ExtraNET CC Avalanche Version 2
Product Announcement

Crystalline Technology has been working to continuously improve the ExtraNET CC Avalanche device. We are happy to announce that our Version 2 Avalanche is ready! It offers as much as a 50% power savings over the previous device, a wider operating voltage, and many other features. See the attached brochure for details.

Version 2 features include:

- Improved, Qualcomm modem, smaller, faster and lower power
- Improved sleep mode for reduced power
- 6 VDC to 30 VDC operating range
- Reverse voltage protection
- Improved transient suppression
- More efficient data delivery

Typical Power requirements when used with a FloBoss 107
(with power savings features of FloBoss utilized)

	Avalanche Version 2					Avalanche Version 1			
	Seconds	**Current**	**mA / Day**			**Seconds**	**Current**	**mA / Day**	
Seconds/Day	86400								
Wake	7200	0.08	6.67	mA	Wake	7200	0.2	16.67	mA
Xmit	60	0.5	0.35	mA	Xmit	60	1	0.69	mA
Sleep	79140	0.002	1.83	mA	Sleep	79140	0.02	18.32	mA
Avalanche Daily Requirement			**8.85**	**mA**				**35.68**	**mA**
FloBoss	86400	0.025	25.00	mA	FloBoss	86400	0.037	37.00	mA
SunSaver	86400	0.01	10.00	mA	SunSaver	86400	0.01	10.00	mA
Total Daily Requirement Ver 2			**43.85**	**mA**	**Total Daily Requirement Ver 1**			**82.68**	**mA**

To enable the low power features of the FloBoss 107 we have prepared the following notes. Enabling the features in this document will save an average of about 12mA of current at 13 volts, while still meeting API 21.1 standards for gas measurement.

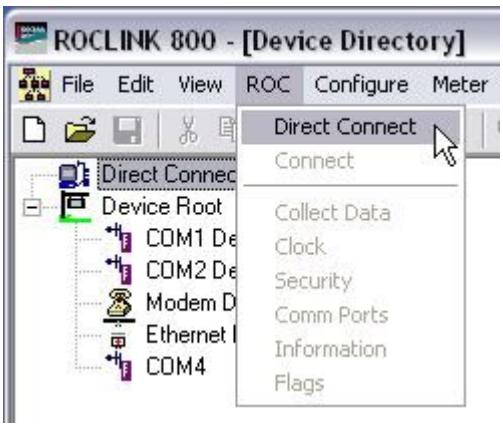
This guide will show you how to:

- Slow the scan rate (how often the meter reads it's sensors)
- Sleep the CPU between scans (this depends heavily on the scan rate)
- Set the loop output voltage for 4-20 devices
- Turn off the display when not in use (requires an extra touch to wake up the display before you can log in)

You must have a computer running the ROCLINK 800 software, and the communications cable to connect to the meter.

