

# BioLink

## Bluetooth Wireless Communications



*BioLink Bluetooth USB adapter*



*BioLink RS-2323 serial port adapter with USB power cable and 400 meter antenna*



*BioLink base station Model C connects up to 28 nodes*

The **BioLink Bluetooth** is a “plug-and-play” product for easy wireless connections between multiple devices. Simply connect one BioLink Bluetooth to your Research International air sampler or bioidentifier, a second BioLink to your desktop PC or laptop, and you have instant two-way communications.

When combined with one of the BioLink Bluetooth base stations, up to 28 nodes can be accessed. With this capability you can remotely monitor multiple SASS 2300 wet or 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.

The BioLink Bluetooth device draws all of its operating power from the RS-232 data interface on Research International Samplers and Detection Instruments, and has all radio functions built in. When connected to a PC it is powered from any USB port directly, or via a supplied USB cable if an RS-232 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.

The BioLink Bluetooth is a Class 1 device 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.

For complete technical information, visit [www.resrchintl.com](http://www.resrchintl.com).

### FEATURES

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

BioLink Bluetooth Wireless Specifications	
Characteristic	Description
Bluetooth specification:	Bluetooth v2.0 + EDR
Max data transfer rate:	3 MBPS with USB style
	921.6 MBPS with RS-232 style
Working distance:	+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)
Operating temperature:	-20°C to 70°C
Storage temperature:	-40°C to 85°C
Humidity:	90% noncondensing
Size:	76 x 31 x 16 mm (RS-232) 72 x 22 x 10 mm (USB)
Computer OS support (USB only):	Windows 2000/XP/Vista; Linux; MAC OS X (MAC OS X driver required)
Approvals:	RS-232: CE, FCC, TELEC, MIC USB: CE, FCC, TELEC, KCC,Bluetooth SIG

Multi-Node Bluetooth Base Station	
Bluetooth specification:	Bluetooth v2.0 + EDR, Class 1
Connectivity:	Up to 28 nodes
Max data transfer rate:	3 MBPS
Profiles:	Serial Port, LAN access, PAN, Dial-up Networking, file transfer
Network protocols:	IPv4, ICMP, ARP, TCP, HTTP, telnet, TFTP, SSH, HTTPS, SSL/TLS, DNS, SCP/SFTP/FTP, syslog, NTP, SMTP, Dynamic DNS
Working distance:	+1dBi Dipole Antenna (100 meter range); +5dBi Dipole Antenna (400 meter range); +9dBi Patch Antenna with separate cable connection (1,000 meter range)
Operating temperature:	0°C to 50°C
Storage temperature:	-30°C to 85°C
Humidity:	90% non-condensing
Size:	203 x 170 x 44 mm
Weight:	1470 gm
Power:	6W at 5V
Security:	IP filtering, SSH v2, SSL/TLS, HTTPS, SCP, SFTP
CF port:	Flash memory
Logging:	Syslog server, CF memory
Management:	Windows utility; Web, telnet, serial console
Customization:	Python script engine, ELDK v4.0, 2MB internal user space
MTBF:	30.5 years
Approvals:	CE, TELEC, FCC

## BioLink Bluetooth Wireless Specifications

<b>Bluetooth BioLink™ Package for Single Remote Device:</b>	One (1) BioLink with null modem for remote device and one (1) USB-powered BioLink for PC. Quick Start Guide Two (2) +5dBi Stub Antenna (400 meter range) Two (2) +1dBi Stub Antenna (100 meter range) CD with software and documentation
<b>Base Station:</b>	Available in 7, 14, and 28 Bluetooth connection models (purchase BioLink units separately)
<b>Data Radio Options:</b>	+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 one 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 one node is to be used with a PC, or direct connection to the Internet, then a base station must be purchased plus one node radio per remote device.

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