DC-Plug or Pin9 1.3mm centerpin (+) or 700mAh NiMH Battery up to 8 hours and more	DC-Plug or Pin9 1.3mm centerpin (+) or Customized	DC-Plug or Pin9 1.3mm centerpin (+)
Power supply	4...10VDC 100mA (max)	8...42VDC 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 (100m / 300ft) Products



Short description	Standard Voltage Input 4...10VDC Version	High Voltage Input 8...42VDC Version	Battery Version	Mounting OEM Version	Rugged IP65 Version
P/N	BT-BluSer1	BTBluSer1H	BT-BluSeA1	BT-BluOEM1	BTBluIP651
Output power	+20 dBm (up to 100m/300ft)	+20 dBm (up to 100m/300ft)	+20 dBm (up to 100m/300ft)	+20 dBm (up to 100m/300ft)	+20 dBm (up to 100m/300ft)
Power connector type	DC-Plug or Pin9 1.3mm centerpin (+)	DC-Plug or Pin 9 1.3mm	DC-Plug 1.3mm centerpin (+) or 700mAh NiMH Battery up to 8 hours and more	DC-Plug 1.3mm centerpin (+) or Customized	DC-Plug 1.3mm centerpin (+)
Power supply	4...10VDC 100mA (max)	8...42VDC 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, Handshake or none				
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.

International:

HANTZ + PARTNER GMBH
Gewerbestr. 37
D-79194 Gundelfingen i.Br.

Phone +49-(0)761-592100
Telefax +49-(0)761-585228

E-Mail info@hantz.com
Internet www.BlueSerial.com