EX2000B Tag Exciter

The Extronics Advance EX-2000B Exciters provide robust and sophisticated RFID detection capabilities, using Extronics Advance Tags that can be accurately located in real time by the system. Exciters transmit low frequency (LF) signals to trigger active RFID Tags as they pass through a chokepoint or as they approach the Exciter. The Tags in turn transmit messages to compatible Access Points in the Tag’s range. This provides an instant acknowledgment of an event confirming that a tagged asset has passed through a gate, doorway, or some other well-defined area. These advanced detection capabilities have proven usability, dependability, and scalability, as well as flexibility to enable a wide variety of valuable applications for many industries to streamline business processes and improve operational efficiency.

Automatic inventory management
Logistics organisations can update inventory records by automatically determining which assets are within the respective defined areas, thus ensuring real-time knowledge of inventory levels without manual checks or barcode scanning.

Logistics real-time alerts
Based on the locations of assets, organizations across industries can use Exciters to trigger automated events and alerts. For example, in a shipping yard, notifications can be initiated when vehicles pass through its gates to enter or exit.

Process control
Manufacturing companies can track the location of equipment, carriers, and even the work-in-process (WIP) inventory during a production cycle. This provides a real-time view of production items, both in terms of type and quantity, which have progressed through each step in the process, thus streamlining the manufacturing operations.

Theft prevention
Organizations with expensive and mission-critical equipment can Tag valuable assets that are intended to remain within a specified area. The AeroScout system can track the location of such tagged assets and trigger an alert when they pass through an exit point or enter a restricted area.

Security applications
Exciters can be installed to improve the safety level of employees and customers. When installed at the entrances of restricted areas, Exciters trigger alerts if unauthorised persons attempt to enter. For example, instant notifications can be sent if someone comes in proximity of a restricted area on an oil rig.
Key features

- **Tag behaviour modification**: Tag behaviour can be changed (activated or deactivated) when it comes in the proximity of an Exciter. For example, a Tag can be switched off when it leaves a defined area, thus extending its battery life. In addition, when the Tag enters a new physical space, its transmission rate can be modified either for a temporary period or for an indefinite time.

- **Rugged enclosure**: A rugged, IP67-rated enclosure is available (EX-2000B-R) for use in hostile indoor and/or outdoor environments.

- **Message programming functions**: Exciters have the ability to store messages on the Tag for subsequent transmission. The message transmission can be triggered by other Exciters, enabling sophisticated process control functions.

- **Multiple cabling options**: Exciters can support Power over Ethernet (PoE) or standard Ethernet to enable centralized programming, monitoring and updates by the AeroScout Engine. In addition, Exciters can work in an offline mode disconnected from the network, thus eliminating the need for a physical network feed. In the offline mode, remote configuration and monitoring is not enabled.

- **Chaining**: In an area where the required LF coverage exceeds the capacity of one Exciter, multiple Exciters can be connected together for complete and precise coverage of areas such as large gates and racks.

- **Specific location detection**: Exciters enable enterprises to locate assets precisely to a specific shelf, rack, room, bay or work cell. They can also assist in difficult searches for specific assets by making the Tag in question identify itself with a specific LED indication.

**Specification**

<table>
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<tr>
<th>Certification</th>
<th>Radio FCC Part 15, sub-part C class B, sub-part B; EN 300-328, EN 300-330, EN 301-489; RSS210 (Canada) Safety: CE, cTUVus (EN 60950) US Patents 7, 403, 108 B2</th>
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<tbody>
<tr>
<td>Range</td>
<td>Adjustable up to 6.5m (20ft)</td>
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| Dimensions             | EX-2000B: Width 220 x Depth 115mm (8.6 x 4.5in)  
EX-2000B-R: Width 280 x Depth 130mm (11 x 5.1in)                                                                 |
| Weight                 | EX-2000B: 800g (28oz)  
EX-2000B-R: 2700g (95oz)                                                                                             |
| IP rating              | EX-2000B: IP64  
EX-2000B-R: IP67                                                                                                         |
| Network interface      | Ethernet (RJ-45)                                                                                                                                                    |
| Power                  | Input voltage: 48VDC; PoE (802.3af ) – 48VDC  
Maximum power consumption: 10W  
Maximum power consumption of External LF Unit: 6W.                                                                 |
| Environmental          | Operating temperature: -20°C to +60°C (-4°F to 140°F)  
Humidity: 0 to 95%, non-condensing                                                                                     |
| LF channel             | 125kHz; Field intensity limits: 37.3dBμA/m at 10m (ETSI); Propagation limits: 21.8dBBμV/m at 300m (FCC); Modulation: ASK                                                                 |