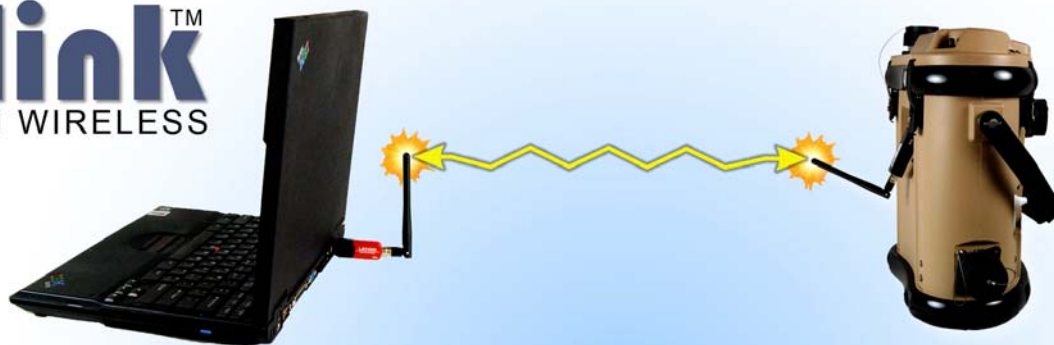


Biolink™

BLUETOOTH WIRELESS



Introduction

If you own any of the Research International family of air samplers or chemical and biological sensing instruments you know their value in providing fast and reliable data, both in the lab and in the field. Now you can eliminate all physical cabling in multi-instrument installations by using Bluetooth BioLink RF Data Radio technology.

The Bluetooth BioLink device draws all of its operating power from the RS232 data interface on Research International Samplers and Detection Instruments and has all radio functions built-in. The Bluetooth BioLink connected to the PC can be powered from any USB port directly, or via a supplied USB cable if an RS232 connector-equipped BioLink model is used at the PC.

Each device has a pairing button and LED that provides a quick and easy method for establishing a trusted device Bluetooth connection without the need for a PC. A four position dip switch sets the baud rate and enables or disables hardware handshaking. In a few minutes the wireless connection setup is complete.

A particularly attractive aspect is that each RF node is assigned a unique Bluetooth address, allowing a Bluetooth BioLink Base Station (available from Research International) to communicate discretely with different system nodes. For a BW application, these nodes might include a dry biotrigger; a wet air sampler; and a bioidentifier. The Bluetooth BioLink Base Stations are network enabled so they can be either connected to a host PC with an ethernet cable or connected directly to the internet.

The Bluetooth BioLinks are Class 1 devices with an open field range of 400 meters (1300 feet) with the supplied antennas. A range of 1000 meters is possible with an optional available antenna.

Advantages

- No bulky cables to fail
- Instruments are fully mobile
- Rapid system setup
- Easy system reconfiguration
- Lower installed system costs

The Bluetooth BioLink product line is designed to replace RS-232 serial cables with wireless connectivity. Advanced features include Bluetooth 1.2 Protocol Stack (with Adaptive Frequency-hopping spread spectrum, AFH), software-free configuration support via an external dip-switch, pairing button for instant configuration of a connection between two Bluetooth BioLink devices, and flexible power options.

The Bluetooth BioLink is “plug-and-play.” Simply connect one Bluetooth BioLink to your Research International air sampler or detector, a second BioLink to your desktop PC or laptop and you have instant two-way communications.

When combined with one of the Bluetooth BioLink Base Stations, up to 28 nodes can be accessed. With this capability you can remotely monitor multiple SASS 2300 wetted-wall air samplers or the SASS 3100 dry air samplers from a desktop PC or laptop. Or connect a BioHawk bioassay system and you have the ability to sample air and run bioassays from a remote location – even over the internet.



Features

- Bluetooth Specification v2.0 + EDR
- Provides transparent RS232 serial cable replacement
- Basic Transmit Power: Max. +18dBm, EDR
- Transmit Power: Max. +6dBm
- Receiving Sensitivity : -88dBm(0.1%BER)
- Supports Bluetooth profiles SPP (Serial Port Profile)
- Interoperability with PDA, laptops etc.
- Supports firmware upgrade via windows based software
- Working distance (In an open field) : Nom. 400 meters, up to 1000m using patch antenna
- Enhanced portability : standard & extended battery pack options
- Easy to use Windows configuration tool available.
- No external drivers required.
- Power Consumption : Minimum 2mA, Maximum 80mA
- Operating temperature: -20°C to 70°C
- Storage temperature: -40°C to 85°C
- Humidity: 90% Non-condensing
- Dimension (LxWxH): 76 x 31 x 16 (mm)
- Weight: 24 g
- Regulatory Approvals CE, FCC, TELEC, MIC
- Diagnostic LED BT Status (mode)
Connect RS232-RX/TX
- Connects to any asynchronous serial compatible device including PC COM serial ports, laptops, palmtops, industrial machines, telemetry, sensors, and data collectors; any RS-232 equipped device
- ROHS Compliant

For More Information

If you would like more information on the Bluetooth Biolink contact:



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Product Configurations

Bluetooth BioLink™ Package for Single Remote Device

Includes:

1. One (1) BioLink with null modem for remote device and one (1) USB-powered BioLink for PC.
2. Quick Start Guide
3. Two (2) +5dBi Stub Antenna (400 meter range)
4. Two (2) +1dBi Stub Antenna (100 meter range)
5. CD with software and documentation

Base Stations for Multiple Devices

Base Station

Available in 7, 14, and 28 Bluetooth connection models (purchase BioLink units separately)

BioLink Bluetooth Data Radio Options

Individual BioLink units for additional remote devices.

+1dBi Dipole Antenna (100 meter range)

+3dBi Dipole Antenna (200 meter range)

+5dBi Dipole Antenna (400 meter range)

+9dBi Patch Antenna with separate cable connection (1,000 meter range)

Notes:

1. If only 1 remote node (device) is to be used, two data radios are needed- one at the remote node, the second at the PC.
2. If more than 1 node is to be used with a PC, or direct connection to the Internet, then a base stations must be purchased as well as many node radios as there are remote devices.