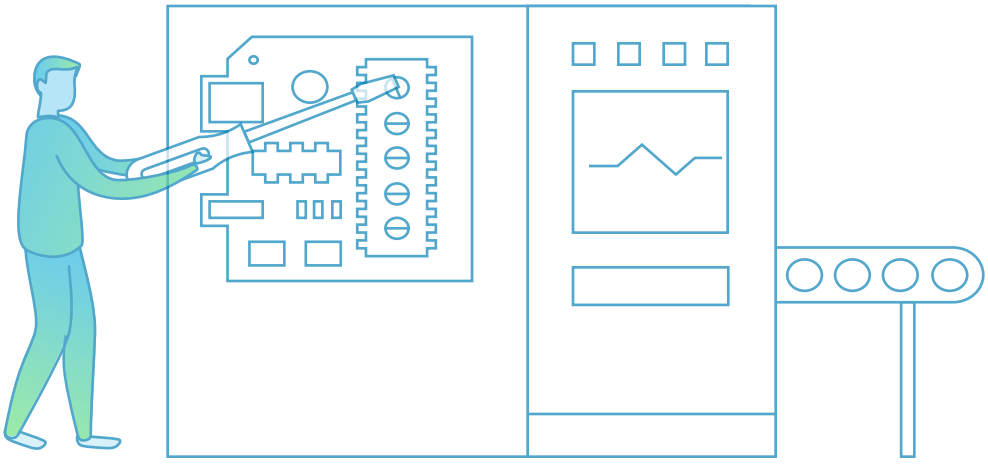
KOSMOS

Creating Modbus Tables

What will this guide teach me?

5 minutes

This guide contains step-by-step instructions on how to set up Modbus TCP tables in Kosmos so that you can connect PLCs to the Kosmos platform.

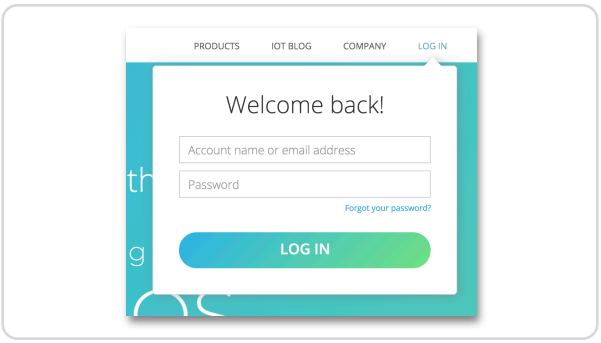


Create Modbus Tables in Kosmos

1 Log In To Kosmos

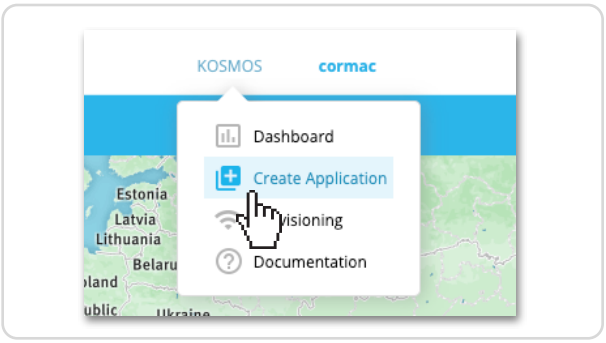
Log into your Kosmos account (or create one if you haven't already).

https://temboo.com



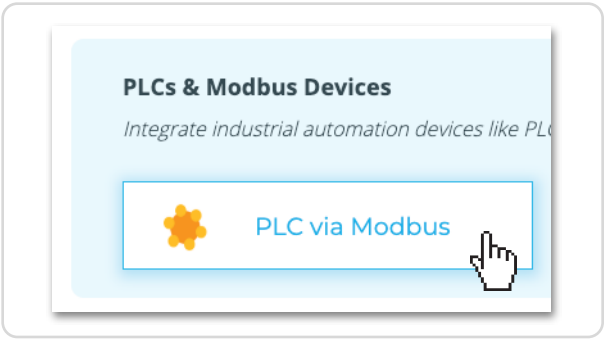
2 Create New Application

Navigate to the Kosmos application creation flow, where you'll build a new Modbus-based Kosmos application.



