



Hydro-Link

Hydro-Met Datalogger
Interface Tool

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Hydro-Link™ Installation Guide

1. Equipment Needed

- 64-bit computer running Windows 7, 8, or 10 with an internet connection

NOTE *Hydro-Link™* is best experienced using Firefox or Chrome.

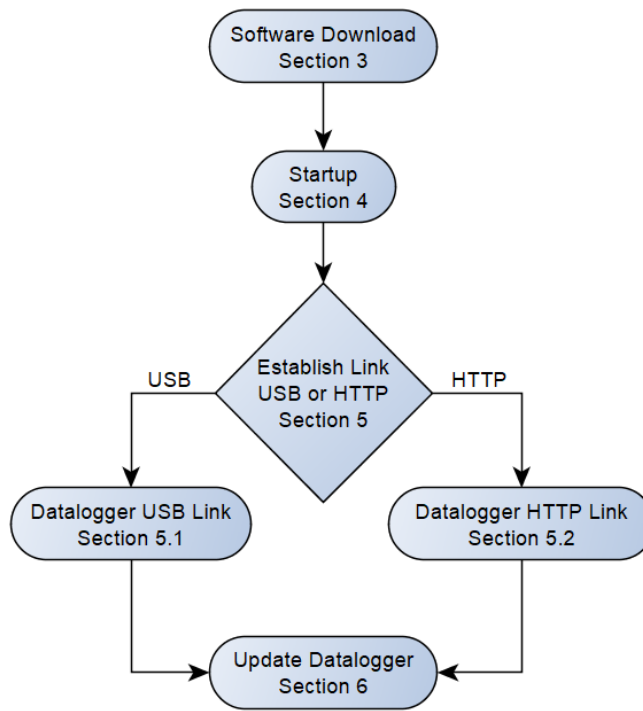
- Campbell Scientific CR300-series data logger with operating system version 9.0 or later

NOTE *Hydro-Link* requires CR300 data loggers with serial numbers greater than 2813.

- USB cable
 - *Device Configuration Utility*
www.campbellsci.com/downloads/device-configuration-utility
-

NOTE If using the TX321 GOES Transmitter, make sure it is updated to firmware version 11.07 or later. (Firmware version 11.07 is included with the TX321/TX320 GPS Update v.3 available from our website. The download includes a procedure for updating the firmware.)

