



BT900-US Series Bluetooth v4.0 Dual Dongle

Intelligent BT / BLE Dongle featuring *smartBASIC*

NO EXTERNAL BLUETOOTH STACK NEEDED!



Laird's BT900-US product expands upon the BT900 series of modules for embedded devices to leverage Classic BT and Bluetooth Low Energy support to PCs, laptops, and mobile computers. The BT900-US provides a simple approach for adding into virtually ANY operating system with a USB port. Let Laird's innovative BT900-US and decades of expertise in Bluetooth design speed your end-to-end wireless application to market.



FLEXIBLE FOR ANY CHALLENGE— A COMPLETE SOLUTION

The BT900-US USB dongle has been developed to take advantage of the BT900-SA module, providing a simple and easy way to add Classic Bluetooth, BLE Central, and BLE Peripheral mode to virtually ANY operating system with a USB interface. Leverage the BT900-US to enable any Bluetooth SPP device or BLE sensor to communicate to any PC, laptop, or mobile computer without any complicated installation or software support requirements.



EMBEDDED BLUETOOTH MADE EASY

A smart design is one you don't have to rewrite. Laird's *smartBASIC* acts as the bridge between software and hardware, enabling an application written for one *smartBASIC* radio to work on any other. Our event-driven *smartBASIC* language, unique to the wireless industry, offers built-in functions that replace thousands of lines of C code with a few abstracted lines of *smartBASIC*. Leverage Laird's years of Bluetooth expertise: write once and deploy anywhere with Laird's line of *smartBASIC*-ready modules and devices.



GLOBAL APPROVALS— MAKE YOURSELF AT HOME.

Laird's BT900-US carries several modular FCC, IC, CE and Bluetooth SIG approvals, meaning you don't need costly and time-intensive testing to bring certified Bluetooth to market. Certifications from worldwide regulatory bodies take time, effort, financial cost, and ultimately slow development. Laird's approvals extend to your design with no additional testing, making them a fast and efficient route to production.

Features & Benefits

- Bluetooth v4.0 dual mode (BT and BLE)
- Virtual COM port implementation – huge array of supported Operating Systems
- *smartBASIC* powers rapid design and deployment
- Supports SPP and any BLE Peripheral or Central roles
- Supports simultaneous BT and BLE connections
- Standalone operation – no need for external Bluetooth stack or power supply

Application Areas



Logistics,
Barcode
Scanners



Point of Sale
terminals



Health and
Medical Devices

global solutions: local support..

USA: +1.800.492.2320
Europe: +44.1628.858.940
Asia: +852.2923.0610

wirelessinfo@lairdtech.com
www.lairdtech.com/bluetooth

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



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CATEGORIES	FEATURE	IMPLEMENTATION
Wireless Specification	Bluetooth®	V4.0 – Dual-Mode
	Frequency	2.402 - 2.480 GHz
	Transmit Power	+ 8 dBm (maximum) Configurable down to -20 dBm
	Receive Sensitivity	-90 dBm (typical)
	Link Budget	98 dB
	Raw Data Rates (Air)	3 Mbps (Classic BT – BR/EDR): 1 Mbps (BLE)
Host Interface	USB 2.0 – UART interface	TX, RX, CTS, RTS DTR, DSR, DCD can be implemented in <i>smartBASIC</i> - using General Purpose I/O
	Virtual COM port via FTDI232RQ	Default 115200, N, 8, 1
Additional I/O	LEDs	One
Profiles	Bluetooth Low Energy	GATT Client & Peripheral – Any Custom Services
	Classic Bluetooth	Serial Port Profile (SPP) – Greater than 400kbps
Maximum Connections	Classic Bluetooth	7 clients
	Bluetooth Low Energy	5 clients
Programmability	<i>smartBASIC</i>	On-board programming language similar to BASIC
	<i>smartBASIC</i> application	Via UART
Control Protocols		Any that can be implemented over SPP using <i>smartBASIC</i> vSP – Virtual Serial Port for BLE
FW upgrade	<i>smartBASIC</i> engine FW upgrade	Via UART
Supply Voltage	Supply	5.0V +/- 10%
		Powered by standard USB port
Physical	Dimensions	18.39 mm x 50.74 mm x 11 mm
Environmental	Operating	-40°C to +85°C
	Storage	-40°C to +85°C
Miscellaneous	Lead Free	Lead-free and RoHS compliant
Support	Operating Systems	Windows
		Windows Embedded
		MAC OSx – max UART baud rate 230.4kbps
		Linux
		Android
Software Tools	Utilities	RTOS – ThreadX – check drivers on FTDI
		UW Terminal or Any Terminal Emulation program UART firmware upgrade
Approvals	Bluetooth®	HW Subsystem Declaration ID
	FCC / IC / CE	Additional countries upon review
Warranty		Limited Lifetime Warranty

Ordering Information

BT900-US-0x	Intelligent USB BTv4.0 Dual Mode Dongle featuring <i>smartBASIC</i>
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