Bluetooth™

Serial Cable Replacement

Are you about to eliminate your product cables? Are you looking for a ready-to-use product that gives you fast time to market? Do you want an easy-to-use interface to all your products? Do you want a safe investment for the future? Then our SERIAL PORT ADAPTER™ is the product for you. It allows any device with an RS232/422/485 port to communicate wirelessly without extra software installation in your device or system.

The second generation of the Serial Port Adapter™ is not just based on the well-tested prior generation but also enhanced with new improvements and features. It is smaller with better performance and higher throughput. Choose from long range or short range depending on your system requirements. The feature Wireless Multidrop™ - Multipoint, enables the product to simultaneously communicate with up to seven remote Bluetooth devices and to automatically form a wireless multidrop network.

Key Features and Benefits

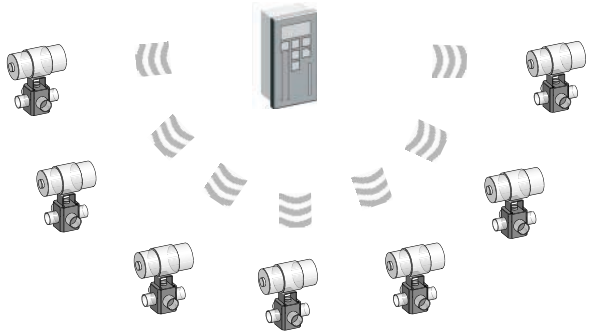
- Wide range of standard products - don't pay for more than you need.
- Future proof - no upfront cost for qualification & approval and no upgrade investments saves development time and cost. Sell your product with wireless communication tomorrow!
- Easy to configure many different ready-to-use functions - easy to operate in the field gives less customer support.
- High quality for demanding applications - second generation of products in real operations.
- As always, no need for extra software in your system - just unplug and play!

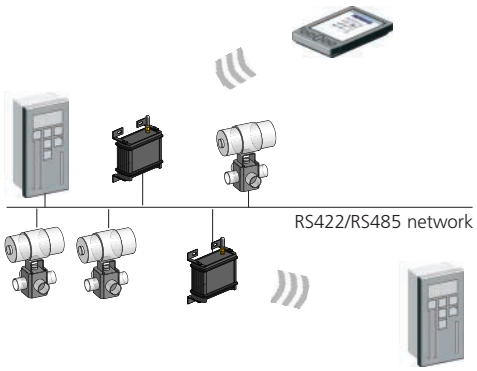
connectBlue

Serial Port Adapter™

WIRELESS MULTIDROP™ - MULTIPOINT

This feature allows the Serial Port Adapter to simultaneously communicate with up 7 remote Bluetooth devices. The Serial Port Adapter automatically forms a wireless multidrop network and distributes all data to all connected devices. No extra software is required in your system.





RS422 AND RS485

Industrial multidrop installations uses RS422 and RS485. The Serial Port Adapter supports RS422 and RS485 in addition to RS232.

ANTENNA ALTERNATIVES

The Serial Port Adapters are available with three different antennas:

- Internal antenna when mounting the OEM Serial Port Adapter in a plastic housing.
- Stub antenna when mounting the OEM Serial Port Adapter in a metallic housing, where the stub antenna can be placed on the outside of the housing.
- Antenna on a cable. The antenna cable can be up to 150 cm long and is used when mounting any of the Serial Port Adapters in a metal cabinet.

BLUETOOTH QUALIFICATION AND TYPE APPROVAL

All connectBlue Serial Port Adapters are fully Bluetooth qualified and type approved for use in Europe and the US. When using the Serial Port Adapters from connectBlue you are not required to perform any tests for neither Bluetooth qualification nor type approval. A list of Bluetooth qualified products can be found at http://qualweb.opengroup.org/.

SHORT RANGE & LONG RANGE

connectBlue offers a wide range of different Serial Port Adapters, where some variants use a 0dBm radio while others use a 20dBm radio. The 0dBm variants allow you to communicate up to 10-30 meters while the 20dBm variants allow you to communicate up to more than 100 meters.

OEM VERSION OR DIFFERENT HOUSINGS

The Serial Port Adapters from connectBlue are available with two different housings. In addition to the OEM Serial Port Adapter, the Serial Port Adapters are also available with a plastic housing and a rugged, IP65, aluminum housing making it suitable for harsh environments.

CONFIGURATION

The Serial Port Adapter can be configured using three different methods:

- Using the Windows based configuration wizard to configure a Serial Port Adapter connected to the RS232 port on your PC
- Using the Windows based configuration wizard to configure a remote Serial Port Adapter via Bluetooth
- Using AT commands

SECURITY

The Serial Port Adapter supports Bluetooth authentication and encryption.

- Authentication, a PIN code is used to block unauthorized access to your device.
- Encryption, data sent over the air is encrypted to prevent eves dropping.