2. Installation Process Overview

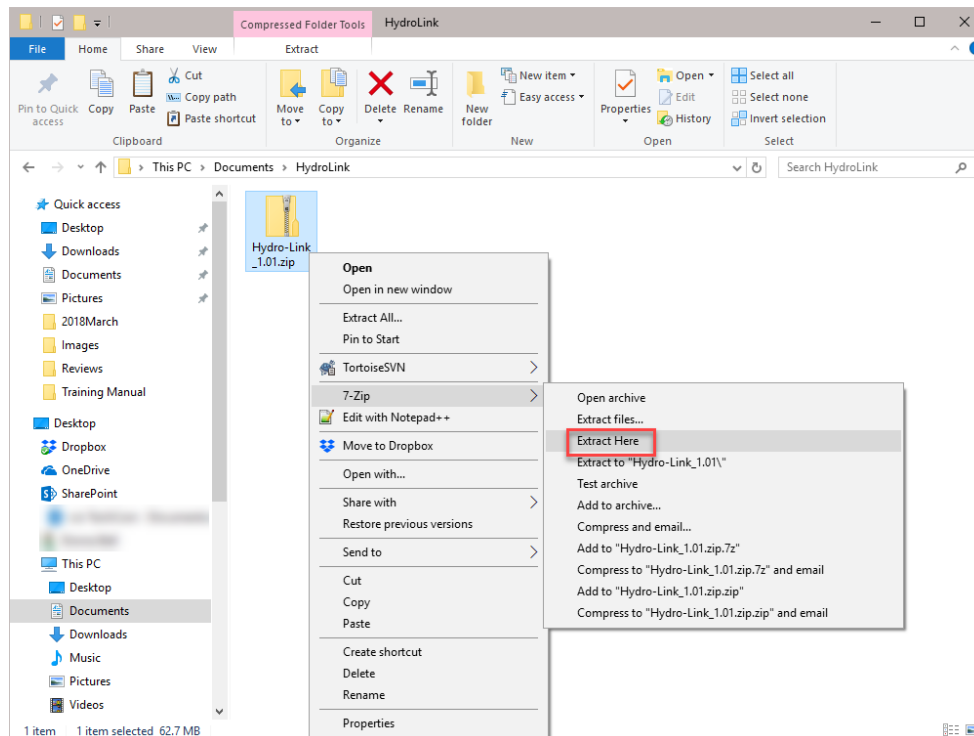


3. Software Download

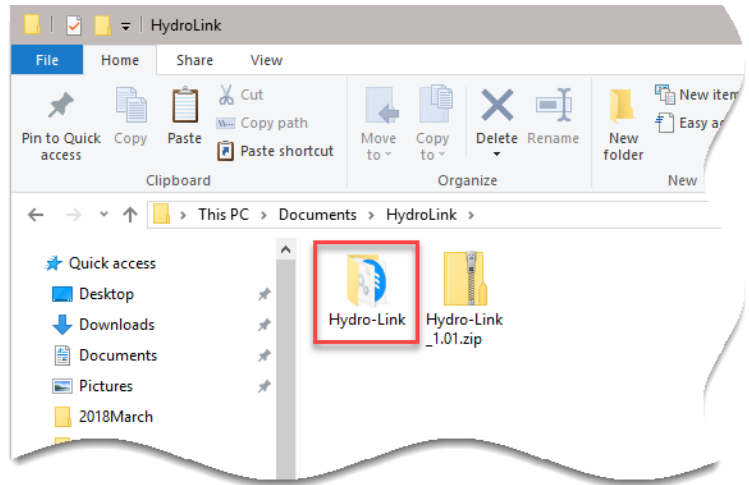
1. Go to www.campbellsci.com/hydro-link. Log in to the website and click **Download Now** at the top of the page to download the install file. Running the install file is the preferred option and does not require any administrative rights. However, it may be necessary to use the zip file if you are unable to run the install executable. To download the zip file, navigate to the **Downloads** section of the Hydro-Link web page.
2. Navigate to the directory where downloads are saved.
3. If installing using the install file:
 - a. Locate the *Hydro-Link* install file (Hydro-Link_<version number>.exe).
 - b. Run the install file and follow the prompts.
 - c. A shortcut will be added to your desktop.

If installing using the zip file:

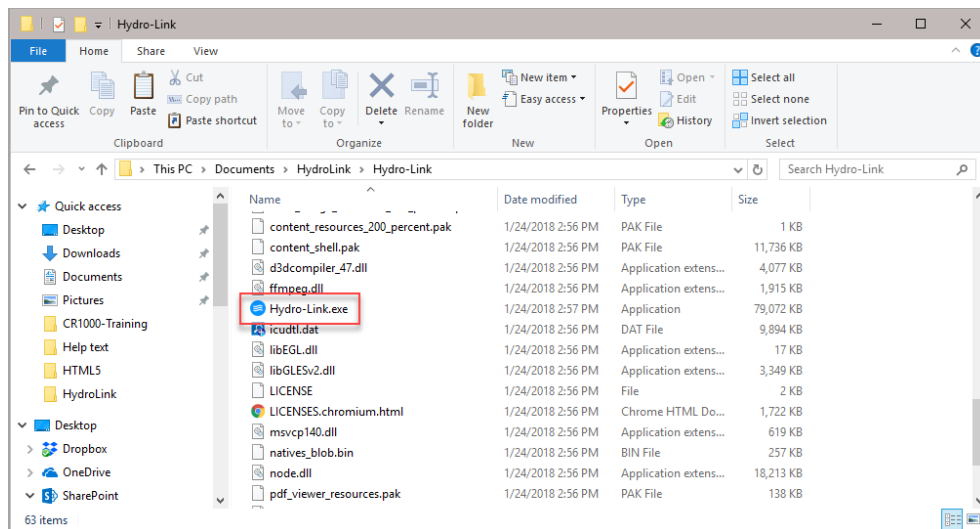
- a. Locate the *Hydro-Link* zip file (Hydro-Link_<version number>.zip) and move it to a user folder.
- b. Extract files to the desired user folder.



- c. After the files have been extracted, the *Hydro-Link* folder appears.



- d. Open folder and locate the *Hydro-Link.exe* file.
- e. A shortcut can be created and moved to the desktop. Right-click on the *Hydro-Link.exe* file and select **Create shortcut**. Drag the created shortcut, *Hydro-Link.exe – Shortcut*, to the desktop.

