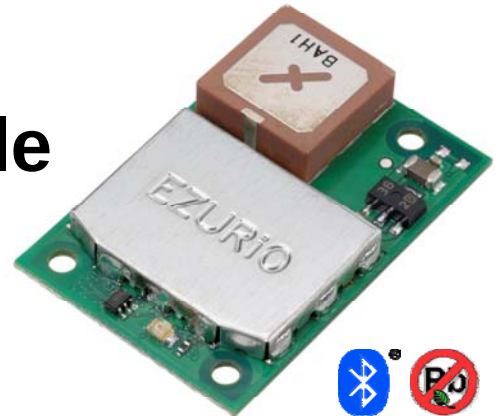


Bluetooth[®] Serial Module BISM II

Part No: TRBLU23 – 00200



The *Bluetooth* Intelligent Serial Module is specifically designed for applications where robust short range connectivity is required. This particular module provides a reliable *Bluetooth* connection that exceeds all requirements in terms of performance. Having an excellent range of up to 300 metres with very low power consumption of less than 36 mA makes this module a true class leader.

Key Features

- Best in class range, providing open field connectivity in excess of 300 metres
- Integrated high performance ceramic antenna
- Adaptive Frequency hopping to cope with interference from other wireless products
- Optimised receive sensitivity to provide long range initial connections that largely eliminate connection Hysteresis
- A full industrial operating temperature range of -40°C to +85°C
- Data transfer rate up to 300 kbps
- Fully approved product – no further approval costs
- Class 1 version 2.0 *Bluetooth*
- Receive sensitivity better than -84 dBm
- Support for 128 bit encryption
- Non-discoverable modes
- 40 way Hirose connector
- 2 X 8 bit ADC's
- 9 X GPIO
- Low power modes
- Lead free
- 2 year warranty

As well as incorporating a fully approved embedded *Bluetooth* protocol stack, the module includes a comprehensive AT style interface, which dramatically reduces the development time of applications from months to days.

Key Benefits

- Fastest time to market
- Range and reliability
- Low power
- Low cost of ownership

This module provides the very best package for embedding into your applications and is contained within a compact profile.

Dimensions

- 25 X 35 X 10 mm
- 8 grams in weight

Bluetooth Serial Module – BISM II

Features

Features
Version 2.0 <i>Bluetooth</i>
Adaptive Frequency Hopping
Supports Wi-Fi co-existence
Fully approved end product – No approval cost
Embedded <i>Bluetooth</i> stack
Integrated antenna with up to 300m range
Simple AT style command set interface
Configurable General Purpose Input Outputs
8bit Analogue to Digital Converter
Industrial Temperature range
Wide ranging profile support: SPP, DUN, headset, audio gateway, handsfree and FTP client



Key benefits

Fastest time to market	Ideal for embedded systems
Lowest cost of ownership	No host stack required

Supports encrypted data	Low power
Robust design	Extensive technical support

Overview of the technical specification

Feature	Implementation
<i>Bluetooth</i>	Class 1
Frequency	2.400 – 2.485 GHz
Max Transmit Power	+ 6dBm
Min Transmit Power	- 27dBm
Low Power Sniff	2.5mA typical
Receive Sensitivity	Better than -84dB
Range	300m (free space)
Serial Interface	3.3v UART
GPIO	9 X Digital
Serial Parameters	Default 9600,n,8,1 From 1200 to 921600bps DTR, DSR, RTS, CTS, DCD, RI DCE or DTE mode
Current Consumption	Idle mode = 13mA Connected as master = 20mA Connected as slave = 30mA

Feature	Implementation
Physical Size	25 X 35 X 10mm, 8g
<i>Bluetooth</i> Qualified	<i>Bluetooth</i> 2.0
Lead Free	RoHS compliant
Temperature Range	-40°C to +85°
Interface Levels	3.3V
Audio	Supported
Multipoint	Supported
Field Upgrades	Over UART
ADC	2 X 8bit
Protocols	UART AT command set Multipoint
Data Transfer Rate	Up to 300 kbps

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 Paragraph 4.9.4.2 (random)	SAE 1455:REVAug94 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 for the most up to date specification