

# BlueWAVE USB Dongle

## Bluetooth™ Class 1 USB Solution

BlueWAVE USB Dongle is the quick and easy way to enable your PC or laptop to connect to other Bluetooth™ devices. Tailored to work with the other products in the BlueWAVE range, this device allows simultaneous Bluetooth™ connections to up to 7 BlueWAVE DCE devices. Unlike most other Bluetooth™ USB products on the market, this device provide a range of 100m. This makes it ideal for use alongside the BlueWAVE range of products.



## Bluetooth™ Serial Port Profile

The BlueWAVE USB Dongle connects to a BlueWAVE DCE unit and instantly provides a COM port on your PC fully supporting the Serial Port Profile.

## Fully Compatible with other Bluetooth™ Products

BlueWAVE USB Dongle is fully compatible with all Bluetooth™ 1.1 devices such as BlueWAVE devices, Bluetooth™ data cards, PDA's, laptops and cell phones.

## Typical Example

A company manufacturing medical diagnostic equipment have a heart monitor product that connects to a PC via an RS232 cable. The company would like to remove the need for the cable and allow their product to be compatible with Bluetooth™ enabled PC's, laptops and PDA's. The manufacturer selects the BlueWAVE RS232 DCE Terminal module and integrates the daughter board PCB into their existing product. They then use the BlueWAVE USB Dongle to allow their non-Bluetooth™ PC to connect to the DCE Terminal. They now have a fully compliant Bluetooth™ connection without any development costs within a minimal timeframe.

## Features

- Simple to interface, no redesign needed
- Connects directly to USB port
- No additional power supply requirements
- Bluetooth™ Version 1.1 Compliant
- Compatible with all Bluetooth™ 1.1 devices.
- Ultra-small design is ideal for mobile and industrial usage
- 100 metre range

## More Information

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**Sample Applications**

BlueWAVE is being adopted by electronics manufacturers within a whole range of industry sectors to include :-

- Utility • Medical • Automotive • Telecoms • Industrial Control • Data logging • SCADA • Test Equipment • EPOS • many more

**General Specification**

<b>Frequency</b>	2400~2483.5MHz
<b>Modulation</b>	FHSS/GFSK 1Mbps 1600hop/s
<b>Data transmission speed</b>	723.2k/57.6kbps (asymmetrical, max.) 433.9kbps (symmetrical, max.)
<b>Max Transmission power</b>	20dBm (Bluetooth™ TX power class 1)
<b>Receiving sensitivity</b>	-80dBm~-20dBm
<b>Coverage</b>	0.5m~100m (Varies depending on use environment)
<b>Interface</b>	USB Rev1.1, Bluetooth 1.1, Conforms to HCI/USB
<b>Protocol</b>	Bluetooth™ host controller, L2CAP, SDP, RFCOMM Generic access, Service discovery application,
<b>Profile</b>	Serial port, LAN access, Dial-up networking, FAX, Object push, File transfer, Synchronization
<b>Operating System</b>	Windows 98SE, Windows ME, Windows 2000, Windows XP
<b>Current consumption</b>	80mA standard
<b>Power supply</b>	USB bus powered mode

**Requirements**

- PC Compatible or Mac computer
- 200 MHz or above
- One USB port
- 64Mb memory or above
- Microsoft Windows 98SE, ME, 2000, XP or Mac OS v10.2 and higher

**FAQs**

*Q. Does the Bluewave USB Dongle conform to any Bluetooth™ profiles?*

A. The Bluewave USB Dongle conforms to the Serial port, LAN access, Dial-up networking, FAX, Object push, File transfer and Synchronization Profiles

*Q. What is the actual range of the device?*

A. The device uses Bluetooth class 1. Assuming it is connected to a good class 1 device such as a BlueWAVE DCE then the range should be approximately 100 meters.

*Q. How do I connect it to my PC?*

A. The Bluewave USB Dongle will connect to a standard PC USB port.

The Bluetooth manager software should then be started and the following steps are followed for connection to a DCE.

1) The PC will “discover” or search for other Bluetooth devices. The Bluewave device will appear as “Bluewave DCE”. 2) The PC will need to pair with the Bluewave. The pin number is then entered. 3) The PC will connect to the serial port service of the Bluewave DCE. 4) A virtual communications port will then generally be created and the application can then talk over this port to the Bluewave DCE.

*Q. How can I order in quantity?*

A. Wireless Futures are happy to handle orders of any quantity. Please contact the sales office to discuss your requirements and we will consider the best ordering volume and frequency.