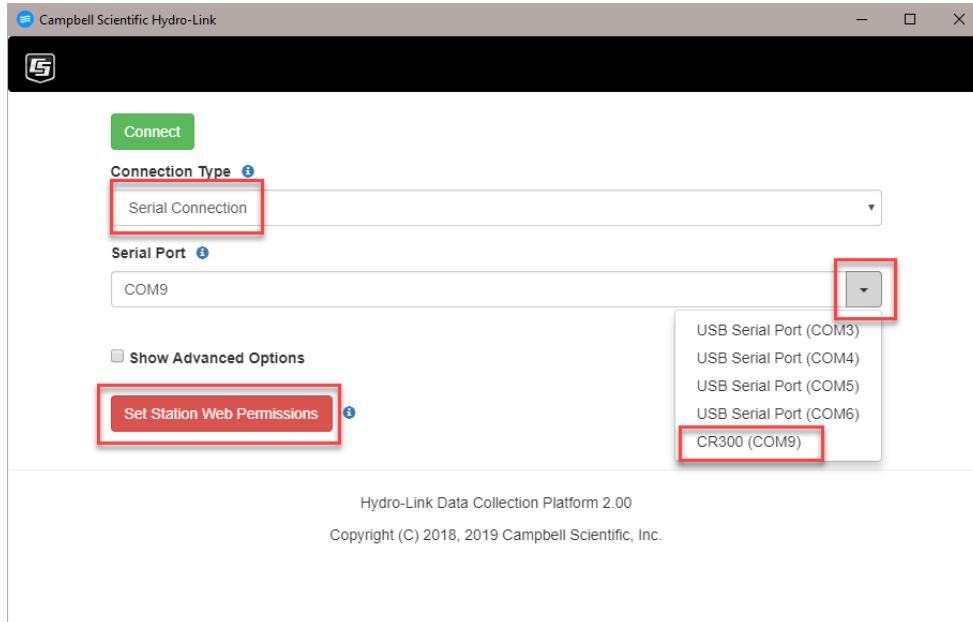


4. Startup

NOTE

To use *Hydro-Link*, a CR300 data logger must be running operating system version 9.0 or later. If necessary, the *Device Configuration Utility* can be used to verify the operating system version or to send a new operating system to the CR300. To send a new operating system, select **CR300 Series** under **Device Type**, connect to the data logger, and go to the **Manage OS** tab. If an update is available, click **Update**. Once the operating system has been sent, close *Device Configuration Utility*. (Refer to the video [Sending an OS to a Local Datalogger](#).)

1. Connect the USB cable from the computer to the data logger.
2. Click the *Hydro-Link* desktop shortcut or run the Hydro-Link.exe file within the folder.
3. The **Connect** page appears.
4. For the initial data logger setup, set **Connection Type** to **Serial Connection**.
5. Select the correct **Serial Port**.



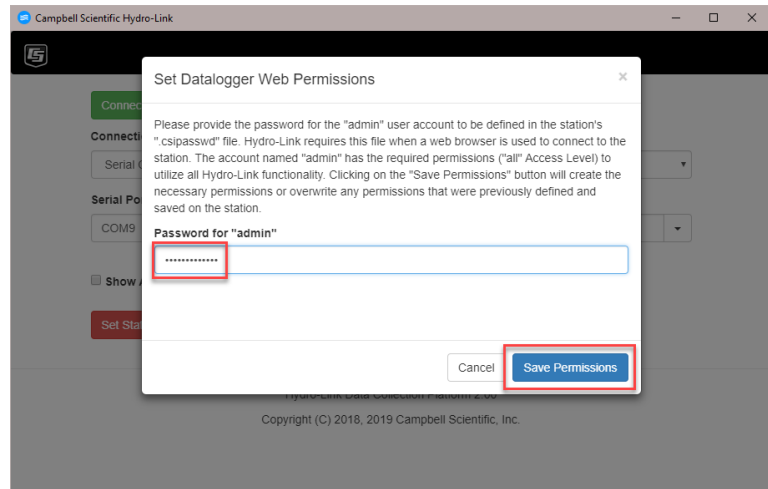
6. Set station web permissions.

NOTE A USB connection is required for this option.

- a. Click **Set Station Web Permissions**.
- b. Type a new password to be used for the **Admin** user.

NOTE This password is required when connecting to the Hydro-Link interface through a web browser.

- c. Click **Save Permissions**.