3 Choose PLC Device

Choose to build a Modbus-based application and select the version of Modbus that your PLC supports.



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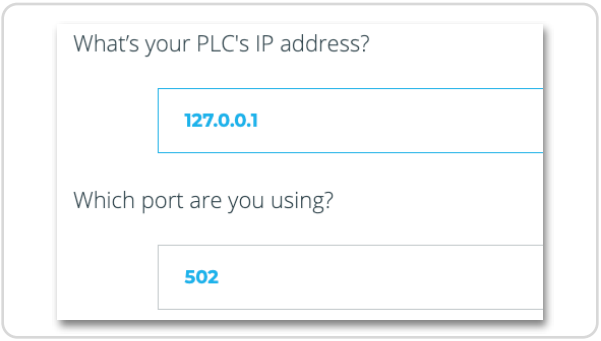
4

Enter PLC Details

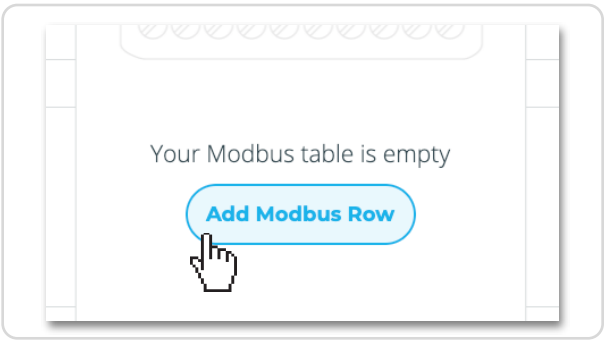
Enter a name for your PLC, along with its IP address and Modbus server port.



5

Add Modbus Row

Below the PLC details you'll find an empty Modbus table area. Click to start adding new rows.



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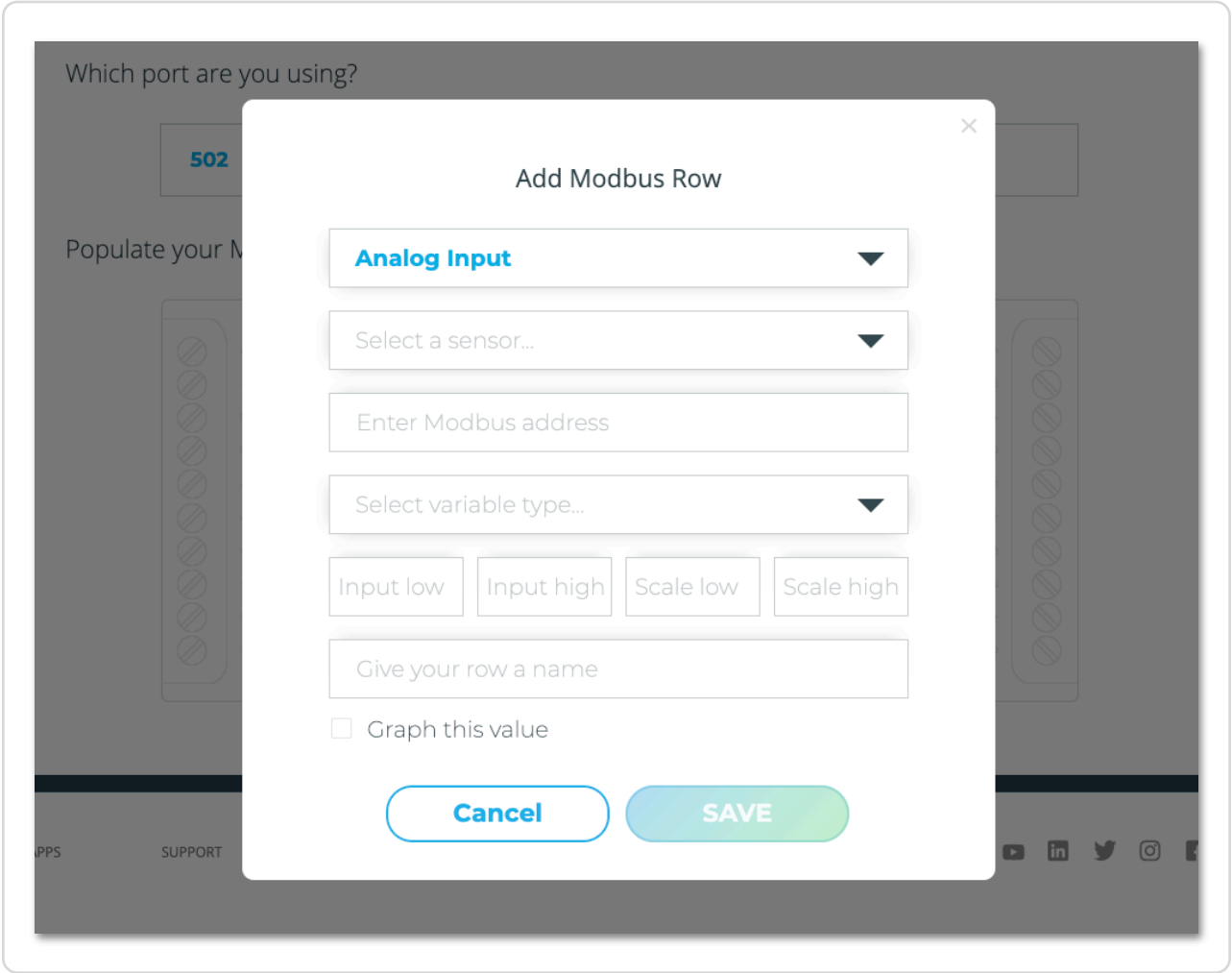
6 Populate Modbus Data