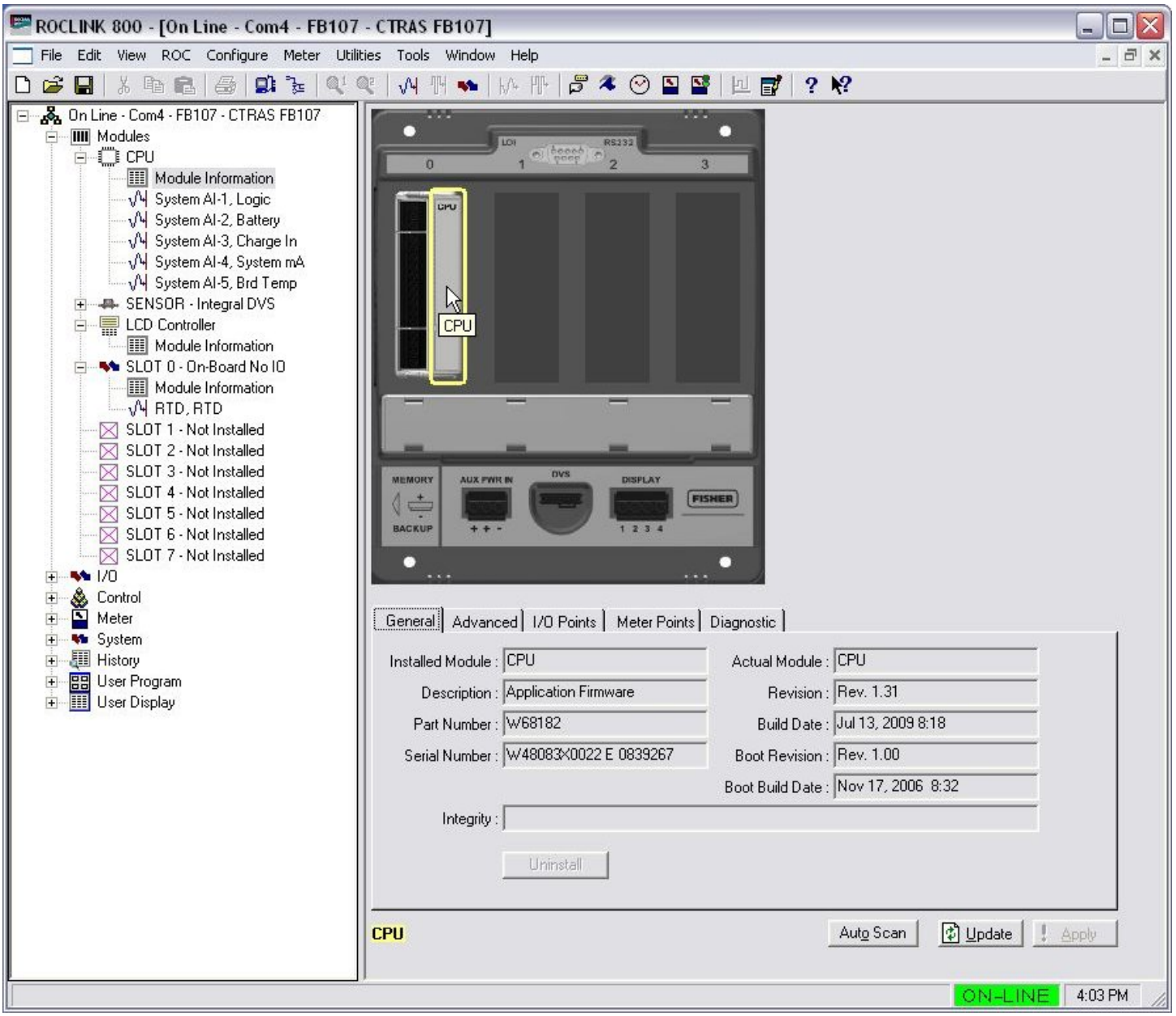
- **Step 1. Connect to the meter**

Open ROCLINK 800, login, then point to "ROC" and click "Direct Connect"



