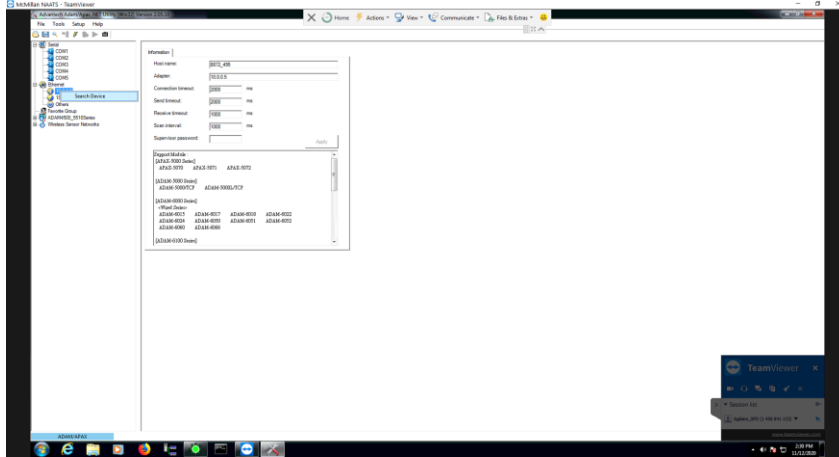
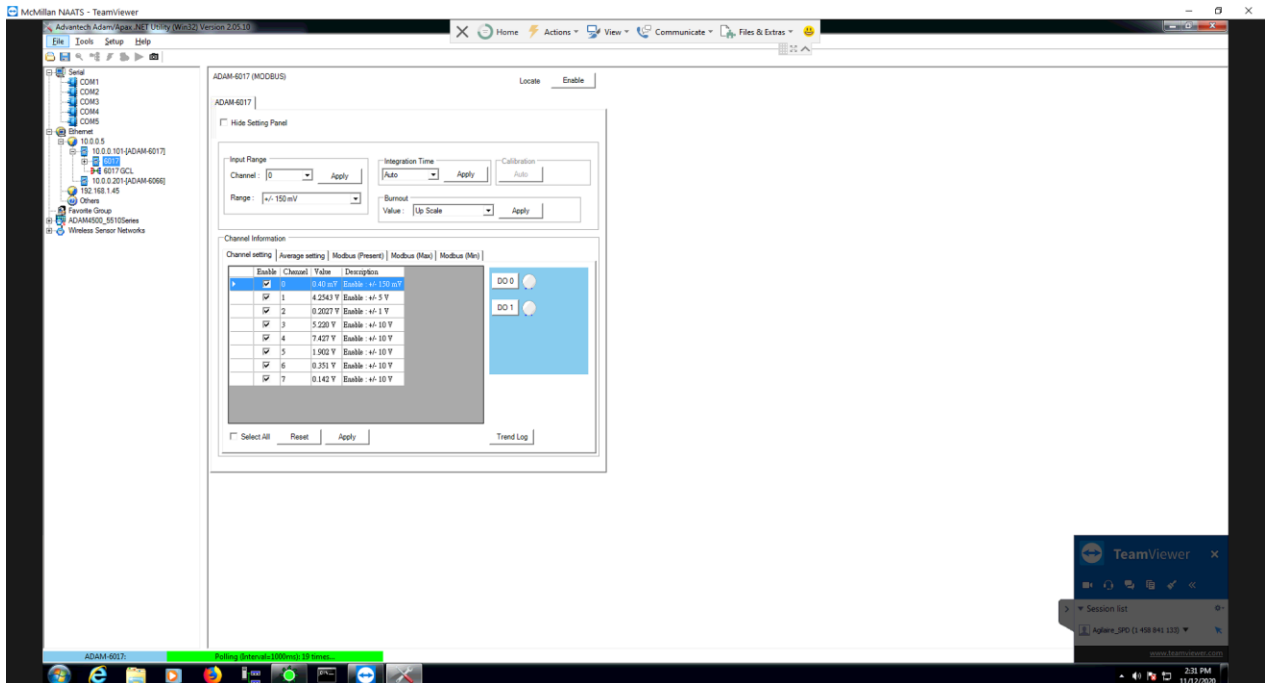


8872 Analog Troubleshooting:

Using Windows Start menu, open the “AdamApax Utility”. When it opens, right click on the “10.0.0.5” network and select “Search Device” to pull up a list of your I/O modules.



