Features at a Glance

RUGGED PRODUCT WITH LONG RANGE BLE CONNECTIVITY

Gather sensor data from the harshest of environments and ensure your wireless signal gets through

MULTIPLE INTEGRATED SENSORS = MANY APPLICATIONS

Single sensor incorporates BLE proximity beaconing, temperature sensing, motion and impact, as well as open/close door sensing

READY IN MINUTES FOR QUICK DEPLOYMENT

Connect to Wi-Fi via our smartphone app and start transmitting live remote sensor data to AWS within minutes.

OVER-THE-AIR UPDATES AND CLOUD PLATFORM ABLE

Stay up to date with OTA capabilities from supporting mobile application as well as Cloud deployment with integrated support with Laird's Sentrius™ IG60 IoT gateway

GLOBAL CERTIFICATIONS AND APPROVALS

Regulatory compliance for FCC, IC, CE, MIC and RCM as well as Bluetooth SIG Qualification

INDUSTRY-LEADING SUPPORT

Laird Connectivity's Tier 2 and FAE support bring expert assistance to your integration, working with you and our engineering team to reduce your time to market.

Laird™ CONNECTIVITY

Bluetooth v5 Long Range IP67 Multi Sensor

Rugged, multi-function Bluetooth 5 sensor for your IoT application

| Contact | Temperature | Proximity | Acceleration |

Bluetooth® 5

The Sentrius™ BT510 Sensor is a battery powered, Bluetooth v5 Long Range integrated sensor platform enabling robust, reliable sensor data transfer in the harshest of environments.

The Sentrius™ BT510 packs in more than just a IP67 temperature sensor, also seamlessly integrating open / close contact and motion / impact detection and BLE beaconing capabilities.

The BT510 is powered by Laird Connectivity's field proven BL654 BLE module that integrates Nordic Semiconductor's nRF52840 silicon for feature rich application development in the Cortex M4F with 1MB Flash memory, which also enables integrated sensor data logging and storage. The ultra-low power sensor uses a single replaceable CR2477 coin cell battery, for a multi-year life and hassle free, long term maintenance.

- **Multi Sensor Platform** – Integrated temperature, accelerometer and magnetic reed switch sensors
- **Best-in-Class BTv5 Performance** – BLE Long Range, secure connections and BLE beaconing
- **Simple sensor and wireless configuration** – Our supporting smartphone app easily configures all settings of the platform
- **IP67 Enclosure** – A rugged IP67 certified enclosure with simple twist / lock design for hassle free maintenance
- **Replaceable Battery** – Ultra low power capabilities and replaceable CR2477 coin cell
- **Worldwide Approvals** – Device Certified for FCC, IC, CE, MIC, RCM and Bluetooth SIG
- **Future Proof** – OTA updates from mobile app or Cloud connectivity with Laird Connectivity's Sentrius™ IG60 IoT gateway
- **Customization** – Custom branding, packaging, application development all available!

Cold Chain Management and Food Safety

Agricultural Humidity and Environment Monitoring

Industrial Heating and Cooling

Interested in Laird Connectivity's BT510 Sensor? Visit us at http://www.lairdconnect.com/bt510

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CATEGORY	FEATURE	SPECIFICATION
Wireless	Bluetooth® 5	Laird BL654 Module with Nordic nRF52840
	Processor	Cortex M4F – 1MB Flash and 256k RAM
Sensors	Temperature IC - Range	-40° to +125°C
	Temperature - Accuracy	+/-0.5°C
	Accelerometer	3-axis MEMS – Programable motion and contact detection
	Open / Close Contact	Omni polar magnetoresistive sensor
Antenna	Integrated	Onboard PCB antenna
Power	Battery	CR2477 coin cell - replaceable
Software	Configuration	Mobile App - Android & iOS – Configuration and / or Remote sensor display
		IoT Gateway - Configuration and / or Remote sensor display to Cloud - PENDING
	OTA Update	Mobile App - Android & iOS – OTA firmware update
		IoT Gateway - Configuration and / or Remote sensor display to Cloud – PENDING
Storage	Data Logging	7 days of data at 15 minute read intervals (Temperature)
LED	Status	1 – multi state
Button	User Input	Multi-use – default BLE pairing
Mounting	Placement	Zip tie, industrial Velcro or screw
Physical	Dimensions	80 mm x 51 mm x 19 mm
Environmental	Operating Temp. Storage Temp	-20° to +60°C (coin cell battery is limiting factor) -40° to +85°C
Regulatory	Approvals	FCC, IC, CE, MIC, RCM and Bluetooth SIG
Warranty		1-Year warranty
Customization	Options **	Branding on front label, packaging or mobile app
		Enclosure Colours
		Pre- configuration options
		Custom Firmware
		New sensor IC options

** Dependent on commercial case

For full specifications on the BT510, please see the appropriate datasheet.

Ordering Information

PART	DESCRIPTION	PACKAGING
455-00083	Sentrius™ BT510 Sensor, Single	Single (1)
450-00048B	Sentrius™ BT510 Sensor, Bulk Packaged	Bulk (100)
455-00058	Magnet Kit (Open/Close) for Sentrius™ BT510, Single	Single (1)
455-00058B	Magnet Kit (Open/Close) for Sentrius™ BT510, Bulk	Bulk (100)

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