Fill out the Modbus row form shown below for each Modbus table entry that your application requires. Modbus mapping information is typically found in your PLC's datasheet or in a separate mapping table created while your PLC was being programmed.

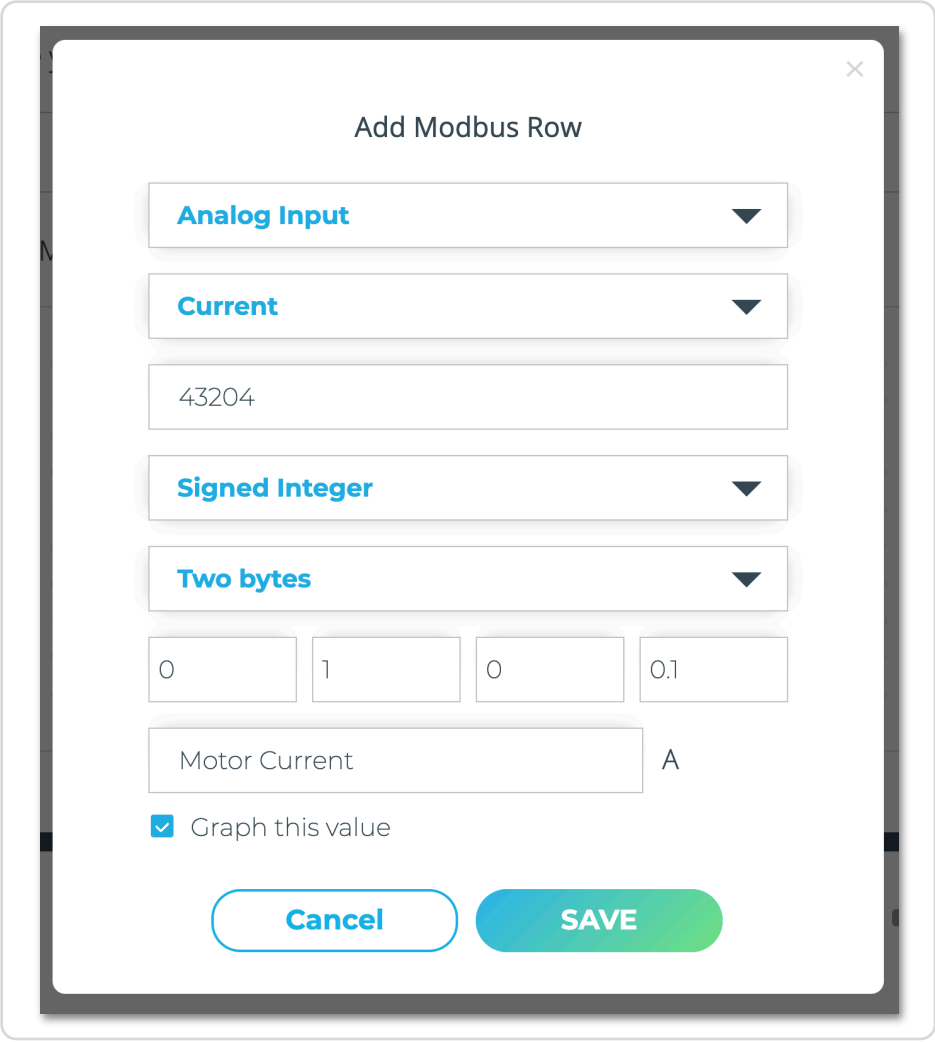


Example: ATV312 Motor Current

This example shows how to populate a Modbus row to vizualize the motor current value from a Schneider Electric ATV312 PLC.

Per the datasheet, motor current is an analog input at address 43204. Since the current unit is 0.1 A, we use a two byte signed integer to represent the transducer value. The input low and scale low are set to 0, with pin high set to 1 and scale high set to 0.1 (indicating that the transducer has no offset or calibrated range).