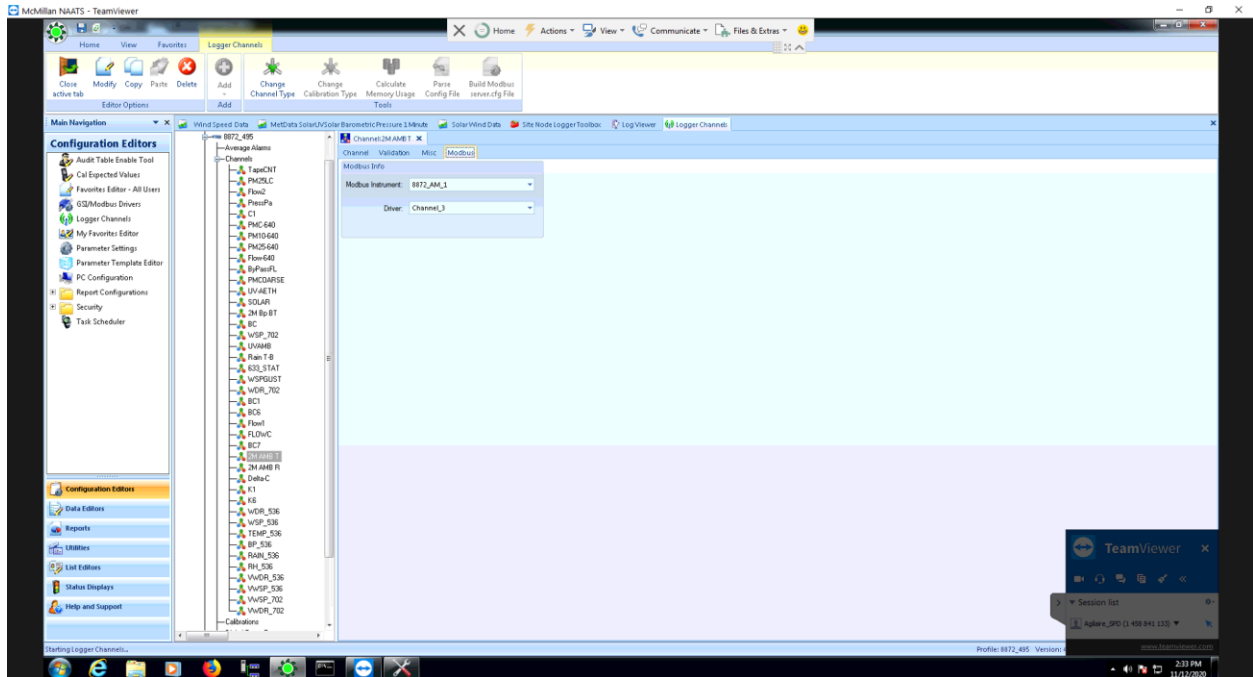
Click to expand the I/O module (101 for the first 8 inputs, 102 for inputs 9-16, etc), and click on the next level down. When asked for a password, put in “00000000” (eight zeros).



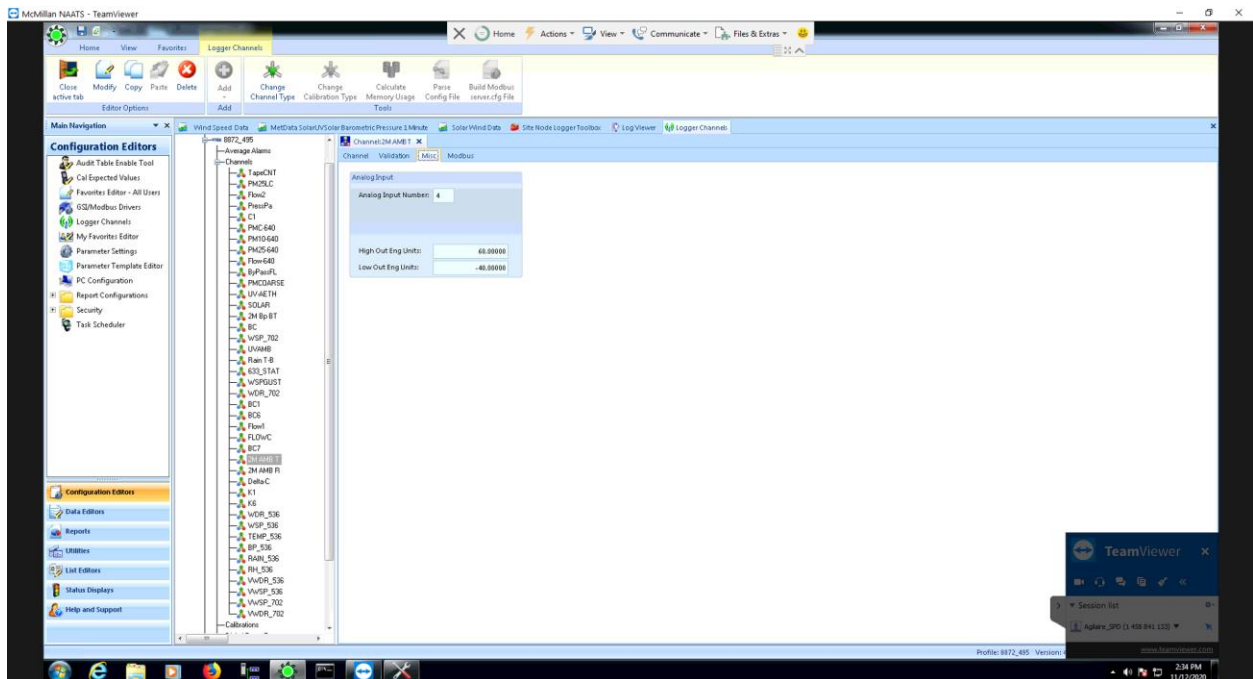
Look at the input and verify the voltage is what you expect from the instrument. Note that “Channel 0” is Analog Input 01 on the logger, Channel1 is Analog Input 02, and so on.