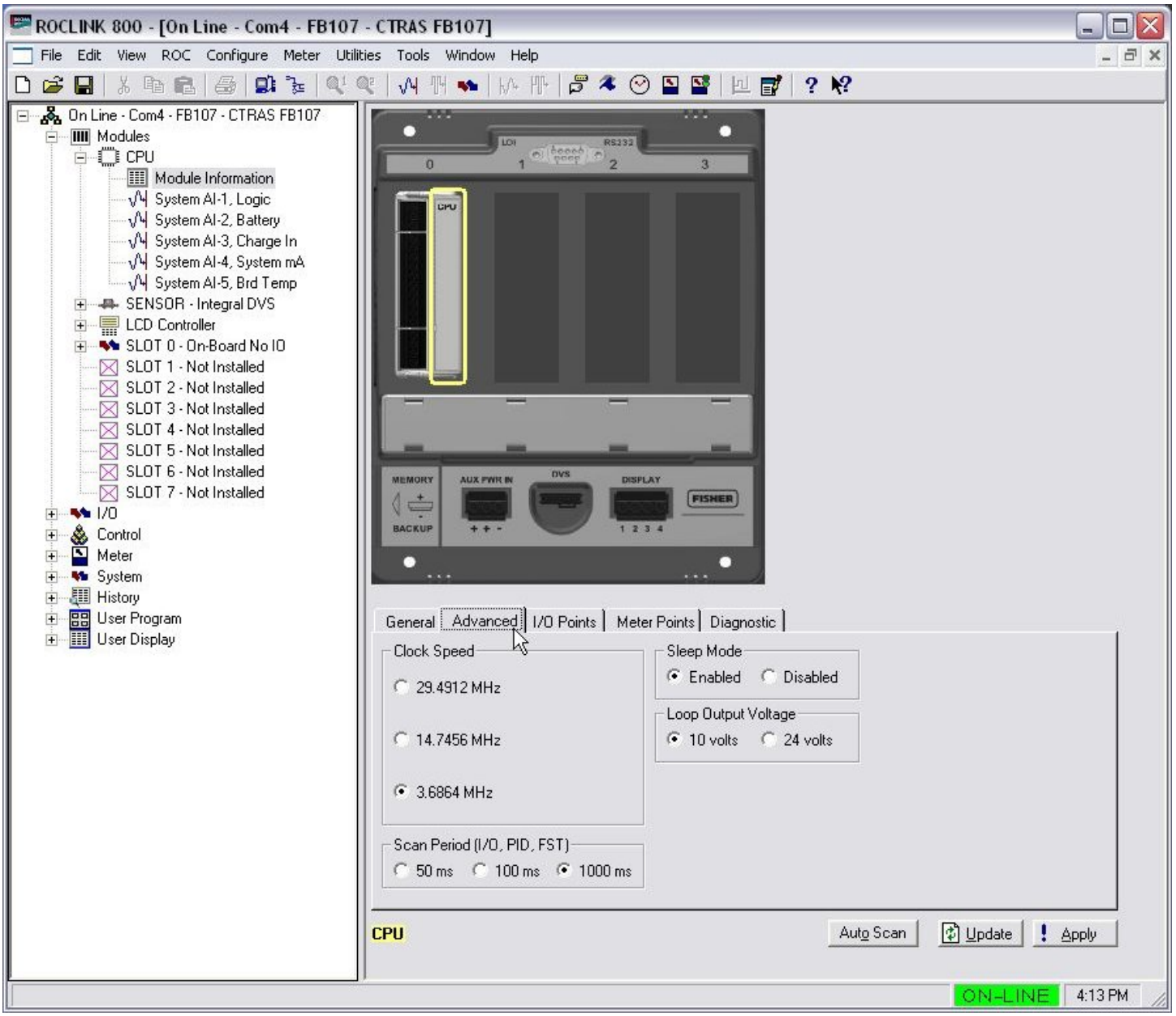
- **Step 2. Open the CPU Properties**

Click on the CPU card shown in the main display area of Roclink. This will open the General Properties, showing software version, build date etc.



- **Step 3. Open Advanced CPU Properties and set options.**

Click the tab labeled "Advanced" and set the options as shown below for maximum power savings. Click "Apply" when you are done.