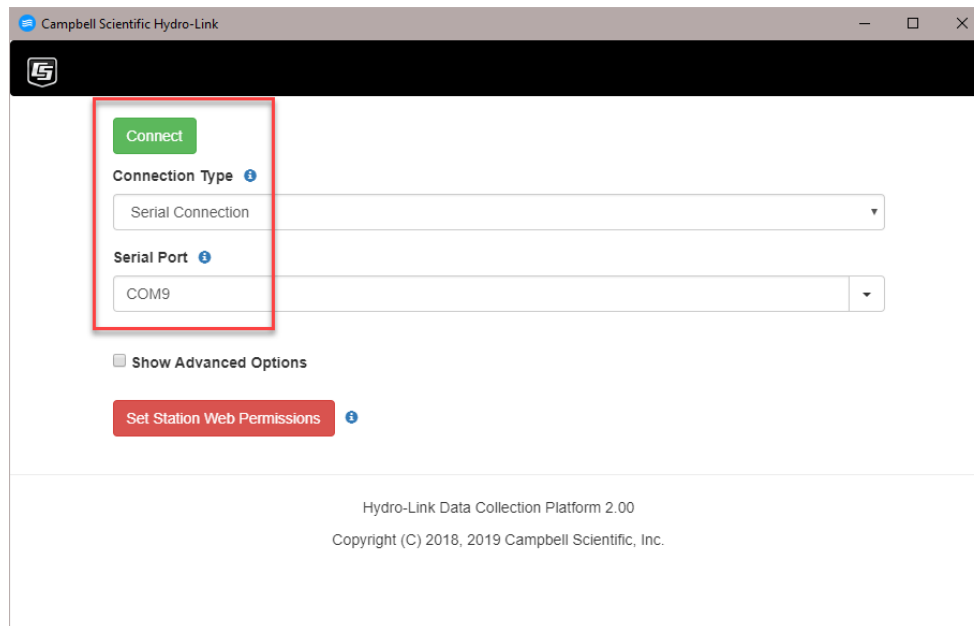


5. Establish Link

The next step is to establish a link to the data logger. Follow steps in Section 5.1, *Data Logger USB Link* (p. 5), to establish a USB link or Section 5.2, *Data Logger HTTP Link* (p. 6), to establish an HTTP link. After establishing the link, proceed to Section 6, *Update Data Logger* (p. 8), to update the data logger.

5.1 Data Logger USB Link

1. Verify settings as shown in the following image (note that the **Serial Port** may be different) and click **Connect**. Once connected, a **Dashboard** screen or the **Configuration** screen is displayed. At this point, jump to Section 6, *Update Data Logger* (p. 8).



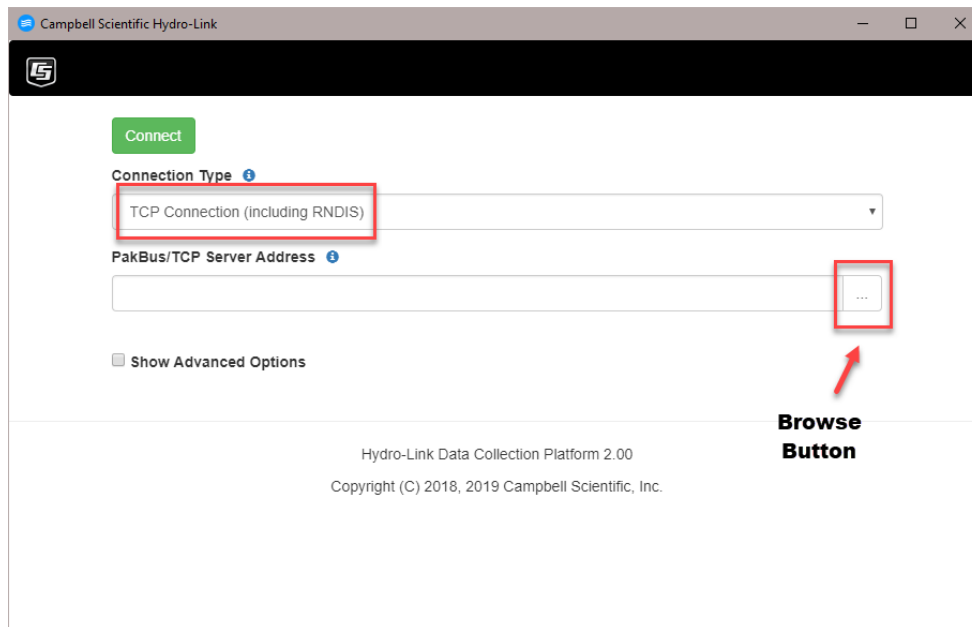
5.2 Data Logger HTTP Link

NOTE If the data logger is a CR300-WIFI, the default WIFI mode is to **host** a network. To connect using an HTTP link, the computer or tablet will need to join the network that the CR300-WIFI is creating. Alternatively, the CR300-WIFI can be configured to **join** a network using *Device Configuration Utility*.

