### Item # BISMS02BI, Bluetooth® Serial Module BISM II TRBLU23



#### Bluetooth® Serial Module BISM II TRBLU23

# **Stock Locator**

The Laird Technologies Embedded Bluetooth Module is specifically designed for applications that demand a robust and reliable Bluetooth connection. This product has been designed with solder connections that allow the module to be mounted directly into your own designs and potted or enclosed within a metal housing, while exposing a high performance multilayer ceramic antenna.

#### **Key Features**

- · Integrated antenna with up to 250 meter range
- Class 1 with +6 dBm transmit power (maximum)
- · Current consumption less than 36 mA
- Version 2 0
- · Fully integrated Bluetooth stack
- · Audio supported through PCM slave connection
- · Comprehensive AT style interface
- -40°C to +85°C operating range
- · Data transfer rate up to 300 kbps
- · Designed for rugged applications and potting
- · Lead free RoHS compliant
- · Multipoint supported
- · UART 3.0 v interface
- · Adaptive frequency hopping
- · Field upgradeable
- · 2 year warranty

As well as incorporating a fully approved Bluetooth protocol stack, the module includes a comprehensive AT style interface, which dramatically reduces the development time of applications from months to days. The UART interface allows the module to be connected any serial port giving access to the full range of features available from the Bluetooth version 2.0 specification.

The Laird Technologies Embedded Bluetooth Module is specifically designed for embedded applications that need a robust Bluetooth link. It has been designed to cope with rugged applications utilizing a direct solder connection that allows the main electronics section to be potted or enclosed within a metal housing, exposing a high performance multilayer ceramic antenna.

The UART interface allows the module to be connected to any serial port. As well as a fully approved Bluetooth protocol stack, the module includes a comprehensive AT style interface, which reduces development times from months to days. It is based on CSR's latest BlueCore BC04 chipset, giving access to the features of the new Bluetooth Version 2.0 specification.

#### SPECIFICATIONS BENEFITS FEATURES APPLICATIONS

## **SPECIFICATIONS**

Description	Surface Mount AT module
Max. Data Transfer Rate	300 Kbps
Bluetooth	Class 1

Frequency	2.400 to 2.485 GHz
Max. Transmit Power	+ 6 dBm
Min. Transmit Power	- 27 dBm
Typical Low Power Sniff	2.5 mA
Receive Sensitivity	Better than -84 dB
GPIO	6 x Digital (DTR can also be configured as I/O)
Max. Range	300 meter free space
Serial Interface	3.0 v UART
Serial Parameters	Default 9600, n, 8, 1 DTR, DSR, RTS, CTS, DCD, RI DCE or DTE mode From 1200 to 921600 bps
Lead free	RoHS compliant
Dimensions	18 x 46 x 5.5 mm
Weight	6 g
Voltage	3.3 to 7.0 V
Current Consumption	Less than 36 mA
Temperature Range	-40 to +85 °C
Interface Levels	3.0 V
Multipoint	Supported
ADC	1 x 8bit
Field Upgrades	Over UART
Protocols	AT command set Multipoint UART
Audio	Supported through PCM slave connection.

# **BENEFITS**

- · Fastest time to market
- Excellent range
- Rugged design
- · Low power consumption
- Low cost of ownership
- · Flat mounting solder down board
- Portable without detriment to performance
  Embedded system design
- Fully integrated Bluetooth stack
- Supports encrypted data
- Robust design for surface mount applications
- Extensive technical support

### **FEATURES**

- · Version 2.0 Bluetooth
- · Adaptive Frequency Hopping
- Supports Wi-Fi co-existence
- Fully integrated Bluetooth stack
- Integrated antenna with up to 250 m range Simple AT style command set interface

- Surface mounted designLow current consumption
- Data rates up to 300 kbps
- Industrial Temperature range
  Wide ranging profile support: SPP, DUN and FTP
- · Multipoint supported
- Field upgradeable over UART
- 2 Year warranty

### **APPLICATIONS**

- Automotive
- Vending
- Logistics
- ePos