

mini-GUIDE

USING PASCO WEATHER SENSOR WITH SPARKvue SOFTWARE TO PLOT TWO RELATED MEASURES (e.g. TEMPERATURE AND RELATIVE HUMIDITY) AND SHOW THEM ON THE SAME GRAPH, AGAINST TIME

STEP 1:

Connect to Pasco Weather Sensor:

See Mini-Guide called “Set Up the Pasco Weather Sensor” to show you how to connect SPARKvue software to the Pasco Weather Sensor by Bluetooth. Click ‘Build New Experiment’ as instructed.

STEP 2:

From another mini-guide, we saw how to take two measurements (for example, temperature and relative humidity) and then to display each of them on a separate graph, side by side, against time.

To do this, we chose a 2-window display, then we chose line graph for each window. The x-axis for each defaults to **time**. We chose ‘**temperature**’ for the y-axis on the first graph, and ‘**relative humidity**’ for the y-axis on the second graph.

When you clicked ‘Start’ you would have seen something like this:



STEP 3:

What we wish to do now is to display the same information, but all contained in a single line graph. To do this, start a new experiment and select the **single window** display type.¹

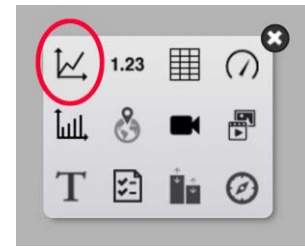


¹ All content comes from <https://www.pasco.com/products/sensors/environmental/ps-3209>
<https://www.pasco.com/products/software/sparkvue>

mini-GUIDE

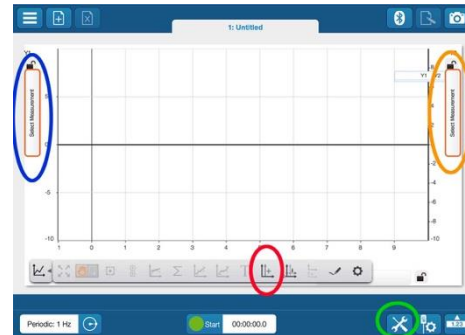
STEP 4:

Select the **line graph** to display your data



STEP 5:

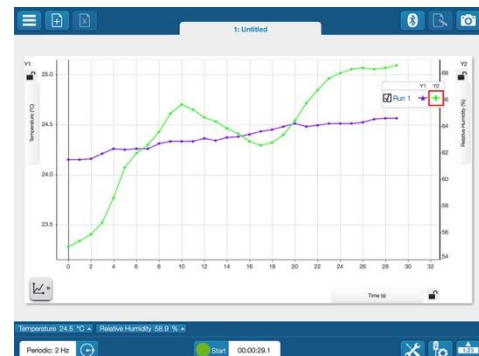
Click the **'Add Y-Axis'** button in the tool bar – a second y-axis is added. Select **'temperature'** for one y-axis and **'relative humidity'** for the other. Use the **'tools'** button to select the scale for each measure.



STEP 6:

Click **'Start'** to begin recording data. The same button becomes the **Stop** button to let you stop data collecting.

Each of the two measures will be recorded on the graph in a different line colour. In this case, Y1 (temperature) is shown in **purple**, while Y2 (relative humidity) is shown in **green**.



EXTRA STEP 7:

Look for the Σ symbol (Sigma) on the graph tool bar. If you click it you can choose, for each of the 2 y-axes, any statistical measures you would like to display for each data stream. Here, Minimum, Maximum and Mean have been chosen for each line.