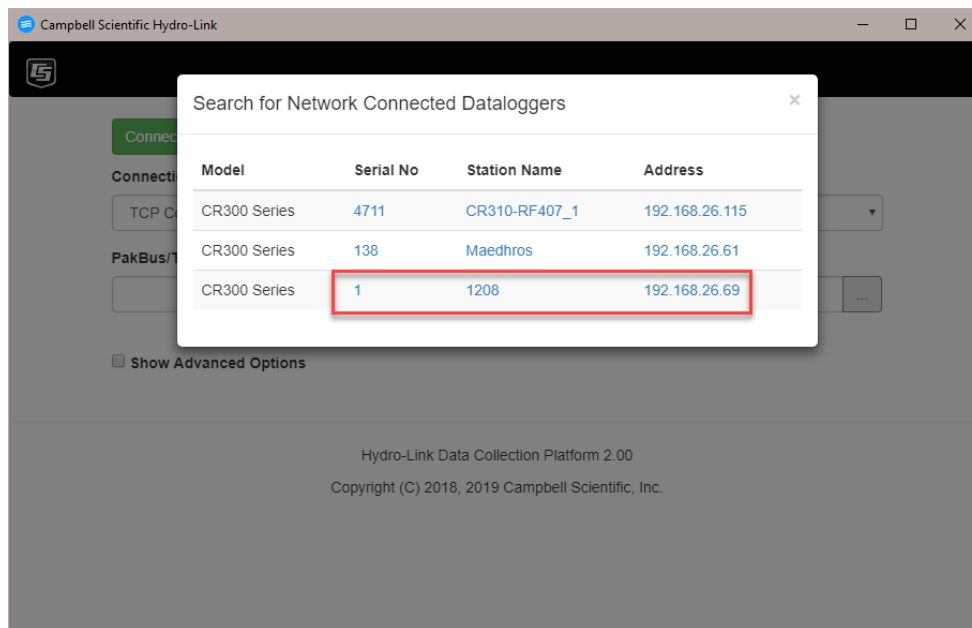
If the data logger is a CR310 and you are using Ethernet communications, the data logger must be connected to a network that can be reached from your computer.

1. The Startup tasks listed in Section 4, *Startup (p. 3)*, including setting station web permissions, should be completed before attempting to connect using the data logger HTTP link.
2. The first screen that appears is the **Connect** page.
3. Set **Connection Type** to **TCP Connection (including RNDIS)**.
4. Use the browse button to find the IP address of the data logger.

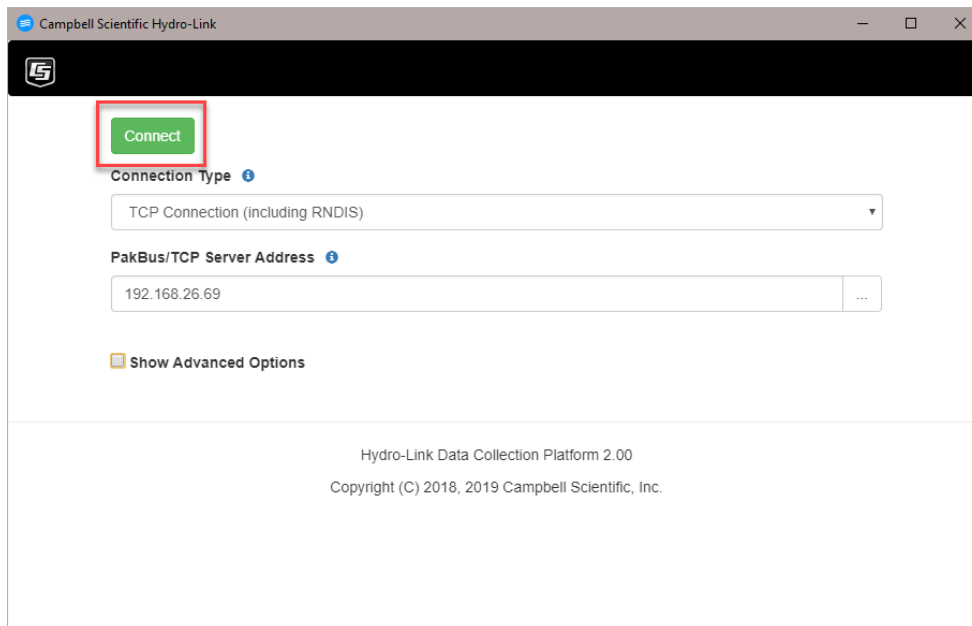
NOTE If browsing does not find the station, type the IP address.