BLUETOOTH ENABLER DEVELOPMENT KIT

By using the Bluetooth Enabler Development Kit (SDK), you fully utilize and control the entire Bluetooth wireless technology embraced in the Serial Port Adapter. The Serial Port Adapter together with the SDK allows your product to use all the Bluetooth functions using as little development time as possible. There is no need for qualification of your developed application since the structure of the SDK always guarantees that your application is qualified according to Bluetooth specification 1.1.

POWER CONSUMPTION

When integrating the OEM Serial Port Adapter into a portable device, low power consumption is crucial. The Serial Port Adapters have been designed to consume as little power as possible in any given situation and support efficient power save modes.

PERFORMANCE AND STABILITY

The Serial Port Adapter supports up to 921.6k baud and delivers high throughput and short response times. It has been designed with high requirements on stability and tested against a wide range of other Bluetooth products, including PDAs, PCs and mobile phones.

Bluetooth™

Technical Data

SPECIFICATIONS

Bluetooth Interface
Supported Bluetooth Profiles: Serial Port Profile, Dial-up networking Profile and LAN Access Profile.

Bluetooth Qualification
The product is Bluetooth qualified according to the Bluetooth 1.1 specification.

Configuration Software
Configuration utilities for Windows 98 SE, Windows 2000, Windows NT 4 and Windows XP used to configure:
- RS232/422/485 parameters
- Bluetooth settings
- Remote peer handling
- Security settings
- and more..

Environmental
Storage temperature 0 dBm: -40 - +85 °C
Storage temperature 20 dBm: -40 - +85 °C
Recommended operating conditions 0 dBm: -20 - +75 °C
Recommended operating conditions 20 dBm: -30 - +55 °C
Maximum operating temperature 0 dBm: -30 - +75 °C
Maximum operating temperature 20 dBm: -30 - +75 °C

Humidity RH 5-90% non-condensing
Shock and vibration: IEC 61131-2

Certifications and Compliance
EMC compliance: ENV 50081-1, ENV 50081-2, IEC 60601-01-2
Environment: IEC 61131-2

Type Approval
FCC/CFR 47, part 15
ETS 300 328, 300 826

	 OEMSPA13i	 OEMSPA13x	 OEMSPA33i	 OEMSPA33x	 SPA12i	 SPA32i	 SPA33i	 SPA33c	 RSPA32s
Output power	0 dBm (10-30m)	0 dBm (10-30m)	20 dBm (>100m)	20 dBm (>100m)	0 dBm (10-30m)	20 dBm (>100m)	20 dBm (>100m)	20 dBm (>100m)	20 dBm (>100m)
Power connector type	20 pin header or one piece part connector	20 pin header or one piece part connector	20 pin header or one piece part connector	20 pin header or one piece part connector	DC plug 2.1m.m centerpin (-)	DC plug 2.1m.m centerpin (-)	Terminal block	Terminal block	IP65, rugged connector
Power supply	3-6 V	3-6 V	3.3-6 V	3.3-6 V	5 V	5 V	8-30 V	8-30 V	8-30 V
Serial connector	20 pin header or one piece part connector	20 pin header or one piece part connector	20 pin header or one piece part connector	20 pin header or one piece part connector	Male DSUB-9	Male DSUB-9	Terminal block	Terminal block	Male DSUB-9
Serial Interface	Logic-level UART, RS232 Baud rate: 300-921.6k CTS/RTS or none	Logic-level UART, RS232 Baud rate: 300-921.6k CTS/RTS or none	Logic-level UART, RS232 Baud rate: 300-921.6k CTS/RTS or none	Logic-level UART, RS232 Baud rate: 300-921.6k CTS/RTS or none	RS232 Baud rate: 300-921.6k CTS/RTS or none	RS232 Baud rate: 300-921.6k CTS/RTS or none	RS232/422/485 Baud rate: 300-921.6k CTS/RTS or none	RS232/422/485 Baud rate: 300-921.6k CTS/RTS or none	RS232 Baud rate: 300-921.6k CTS/RTS or none
Antenna	Internal	Stub or on a cable	Internal	Stub or on a cable	Internal	Internal	Internal	Stub or on a cable	Stub
Wireless Multidrop™ - Multipoint	3 slaves	3 slaves	7 slaves	7 slaves	3 slaves	7 slaves	7 slaves	7 slaves	7 slaves
Housing	No housing	No housing	No housing	No housing	Plastic IP20	Plastic IP20	Plastic IP20	Plastic IP20	Rugged IP65
Dimensions (mm)	23*36*5	23*36*5	40*42*5	40*42*5	63*80,2*25,7	63*80,2*25,7	63*80,2*25,7	63*80,2*25,7	75,5*84,6*34,6

DISTRIBUTORS NEAR YOU

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