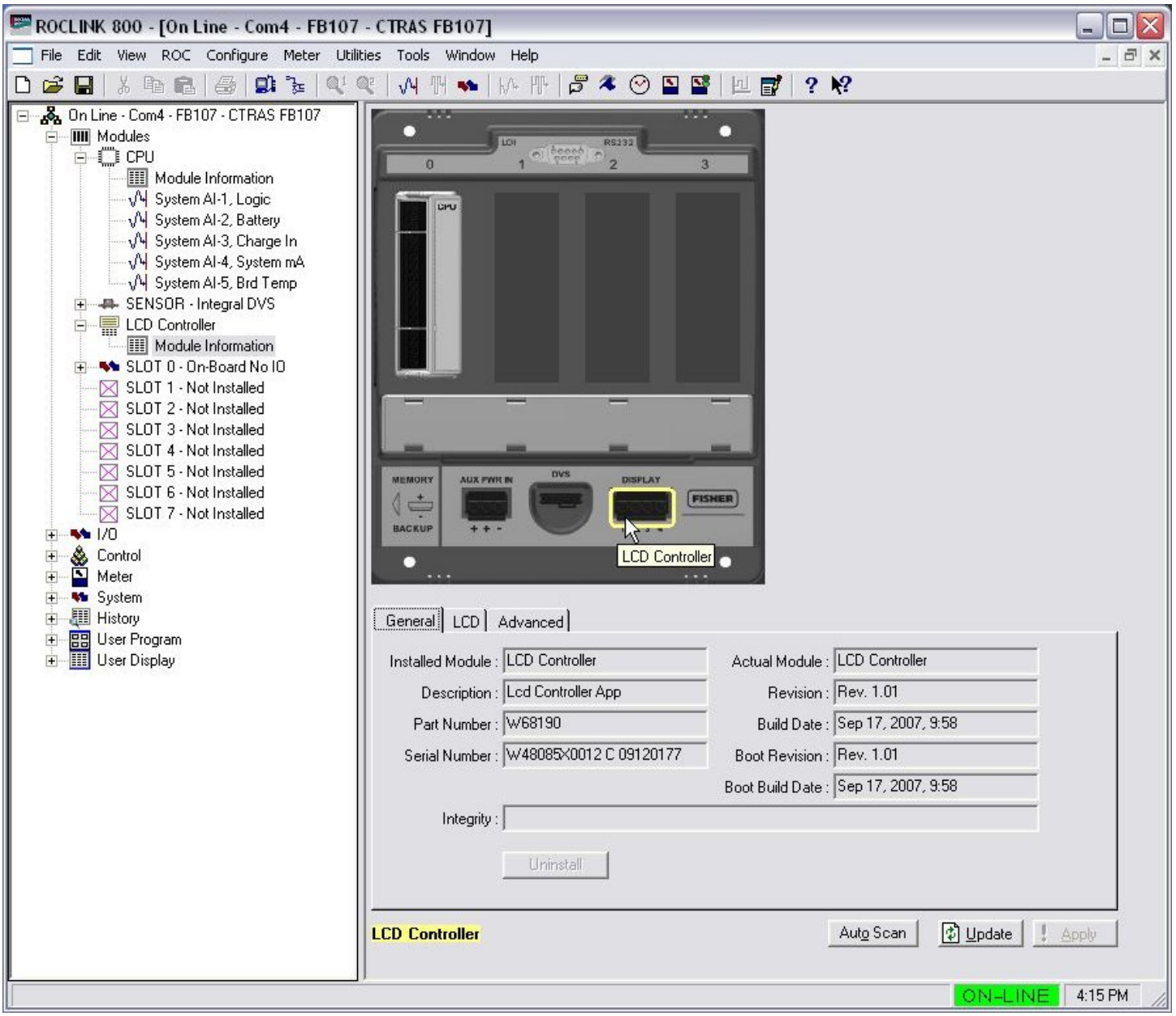
Remember to click "Apply" when you are done.

NOTE: If you are using any 4-20 devices, check the manual for your sensors to be sure they will work with 10 volts before you change the loop output voltage. An incorrect loop output voltage could cause some sensors to work incorrectly.

The power light on the CPU card should now be blinking about every other second. This indicates that the meter is scanning, and then sleeping.