5. Click on the serial number, station name, or IP address.



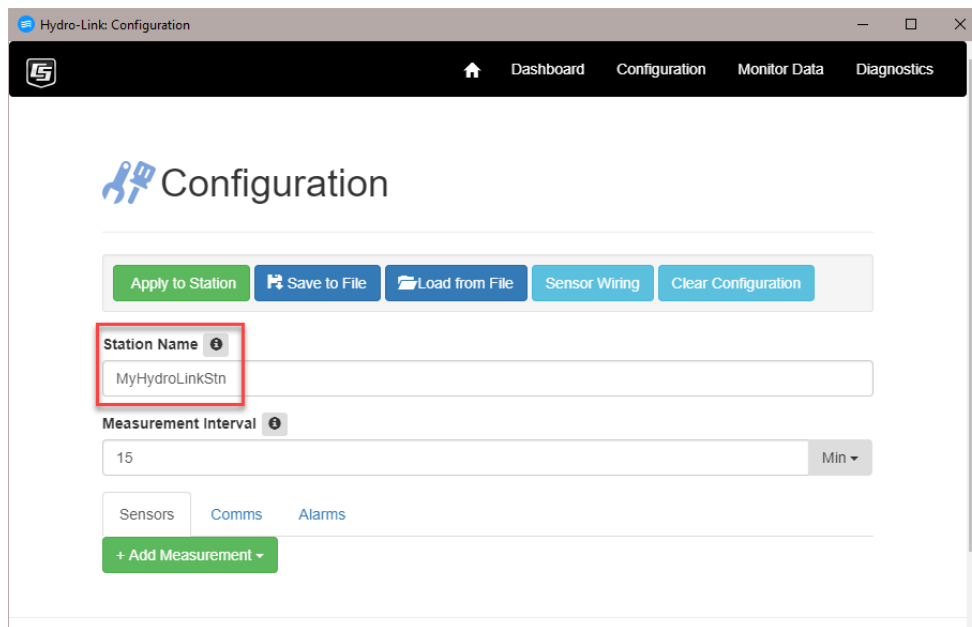
6. Click **Connect**. Once connected, a **Dashboard** screen or the **Configuration** screen is displayed.



6. Update Data Logger

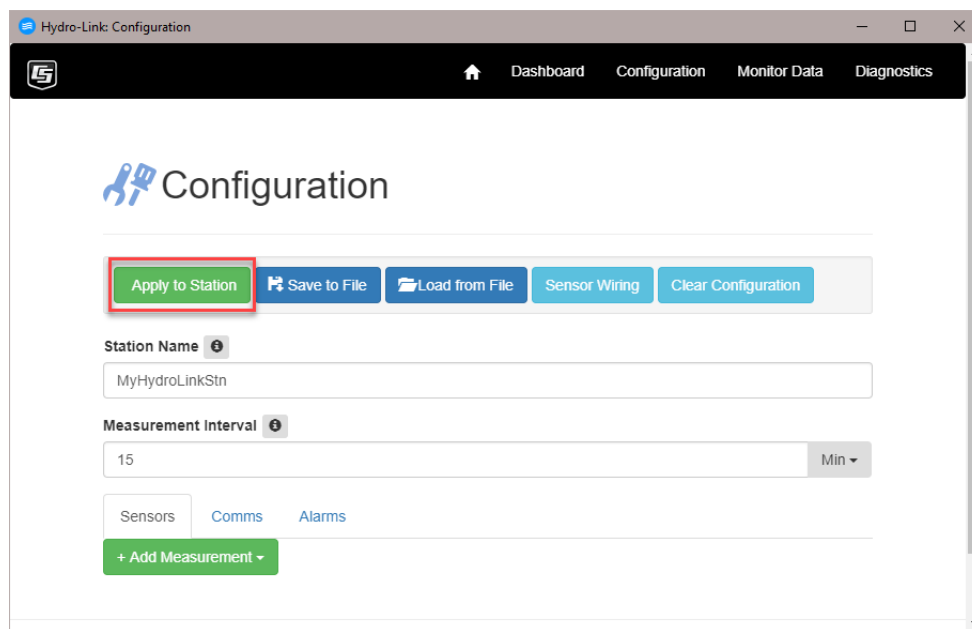
The first time a CR300-series data logger is used with this interface, it must be loaded with support files. The following steps take you through loading the support files without creating a valid configuration. Once the support files are loaded, the same steps can be followed to create and modify real configurations as needed.

