

Technical Note



USB Base Station Extender

2.4 GHz Wireless Sensors

Overview

MicroStrain's **USB Base Station Extender Package** provides a robust way to overcome situations where physical extension of the standard USB Base Station communication cable, rather than the addition of a Range Extending antenna, is preferable. The Extender Package allows one or more USB Base Station communication cables to be extended from the host computer into an environment to overcome obstacles such as walls, machinery, landscape, rotation out-of-sight, etc.

Package Components

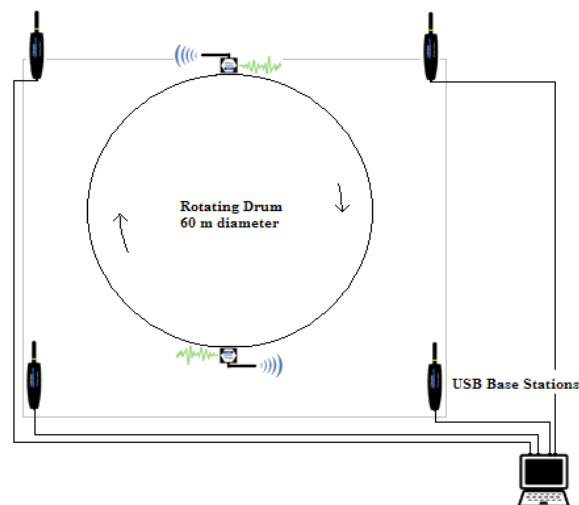
- Base connector: USB Type A Male; RJ45 Female
- Remote connector: USB Type A Female; RJ45 Female
- 150 foot (45.72 meter) CAT5E molded cable

Features

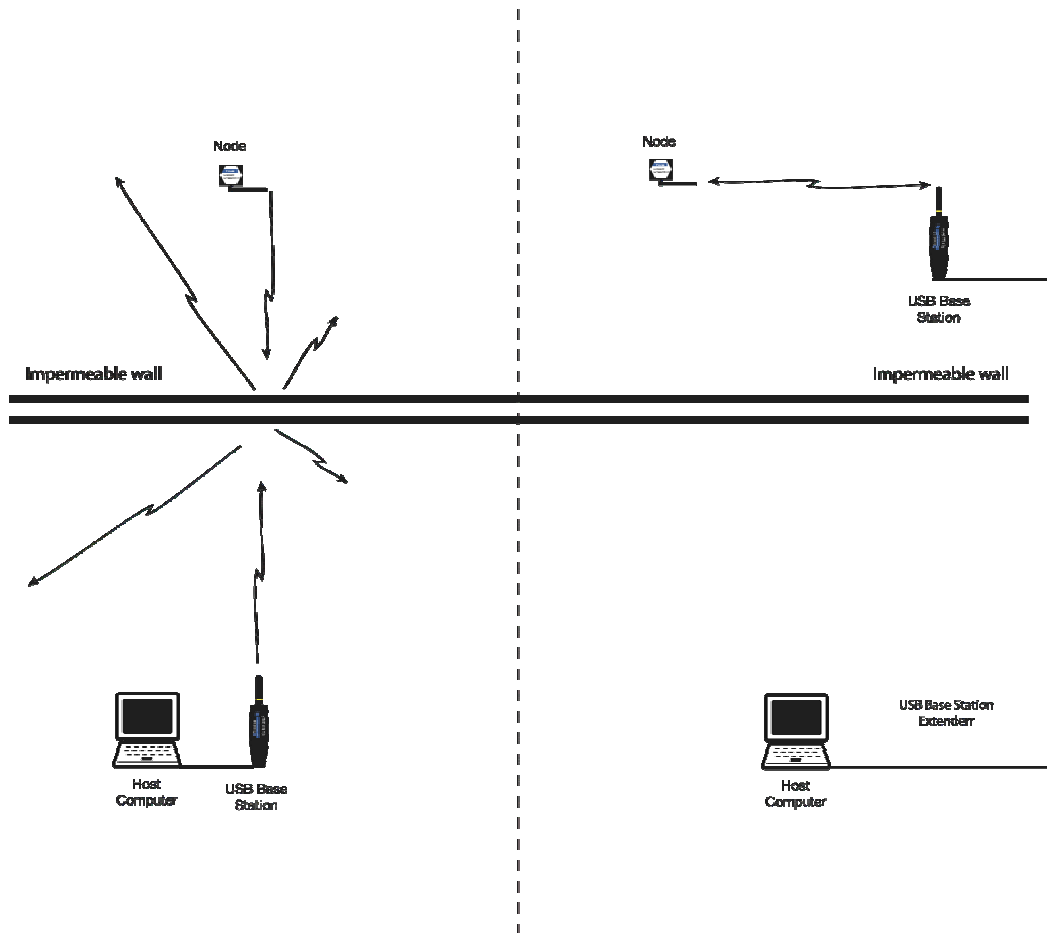
- The package extends the distance of a USB Base Station from a USB-enabled computer up to 150 feet.
- The connectors are self-powered (by USB port) so no external power source is required.
- The cable is Cat5E, PVC-jacketed and a 150 feet run is included with the package for ease of use and flexibility.
- The package is compliant with USB Specification 1.1 and 2.0.

Uses

In this scenario, a wireless node is attached to a rotating drum. As the drum rotates, the wireless node loses line-of-sight communication with the base station positioned at the host computer. By extending one or more base stations with the Extender, line-of-sight communications can be maintained throughout the drum's rotation.



In this scenario, a wireless node is positioned behind a wall and is not in line-of-sight with the base station. Communication is blocked by the wall. By employing the Extender, the base station is run around the wall and line-of-sight communications are established.



Ordering

The USB Base Station Extender Package can be ordered from MicroStrain, its U.S. representatives and world-wide distributors as part number 9022-0021.