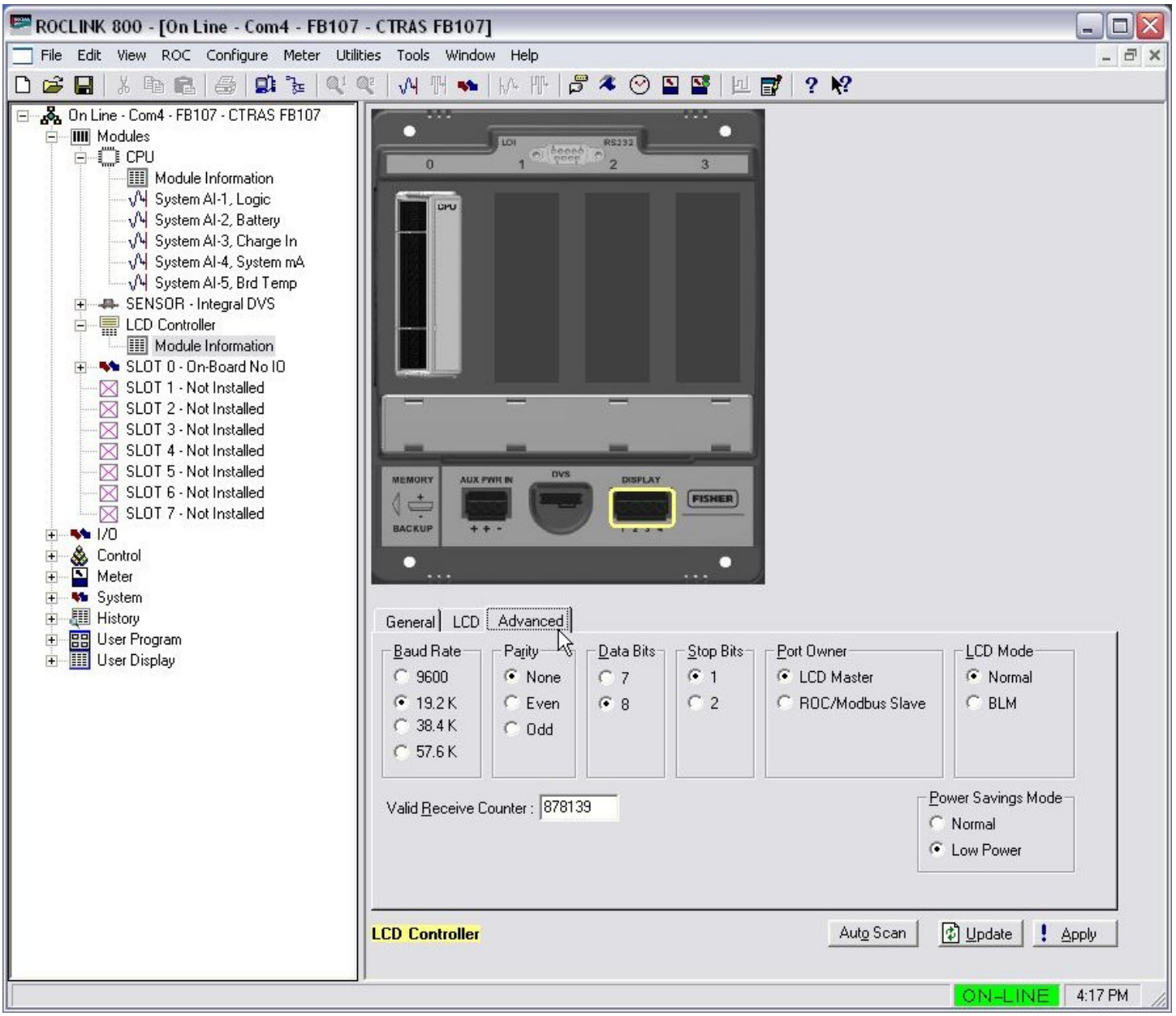
- **Step 4. Open the Display Properties**

Click on the display port to open its properties screen. You'll see the display controller's firmware version, build date, serial number, etc.



- **Step 5. Open the display controllers Advanced properties**

Click on the tab labeled “Advanced” and set “Power Savings Mode” to “Low Power” as shown below. Click “Apply” when you are done.