1. On the **Configuration** screen, input a **Station Name**.



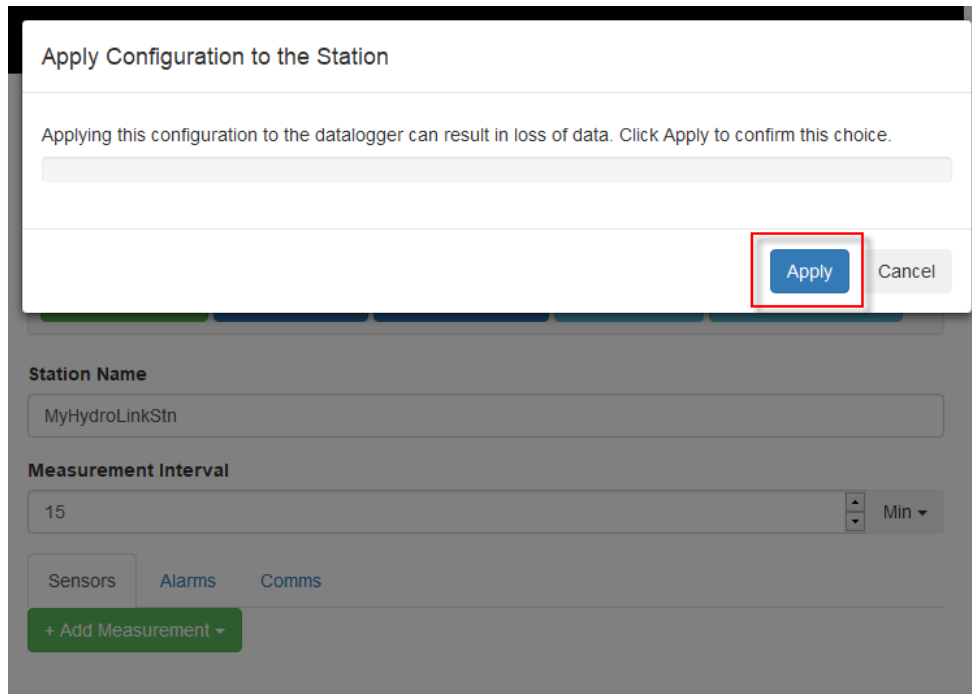
The screenshot shows the 'Hydro-Link: Configuration' window. The navigation bar includes 'Dashboard', 'Configuration', 'Monitor Data', and 'Diagnostics'. The main content area is titled 'Configuration' and features a toolbar with buttons for 'Apply to Station', 'Save to File', 'Load from File', 'Sensor Wiring', and 'Clear Configuration'. Below the toolbar, the 'Station Name' field is highlighted with a red box and contains the text 'MyHydroLinkStn'. The 'Measurement Interval' is set to '15' with a 'Min' dropdown. There are tabs for 'Sensors', 'Comms', and 'Alarms', and a '+ Add Measurement' button.