Also check the voltage scale, in this case, note that channel 3 (Input 04) is a 10V scale with a value of 5.22 volts.

If the voltage is what you expect, open Configuration->Data Source Details. Open the channel in question, and select the “Modbus” tab. Make sure the correct module and “Channel” on the module is selected. In this case, Module 1 and “Channel3” on the module is Analog Input 04.



Then select the “Misc” tab and make sure your scaling is set correctly:



Perform a hand calculation based on the voltage from the Adam APAX utility screen:

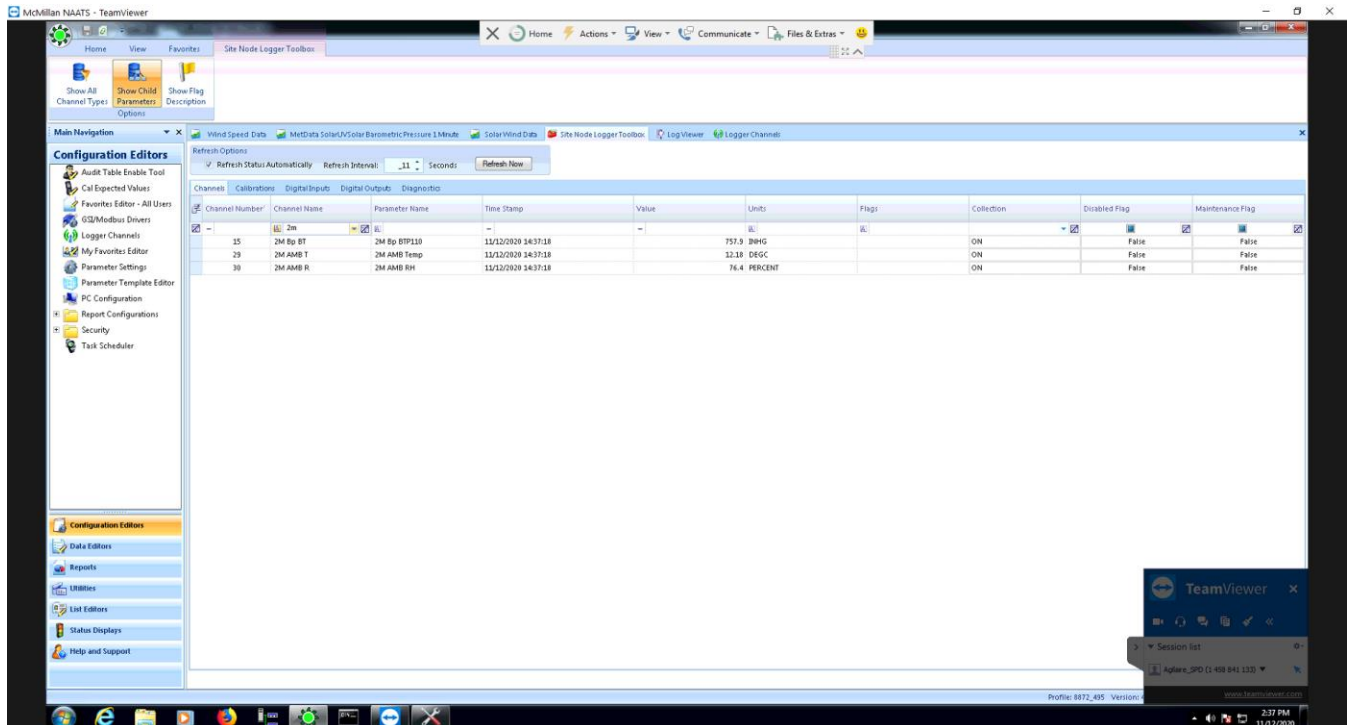
$$\text{Reading} = \text{Low Output} + (\text{High Output} - \text{Low Output}) * (\text{Voltage} / \text{Voltage Full Scale})$$

In our example:

$$(-40) + (60 - (-40)) * (5.22\text{V} / 10\text{V})$$

$$\text{Or } (-40) + (100 * 0.522) = 12.2$$

Which is pretty much what we are reading:



In short, the only things that can go wrong are:

- Voltage from instrument not what you expect
 - Instrument bad
 - Misunderstanding of the instrument output
 - Bad I/O module (test by moving to spare analog input)
- Incorrect connection on back of logger (wrong analog input)
- Wrong voltage scale in APAX utility (*newer version of AV-Trend take care of this automatically*)
- Bad setting on “Modbus” tab (wrong ‘channel’, again, *newer versions of AV-Trend take care of this automatically if you set “Analog Input” number on “Misc” tab to match back panel*)
- Incorrect scaling factors not matching instrument settings.