Septentrio PolaRx5 - Low Bandwidth Connections

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PolaRx5 Web User Interface (Easy)

As of firmware release 5.3.0 users can access a low bandwidth text interface with adjustable refresh rate. This interface can be accessed by appending /lite to the URL or IP address.

One of the simplest way to connect to and control a PolaRx5 is to access the receiver via the Web User Interface (WUI). However, the WUI requires a significant amount of bandwidth to function. Station operators connecting to remote stations with limited bandwidth may find the WUI unresponsive, and in some cases prohibitively expensive. When a client is connected to the WUI, the receiver sends SBF messages every second to update the receiver status pages. Different WUI page views require different amounts of bandwidth. A few examples of typical bandwidth usage rates are shown below.

Overview Page:

- ~50 kbits/sec (receiver -> client)
- ~6 kbits/sec (client -> receiver)

Spectrum View Page:

- ~100 kbits/sec (receiver -> client)
- ~10 kbits/sec (client -> receiver)

PolaRx5 RxControl (Medium)

An alternative method for accessing the receiver is to use Septentrio's RxControl software (Windows and Linux only). Users can select the SBF message update rate using the RxControl -> File -> Preferences menu. The default update rate is 1Hz. Reducing the update rate will reduce bandwidth usage.

- @1Hz update rate - ~10 kbits/sec (receiver -> client)
- @1Hz update rate - ~1 kbits/sec (client -> receiver)

PolaRx5 Command Line Interface (Expert)

For extreme cases where a remote site has with very limited bandwidth a user can utilize the Command Line Interface (CLI) to control the receiver. The CLI can be accessed using Septentrio's Data Link software or a telnet connection. In this mode only the commands issued and their response consume bandwidth. This is the most bandwidth efficient way to communicate with a remote receiver via TCP/IP. Please see the Firmware Reference Guide and RxTools Manual for more detailed guidance (available from the Septentrio Support website).

Online URL: https://kb.unavco.org/article/septentrio-polarx5-low-bandwidth-connections-857.html