2. Click **Apply to Station**.

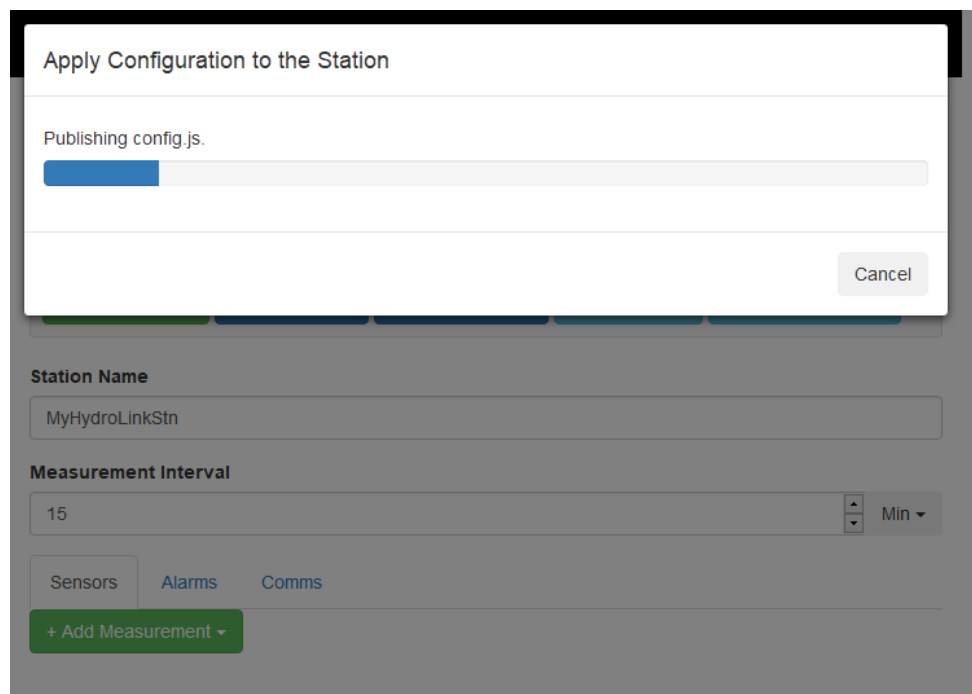


The screenshot shows the same 'Hydro-Link: Configuration' window. In this view, the 'Apply to Station' button in the toolbar is highlighted with a red box. The 'Station Name' field still contains 'MyHydroLinkStn' and the 'Measurement Interval' is '15'. The 'Sensors', 'Comms', and 'Alarms' tabs and the '+ Add Measurement' button are also visible.

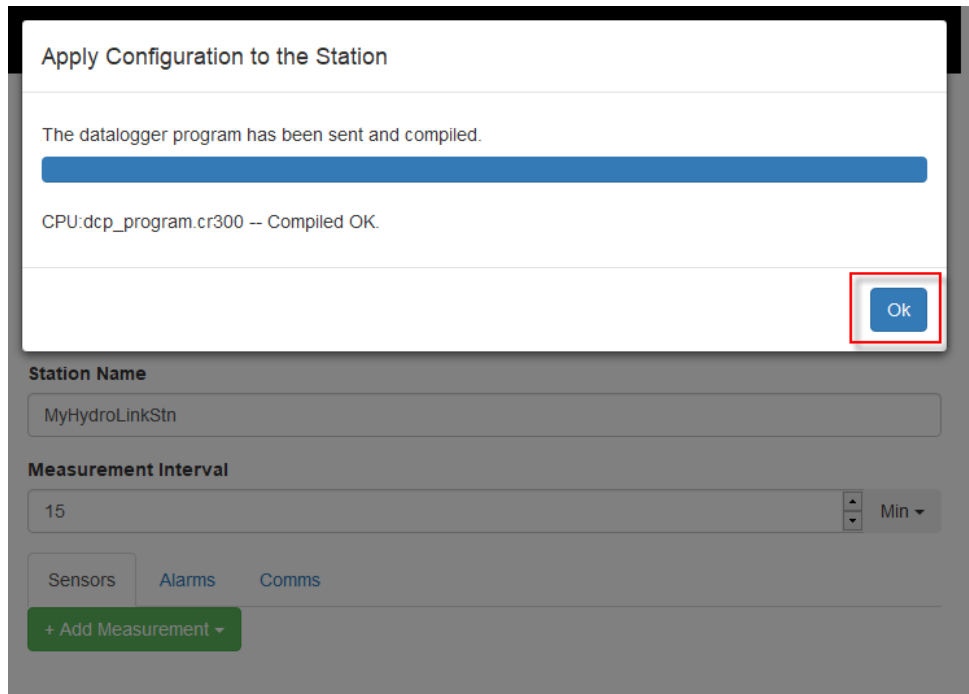
3. In the resulting dialog box, click **Apply** to continue.



4. The files will begin to upload to the data logger. The initial apply to station will take several minutes, because the data logger file system is updating with the complete file list. Subsequent configuration uploads will be much faster, because only a few files will require an update.



5. View compile results and click **OK** to continue.



At this point the CR300-series data logger is set up, and the user can create configurations as needed.

7. Conclusion

Hydro-Link is a set of web pages that can be hosted on the computer or the data logger. The first time a data logger is used with Hydro-Link, it must be done using the computer-hosted web pages. When **Apply to Station** is pressed, a copy of the web pages is transferred from the computer to the data logger. From that point on, the data logger can host the web pages if it has an internet connection such as WiFi, CR310 with an Ethernet connection, or USB-RNDIS virtual Ethernet.

As new versions of Hydro-Link are released, a data logger running an older version can be updated by running the new computer-based version and applying any configuration to the data logger. This will overwrite the older web pages and supporting files to the new version.

CAUTION

Avoid any attempt to downgrade to an older version of Hydro-Link by running an older computer version than what is running in the data logger. This might happen when two technicians are using different computers, one with the new version and one with the older version.



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