

## Data Logging Guide

# About Roastmaster Data Logging

Roastmaster 4.0 now offers a Data Logging option, available as an in app purchase from the probes list in the utilities section. This option will allow Roastmaster to communicate with one or more Phidget Temperature Sensors via a WiFi Ethernet network.

**In order to use data logging, you will need the following:**

## **1. A Phidget Temperature Sensor with attached K Type thermocouple(s)**

Phidget Temperature Sensors are the heart of Data Logging in Roastmaster. They are available in 2 configurations: a 1 Port model, supporting 1 thermocouple, and a 4 Port Model, capable of supporting 4 separate thermocouples.

K Type thermocouples are connected directly to the Temperature Sensor, forming the probe assembly.

## **2. A network host attached to the Phidget Temperature Sensor**

Since iOS devices do not support USB connections, the Temperature Sensor/Probe assembly by itself cannot do anything with the temperature data it measures. It must first be connected to a host via a USB cable, which then broadcasts this information over your network, so your iOS device can access it wirelessly.

A host can be either a Mac or Windows laptop or desktop machine (page 3) running the Phidgets software, or the Phidgets SBC2 with a WiFi adapter (page 4).

**Note: if you are going to use the Phidget SBC2 as your network host, you will need a Mac or Windows desktop machine or laptop to configure the SBC2 before you use it for the first time. The configuration process is short and takes only a few minutes to complete. All settings are made in the Phidgets Control Panel (Windows) or Preference Pane (Mac). The setup process is simple, user-friendly and will only need to be completed once. After this, the SBC2 will be entirely self-sufficient.**

## **3. A WiFi (wireless) Ethernet router**

All iOS devices are wireless. The router facilitates the communication between your iOS device(s) and the Phidget Temperature Sensor/Host assembly.

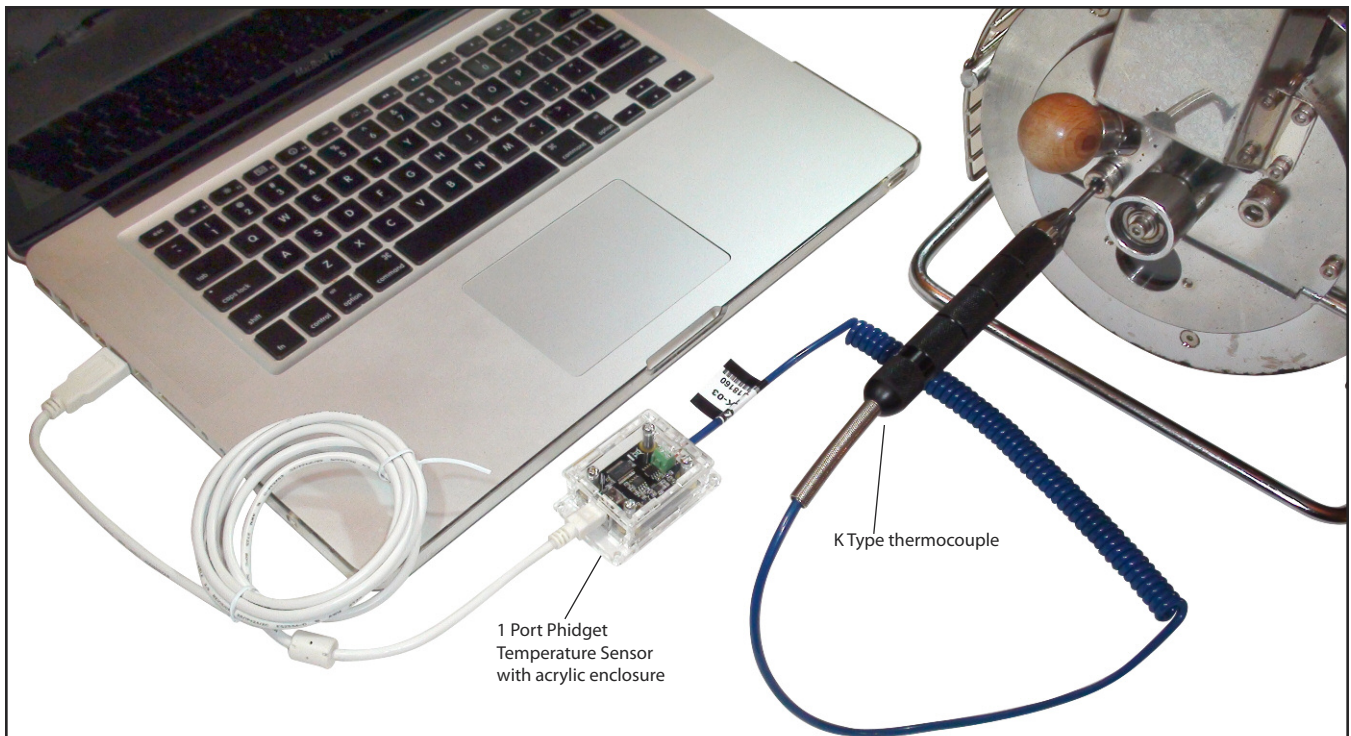
## **4. The Roastmaster Data Logging option**

The Data Logging option unlocks all Data Logging features in Roastmaster, and allows you to define probes to use with curves during your roasts.

