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!

## 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
**OTA 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. | -20° to +60°C (coin cell battery is limiting factor)
**Storage Temp.** | -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

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