



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.

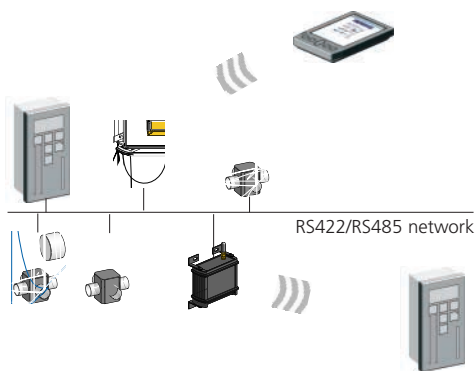
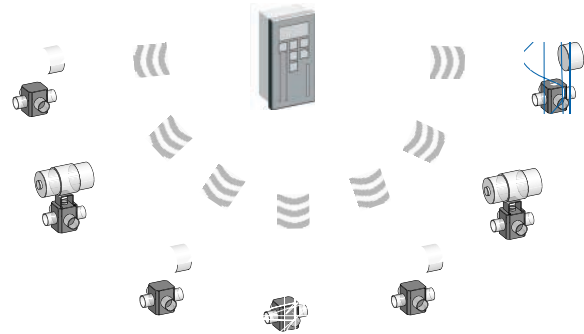
Key Features and Benefits

- 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!

Serial Port Adapter™

WIRELESS MULTIDROP™ - MULTIPOINT

This feature allows the Serial Port Adapter to simultaneously communicate with up to 7 remote Bluetooth devices depending on application and use cases. 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 use 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 eaves 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.



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..

Type Approval

FCC/CFR 47 part 15 unlicensed modular transmitter approval

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: -20 - +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

R&TTE compliance: EN 300 328
 EMC compliance: EN 301 489, EN 61000-6-2, IEC 60601-1-2
 Complies with IEC 60950
 Environment: IEC 61131-2



| | 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) |
| 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 | 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 |
| 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 | 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 |
| Antenna | Internal | Stub or on a cable | Internal | Stub or on a cable | Internal | Internal | 33i -Internal 33x - Stub or on a cable | Stub |
| Wireless Multidrop™ - Multipoint | 3 slaves | 3 slaves | Up to 7 slaves depending on application | Up to 7 slaves depending on application | 3 slaves | Up to 7 slaves depending on application | Up to 7 slaves depending on application | Up to 7 slaves depending on application |
| Housing | No housing | No housing | No housing | No housing | Plastic IP20 | Plastic IP20 | Plastic IP20 | Rugged IP65 |
| Bluetooth Qualified | Fully | Fully | Fully | Fully | Fully | Fully | Fully | Fully |
| Type Approved | Fully | Fully | Fully | Fully | Fully | Fully | Fully | Fully |
| 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 | 75,5*84,6*34,6 |

DISTRIBUTORS NEAR YOU



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