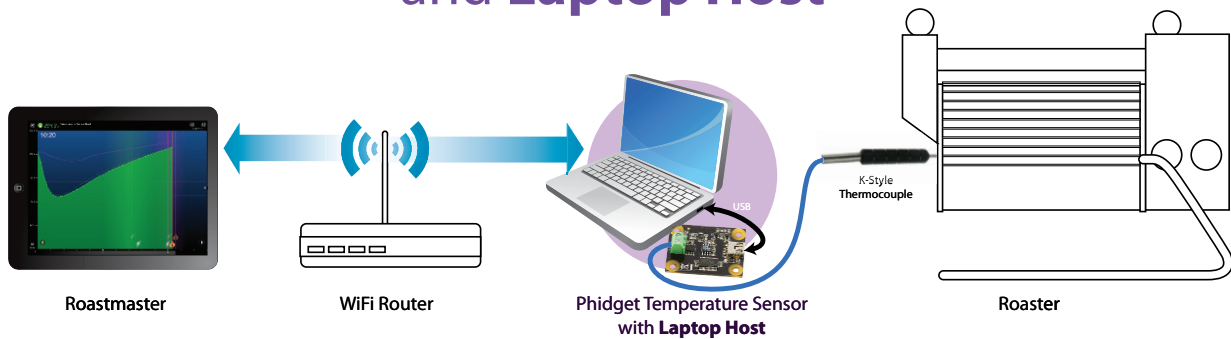
Once you've defined your probes, you need only to create one or more reading curves in a new roast (1 for each probe you want to use). In the curve details screen, choose the probe you want to use for that curve. Once you've chosen a probe, Roastmaster will link to that probe and begin reporting temperatures in the Roast Console and Full Screen Graph. When you start the roast, Roastmaster will begin sampling temperatures at definable intervals throughout the roast, creating nodes in the curve automatically as the roast progresses.

If you use probes often, consider using the "Curve Templates" feature available in Profiles and Programs. Curve Templates allow you to create blank, placeholder curves in a Profile or Program. Then, whenever you tag that Profile or Program in a roast, Roastmaster will automatically create new, identical curves in the roast for the purpose of recording new data. If you've set the probe binding of the Curve Templates, the newly-spawned curves will automatically link to its bound probe, and begin reporting data. Curve Templates eliminate the need for time-consuming roast configuration, making the setup process a one-tap affair.

**If you have any questions regarding Roastmaster, the Data Logging option or supported hardware, please email [support@rainfroginc.com](mailto:support@rainfroginc.com)**



## Roastmaster Data Logging With **Phidget Temperature Sensor** and **Laptop Host**



You can use a Mac or Windows laptop (or desktop) to host a Phidget Temperature Sensor for Roastmaster's Data Logging option.

This potentially offers a lower-cost solution, but does not provide the portability and level of ease that an SBC2 host offers.