Finally, we check the box at the bottom of the form to indicate that we want motor current to be graphed on the Kosmos dashboard.



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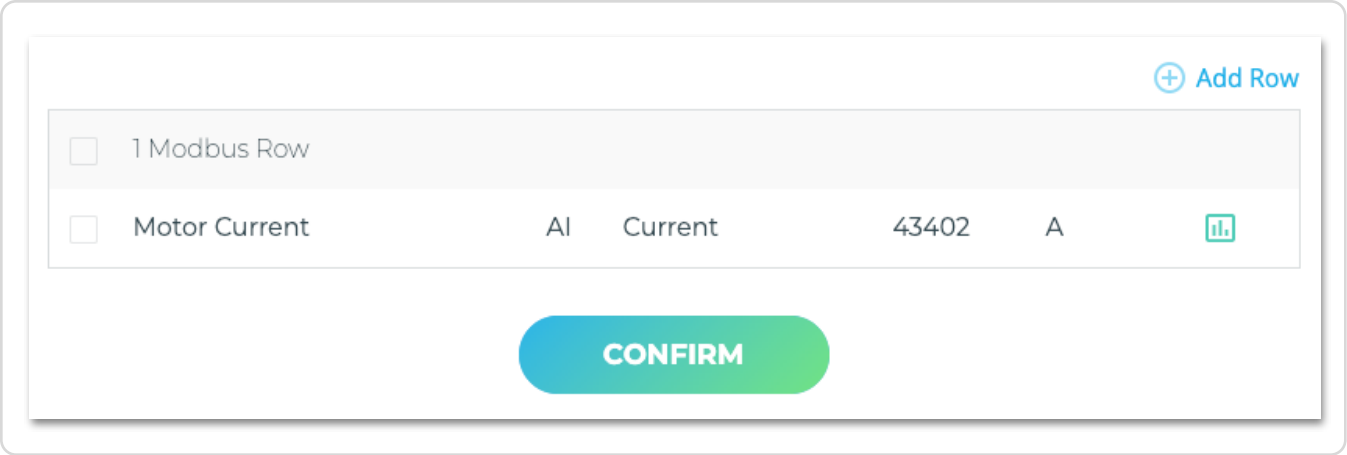
7 Review Modbus Table

Once you've saved your first Modbus row, a Modbus table will appear. At this point you can add more rows, edit existing rows, or delete rows.



8 Complete your PLC Application

With your Modbus table populated, you can complete the creation of your Kosmos application, download the associated files, and move on to setting up your Kosmos gateway hardware.

You can find hardware setup guides for PLCs and other Modbus devices on our website.

Kosmos Hardware Setup Guides

Questions?

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