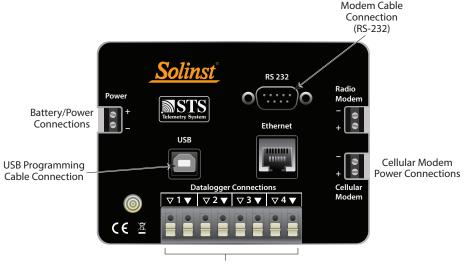
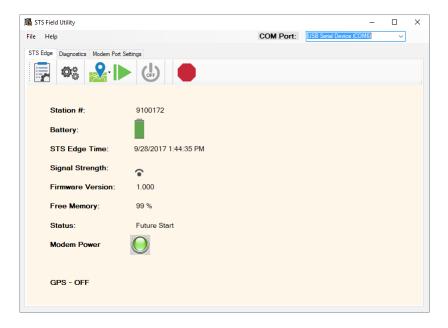
STS Edge Telemetry System Remote Station Quick Start Guide

STS Edge Cable Connections



Datalogger Reader Cable Connections

STS Field Utility



The STS Field Utility is included with the Solinst Telemetry Software package. To communicate with the STS Field Utility, connect the STS Edge to your PC using the USB Programming Cable. The connection is labeled "USB" on the STS Edge

To open the STS Field Utility, use the Tools menu in the STS/RRL Administrator.

Select the appropriate USB or Com Port for the connected STS Edge from the drop-down menu.



Click to retrieve information and settings from the connected STS Edge.

The STS Edge tab will display the Serial Number of the connected STS Edge, the battery level of the Remote Station, The STS Edge Time, the Signal Strength of the modem, the STS Edge Firmware Version, the percentage of remaining Free Memory in the STS Edge, the STS Edge System Status, and the Modem Power and GPS status (red=off, green=on).

STS Edge Status descriptions are as follows:

- Idle indicates that the STS Edge is idle and waiting for initialization.
- Init shows that the STS Edge is going through the initialization process
- Logging indicates that the STS Edge is collecting data from dataloggers.
- Future Start indicates that the STS Edge has been programmed with the future start option.

In the STS Edge tab, you can turn a connected modem on or off by clicking, or





stopped. This may be useful before you want to reprogram your STS Edge for a new site.

You can disable or enable GPS location for the STS Edge by clicking . Select "Get Location" from

odrop-down menu to display a map with the STS Edge location based on GPS coordinates.

You can stop a programmed STS Edge from sampling and reporting by selecting



Note: See the STS Edge Telemetry User Guide for more information on the STS Field Utility Modem Port

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Initialization Instructions

After all settings in the STS/RRL Administrator Software are programmed, modem set up, and all connections made at to the STS Edge, the STS Field Utility is used to "initialize" the system.

- 1. After you have retrieved the information and settings from the connected STS Edge, use the icon to turn the modem off. Disconnect the battery. Wait a few seconds, then re-connect the battery. The LED on the STS Edge should blink green. Turn the modem back on, by clicking 🚮 The green light on the modem should flash to indicate that it is working.
- 2. At the Home Station, shut down, then restart the STS/RRL Administration Software and the STS /RRL Communication Agent. After the software has been restarted, the STS/RRL Administrator window should show the message "Waiting for Update" in the Site Status field.
- 3. Before completing the initialization process, perform a test to ensure the Home Station and STS $\,$ Edge are communicating properly. This can be done using the Diagnostic tab in the STS Field Utility. If the test is successful, begin the initialization process.

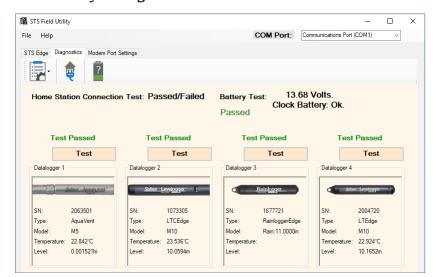
Note: You can also use the Diagnostics tab to test the connection of each datalogger and the battery level of the remote station before initializing.

4. The initialization process is started by simply clicking in the STS Edge tab of the STS Edge Field Utility. STS/RRL Administrator and Communication Agent Software must be running on the Home Station computer during the initialization process.

Note: After you start initialization, a message may ask if you want to stop the dataloggers from recording, if you have previously set them to start logging. This is a precaution, as the internal battery will be used if the dataloggers are set to record independent of the STS System.

- 5. A Window will open showing the progress of the initialization process. The initialization process should only take a few minutes. During the process, the status of the STS Edge will change from "Idle" to "Init". If initialization is successful, a message will be given and the STS Edge status will change from "Init" to "Logging" or "Future Start".
- 6. Click OK in the Initialize Home Station Window, and the STS Edge System will start collecting data at the specified time.

STS Field Utility – Diagnostics



The Diagnostics tab is used to verify the STS Edge connection with the Home Station and dataloggers, and to test the battery.

to test the STS Edge connection with the Home Station. Click Remote Station battery voltage



For each datalogger connected, click Test. If successful, information about each connected datalogger

will be displayed. Real-time readings from the dataloggers will also be shown.

Site Maintenance

As with any monitoring project, you should select the proper equipment and determine a maintenance schedule based on the monitoring environment specific to your application.

Battery re-charging should be done on regular scheduled intervals, based on the battery life estimates shown below (estimates based on 12V sealed lead-acid battery with 4 dataloggers connected). It is recommended to recharge the battery once it reaches 10 Volts. Recharging is especially important in the fall, if the winter temperatures are cold. Replace existing lead-acid batteries every 3-5 years.

Sample Rate	Report Rate	Battery Life Estimates
Every 15 Minutes	Every 6 Hours	7 Months
Every Hour	Every 24 Hours	1 Year
Every 6 Hours	Every 3 Days	1.3 Years
Every 24 Hours	Every 7 Days	1.4 Years

Under normal operation the LED on the STS Edge will flash green. The LED will flash red if a failure is detected with the modem or STS Edge power.

First, check to see if the battery needs recharging or changing. Check all connections to the STS Edge. Check modem and wiring for short circuits.

You can reset the LED by "Restoring Factory Settings", stopping logging, or testing the Home Station connection in the STS Field Utility.

If none of these actions correct the error, contact Solinst for further assistance.

High Quality Groundwater and Surface Water Monitoring Instrumentation