### Parts List

#### Network Host:

Existing Mac or Windows Laptop or Desktop

#### Temperature Sensor:

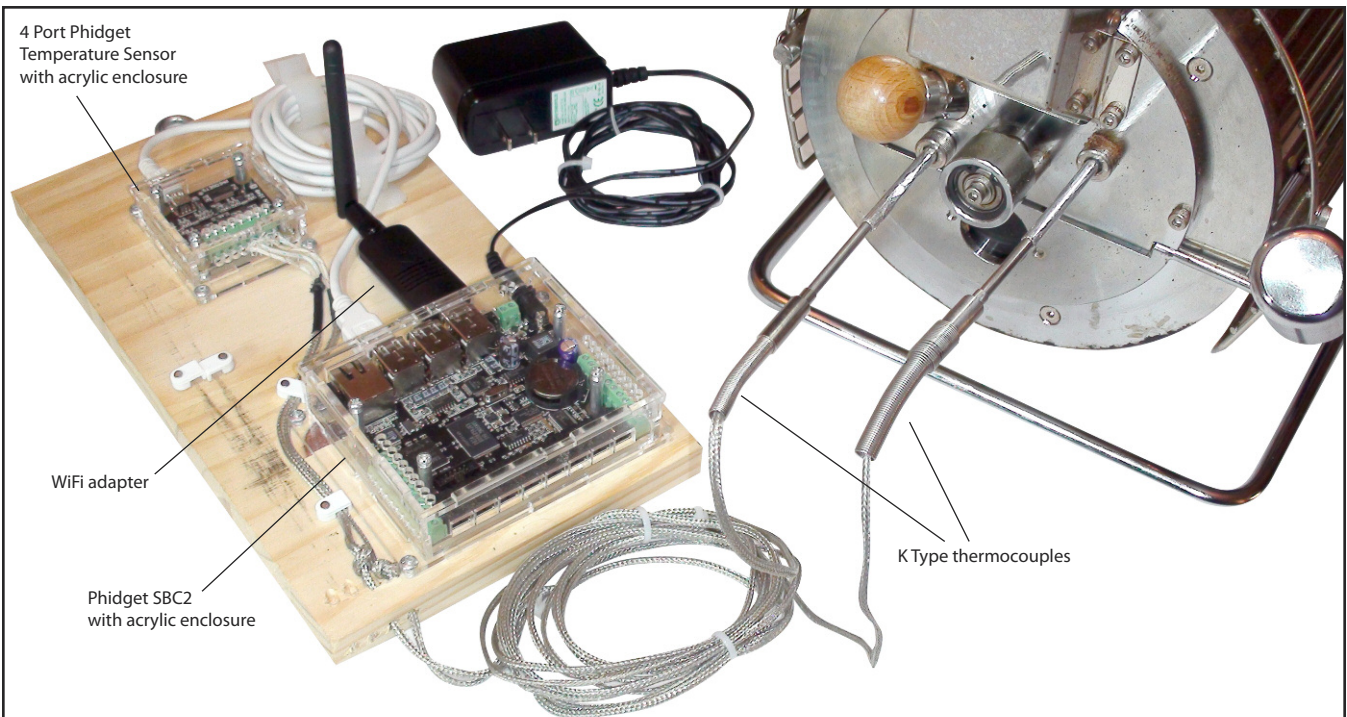
[1 Port Temperature Sensor](#) & [Acrylic Enclosure](#)

OR

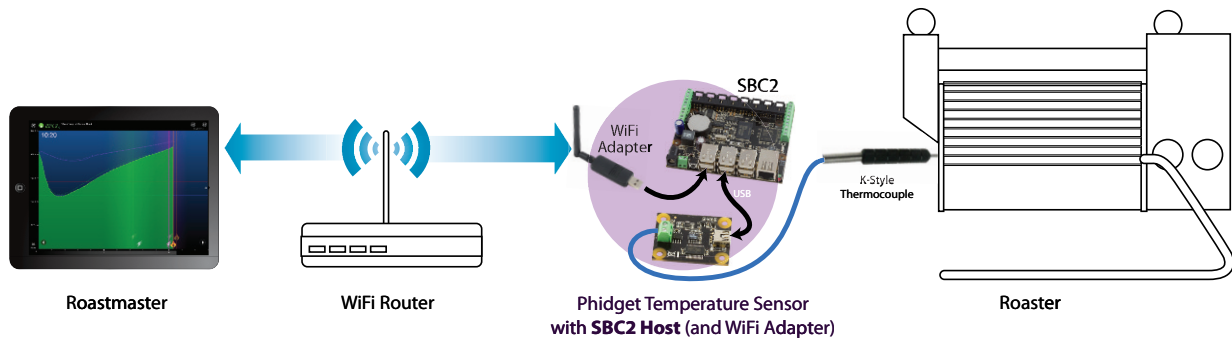
[4 Port Temperature Sensor](#) & [Acrylic Enclosure](#)

#### Thermocouple:

[K Type Thermocouple](#)



## Roastmaster Data Logging With **Phidget Temperature Sensor** and **Phidget SBC2 Host**



You can use the Phidget SBC2 as the host for Roastmaster's Data Logging option.

This setup provides the utmost in portability and ease of use. Once registered on your WiFi network, the SBC2 will automatically join whenever you plug it into an outlet.

This setup requires a bit of assembly, but offers a cost-effective and extremely scalable solution.

### Parts List

#### Network Host:

[Phidget SBC2](#), [Acrylic Enclosure](#) & [WiFi Adapter](#)

#### Temperature Sensor:

[1 Port Temperature Sensor](#) & [Acrylic Enclosure](#)

OR

[4 Port Temperature Sensor](#) & [Acrylic Enclosure](#)

#### Thermocouple:

[K Type Thermocouple](#)