

BISMS02BI Embedded Bluetooth[®] AT Module



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USA: +1.800.492.2320 Europe: +44.1628.858.940 Asia: +852.2268.6567

wirelessinfo@lairdtech.com www.lairdtech.com/wireless The Embedded Bluetooth® AT Module is designed for applications that demand a robust and reliable Bluetooth connection. This product is designed with solder connections for mounting directly onto a main PCB. The integrated high-performance, multilayer ceramic antenna is highly resistant to de-tuning, allowing great flexibility in positioning.

As well as incorporating a fully approved Bluetooth protocol stack, the module includes a comprehensive AT style interface that dramatically reduces application development time from months to days.

The Bluetooth surface mount module is shipped with the powerful Laird Technologies Terminal Control Center software that allows simple configuration of the adapter for rapid product development. This, in combination with the Laird Technologies' AT style interface, reduces wireless connectivity development time from months to days.

Key Features 🕴 🗸 RoHS

- Integrated antenna up to 300m range
- Class 1 with +6dBm transmit power (maximum)
- Current consumption less than 36 mA
- Version 2.0 Bluetooth
- Fully integrated Bluetooth stack
- Audio supported through PCM connection
- Simple AT style command set interface
- -40°C to +85°C operating range
- Data transfer rate up to 300kbps
- Lead free RoHS compliant
- Multipoint support
- Adaptive frequency hopping
- Field upgradeable
- 2 year warranty
- Supports Wi-Fi co-existence
- Fully approved end product No approval cost
- Surface mounted design
- Wide ranging profile support: SPP, DUN and FTP
- HCI version available
- Field upgradeable over UART

Benefits

- Fully integrated Bluetooth stack
- Fastest time to market
- Low power consumption
- Lowest cost of ownership
- Robust design for surface
- mount applications
- Extensive technical support

Laird

BISMS02BI

FEATURE	IMPLEMENTATION	
Bluetooth®	Class 1	
Frequency	2.402 – 2.480 GHz	
Max Transmit Power	+6dBm	
Min Transmit Power	-27dBm	
Receive Sensitivity	Better than -84dB	
Range	Up to 300m (free space)	
Serial Interface	3.0V UART	
GPIO	6 x digital GPIO	
Serial Parameters (UART Version	Default: 9600,n,8,1	
only)	From 1200 bps to 921.6 kbps	
	DTR, DRS, RTS, CTS, DCD, RI	
	DCE or DTE mode	
Current Consumption	<36mA	
Physical Size	18.0 x 46.0 x 5.5 mm	
Supply Voltage	3.3V - 7.0V	
Lead Free	RoHS Compliant	
Temperature Range	-40°C to +85°C	
Interface Levels	3.0 V	
Multipoint	Supported	
Field Upgrades	Over UART	
ADC	1 x 8bit	
Protocols	AT command set (BISMS02BI)	
	HCI (TRBLU24-0100)	
Audio	Supported through PCM connection	

Ordering Information

🚯 🗸 RoHS

BISMS02BI	Class I Embedded Bluetooth Module	
BISMS02BI-NA	Class I Embedded Bluetooth Module with uFL connector	
TRBLU24-00100	Class I Embedded USB HCI Module	
TRBLU24-00100-NA	Class I Embedded USB HCI Module with uFL connector	

The details contained within the document are subject to change. Download the product specification from <u>www.lairdtech.com/wireless</u> for the most current specification.

CONN-DS-BISMS02Bi

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Revision History					
Ver.	Date	Changes	Approved By		
1.0	16 Oct 2013	Initial	J. Kaye		
1.1	06 May 2014	Added Rev History	Sue White		