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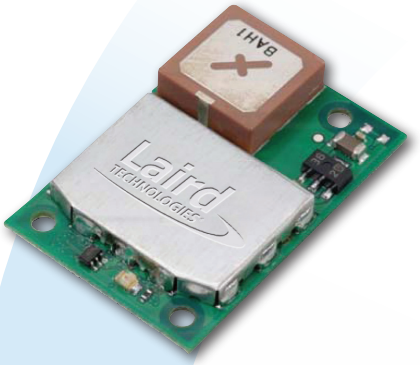
Innovative **Technology** for a **Connected** World

TRBLU23
Bluetooth® Intelligent Serial Module



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. The excellent range of up to 300 meters with very low power consumption of less than 36 mA makes this module a true class leader.

KEY FEATURES

- Best-in-class range provides open field connectivity in excess of 300 meters
- 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 hysterisis
- A full industrial operating temperature range of -40°C to +85°C
- Data transfer rate up to 300 kbps
- Fully approved product
- 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 ADCs
- 9 X GPIO
- Low power modes
- Lead free
- 2 year warranty
- Supports Wi-Fi co-existence
- Embedded Bluetooth stack
- Integrated antenna with up to 300m range
- External antenna version available

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

global solutions: local support™

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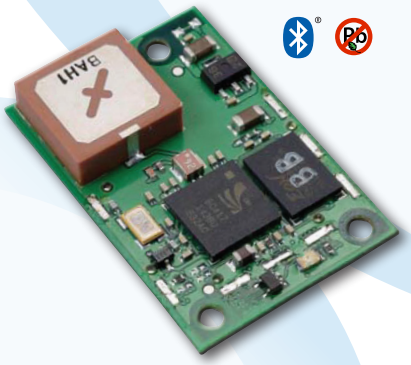
FEATURE	IMPLEMENTATION
Bluetooth®	Class 1
Frequency	2.402 – 2.480 GHz
Max Transmit Power	+6dBm (internal antenna - TRBLU23-00200)
	+4dBm (at u.fl connector - TRBLU-23-00300)
Min Transmit Power	-27dBm
Lowe Power Sniff	2.5mA typical
Receive Sensitivity	Better than -84 dB
Range	300 m (free space)
Serial 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
Physical Size	25.0 x 35.0 x 7.6mm, 8g
Antenna	Internal Multilayer Ceramic
	External Connection via u.fl connector
Bluetooth Qualified	Bluetooth 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



ORDERING INFORMATION

TRBLU23-00200 Bluetooth Serial Module with integrated antenna

TRBLU23-00300 Bluetooth Serial Module with u.fl connector for external antenna

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

LWS-SPEC-TRBLU23 0309