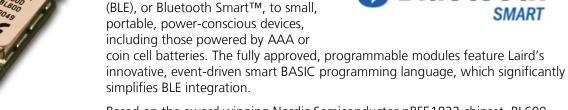




### Single-Mode BLE Module Featuring *smart*BASIC







Based on the award winning Nordic Semiconductor nRF51822 chipset, BL600 modules provide exceptionally low power consumption with outstanding wireless range, all within a compact footprint of 19 mm x 12.5 mm. The modules incorporate all the hardware and firmware required to support development of BLE applications, including:

Radio hardware

BL600 Series modules from Laird

Technologies make it easy to add single-mode Bluetooth Low Energy

- UART, SPI, I2C, ADC, and GPIO interfaces for connecting peripherals and sensors
- A complete BLE software stack
- GATT-based BLE profiles that include Blood Pressure, Heart Rate, Health Thermometer, Proximity and Find Me, with future support for additional and custom profiles to suit your application's needs

What makes the modules unique is *smart*BASIC, an event-driven programming language that enables standalone operation of the module whereby sensors can be attached via any of the interfaces without the need for an external processor. A simple *smart*BASIC application encapsulates the complete end-to-end process of reading, writing, and processing of sensor data and then using BLE to transfer it to any Bluetooth v4.0 device – smartphone, tablet, gateway, or computer. Ultimately *smart*BASIC accelerates initial development, creation of prototypes, and mass production by providing you with your own BLE expert within the module.

In addition to carrying FCC modular, IC, CE and MIC approvals, BL600 modules are fully qualified as a Bluetooth End Products, enabling designers to integrate the modules in devices without the need for further Bluetooth Qualification. A low-cost developer's kit including simple software tools simplifies module integration and guarantees the fastest route to market.



### global solutions: local support,

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

wirelessinfo@lairdtech.com www.lairdtech.com/wireless The details contained within the document are subject to change. Download the product specification from <a href="www.lairdtech.com/wireless">www.lairdtech.com/wireless</a> for the most current specification.





# Single-Mode BLE Module Featuring *smart*BASIC

CATEGORIES	FEATURE	IMPLEMENTATION
Wireless Specification	Bluetooth®	V4.0 – Single-Mode
	Frequency	2.402 - 2.480 GHz
	Max Transmit Power	4dBm
	Receive Sensitivity	-91dBm (typical)
	Whisper Mode	Down to -55dBm (Transmit)
	Link Budget	95 dB (@ 1 Mbps)
	Raw Data Rates	1 Mbps (over the air)
Host Interfaces	Total	28 lines – multi function
	UART	TX, RX, CTS, RTS DTR, DSR, DCD, RI can be implemented in <i>smar</i> tBASIC Default 9600, N, ,8, 1 From 1,200 to 115,200bps
	GPIO	Up to 28 lines
	SPI	3 lines
	I2C	2 lines
	ADC	6 lines (plus ADC reference)
Profiles		Blood Pressure, Heart Rate, Health Thermometer, Proximity & Find Me *
Services		Generic Access, Battery Service, Device Information Service, Heart Rate Service, Health Thermometer Service, Immediate Alert Service, Link Loss Service, Tx Power Service, Blood Pressure Service
Control Protocols		Any that can be implemented using <i>smart</i> BASIC
Encryption	AES	128 bit using CCM encryption
Supply Voltage	Supply	1.8V – 3.6V – internal LDO 2.1V – 3.6V – internal DCDC converter
Power Consumption	Current	'System Idle' – 3.5uA 'Transmit' – 10.5mA @ 0dBm
Physical	Dimensions	19mm x 12.5mm x 3mm
Environmental	Operating	-25°C to +75°C
	Storage	-40°C to +85°C
Miscellaneous	Lead Free	Lead-free and RoHS compliant
	Warranty	1 Year
	vvarrarrey	
Development Tools	Development Kit	Development board and free Software Tools
Development Tools Approvals	,	Development board and free Software Tools End Product Listing (EPL)

<sup>\*</sup> Profile listing as per April 1st 2013, additional profiles added quarterly.

## **Ordering Information**

<del>-</del>	
BL600-SA-0x	Single Mode BLE Module featuring <i>smart</i> BASIC (internal antenna)
BL600-SC-0x	Single Mode BLE Module featuring smartBASIC (IPEX MHF4 antenna connector)
BL600-ST-0x	Single Mode BLE Module featuring <i>smart</i> BASIC (trace pin)
DVK-BL600-SA / ST / SC-0x	Development Kit for each BL600 series module above





Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию.

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России, а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научноисследовательскими институтами России.

С нами вы становитесь еще успешнее!

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