

## High Speed *Bluetooth*<sup>®</sup> USB Adapter

Part No: BRBLU03 – 010A0



The Professional High Speed *Bluetooth* USB Adapter is the latest in the EZURiO range of Professional *Bluetooth* products and is the world's first *Bluetooth* USB adapter that has been designed specifically to deliver the high data rates of modern technology.

This new *Bluetooth* USB adapter is designed with the most advanced *Bluetooth* features in a product that has been engineered to ensure the highest quality and reliability. This is a professional product designed for system critical use where robustness and reliability are critical

The Ezurio USB adaptor has been designed to give you the reliability that ensures your wireless applications work just as well in the diverse 'real world' deployment locations as in the controlled environment of your engineering lab. It gives you all of the advantages to make the most of any environment. It's designed to offer the best possible performance and cope with the worst possible environment by providing the following features:

### Key Features

- Best in class range, providing open field connectivity in excess of 300 metres
- Adaptive Frequency hopping to cope with interference from other wireless products
- A full industrial operating temperature range of -40°C to +85°C
- Automatic high speed performance using the Enhanced Data Rate of Bluetooth Version 2.0+EDR specification with data rate up to 3Mbps
- Supports extended SCO to provide the highest quality voice communications
- Optimised receive sensitivity to provide long range initial connections that largely eliminate connection hysteresis
- Low power
- Lead free
- 2 year warranty

Power is a key performance indicator. The EZURiO professional range has a highly optimised radio that works at an extended range at around 10% of the power consumption of other *Bluetooth* solutions. This unprecedented power control ensures that your products work for longer.

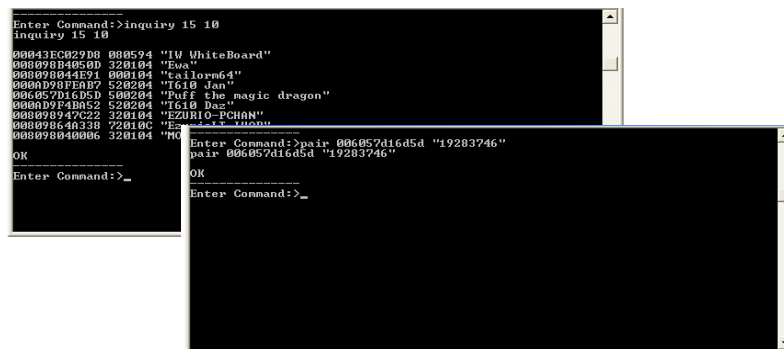
EZURiO prides itself on the ease of product integration and the Professional *Bluetooth* USB Adapter is no exception. The USB adapter contains a fully compliant *Bluetooth* HCI interface enabling it to run with any approved *Bluetooth* protocol stack. With Microsoft Windows XP SP2 and Windows CE this is truly plug and play.

## Security

When designing your applications, security is often over looked or seen as problematic. To simplify this, our professional USB adapter supports all the security features from the *Bluetooth* standard.

- Full support of Authentication and Encryption
- 128 bit encryption keys
- 128 bit authentication keys
- SAFER+ encryption algorithm
- Combination keys
- Full 16 alphanumeric character PIN codes
- Non-discoverable modes

The *Bluetooth* USB Adapter is supplied with a robust Windows software stack supporting the most widely used *Bluetooth* profiles and to speed up application development, for developers we also provide a powerful yet simple interface console.



Our BTConsole runs on top of the supplied stack and provides a simple, yet intuitive, command line access to key *Bluetooth* connectivity functions including inquiry, pairing, encryption, connection and virtual serial port management. If wireless is the selling feature of your application or product, why would you wish to trust your wireless solution to anything else?

## Overview of the technical specification

| Feature             | Implementation              |
|---------------------|-----------------------------|
| <i>Bluetooth</i>    | Class 1                     |
| Frequency           | 2.400 – 2.485 GHz           |
| Enhanced Data Rate  | Up to 3Mbps (raw data rate) |
| Max Transmit Power  | + 6dBm                      |
| Antenna Gain        | + 2dBi                      |
| Low Power Modes     | Hold, Sniff, Park           |
| Receive Sensitivity | Better than -84dB           |
| Range               | 300m (free space)           |
| Physical Interface  | USB 2.0                     |
| Current Consumption | Up to 45mA                  |

| Feature                  | Implementation                                             |
|--------------------------|------------------------------------------------------------|
| <i>Bluetooth</i> Version | <i>Bluetooth</i> 2.0 + EDR                                 |
| Physical Size            | 20 X 64 X 11 mm                                            |
| Temperature Range        | -40°C to +85°                                              |
| Interface Levels         | 3.3V                                                       |
| Audio                    | SCO and ESCO Supported                                     |
| Piconet / Scatternet     | Supported                                                  |
| Qualification            | Fully <i>Bluetooth</i> qualified as a controller subsystem |
| Lead Free                | RoHS compliant                                             |

## Environmental tests

|                                                 |                                               |
|-------------------------------------------------|-----------------------------------------------|
| IEC 60068-2-1:1990                              | IEC 60068-2-2:1974                            |
| IEC 60068-2-14:1984                             | IEC 60068-2-56:1988                           |
| IEC 60068-2-30:1980                             | IEC 60068-2-29:1987                           |
| SAE 1455:REVAug94<br>Paragraph 4.9.4.2 (random) | SAE 1455:REVAug94<br>Paragraph 4.10.4 (shock) |

The details contained within the document are subject to change; please download the product specification available from [www.ezurio.com](http://www.ezurio.com) for the most up to date specification

For further information please visit our website at [www.ezurio.com](http://www.ezurio.com)

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