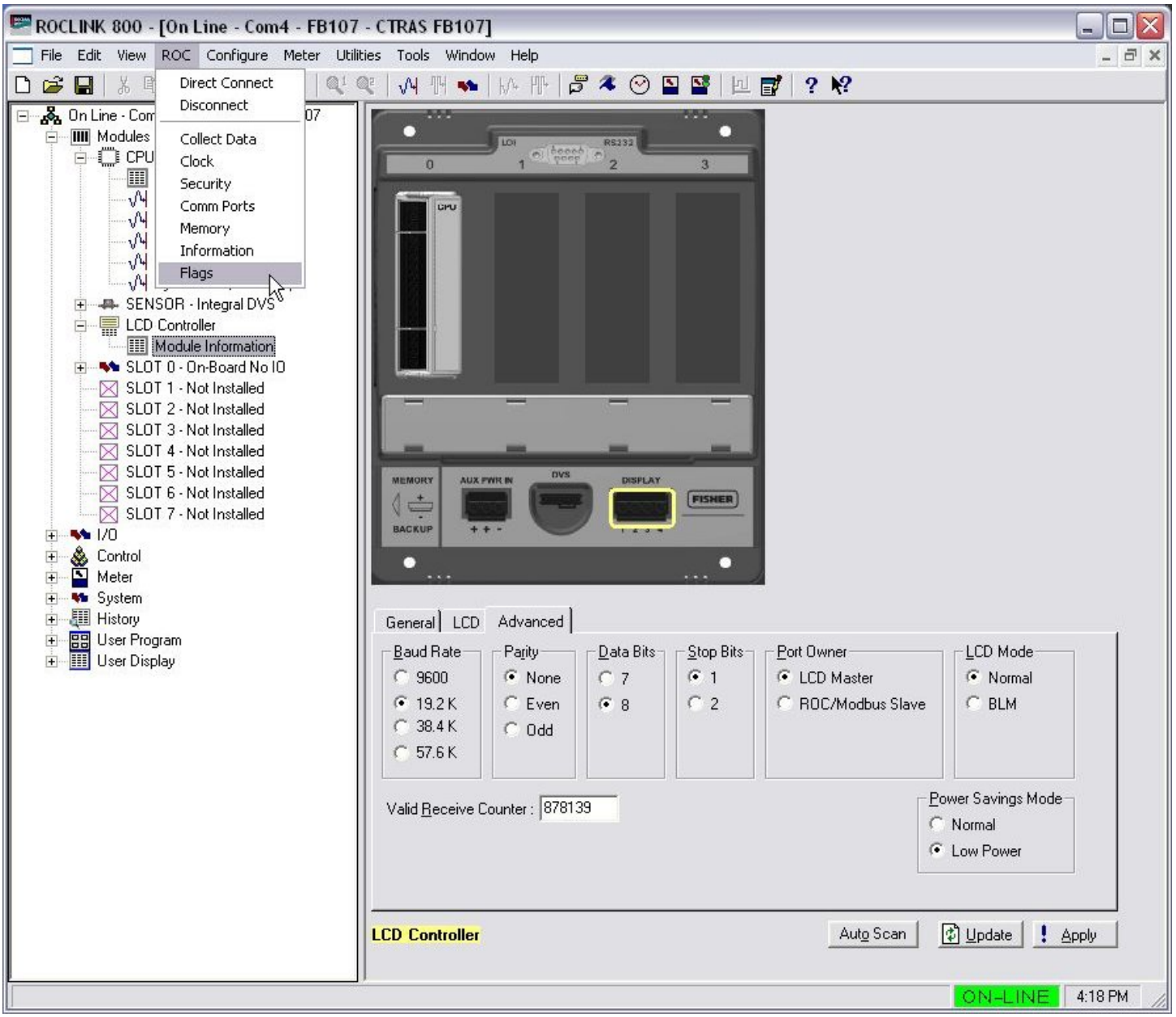
Click “Apply” when you are done.

The display should now be blank and will stay off until it is touched. A second touch will be required to get to the login screen.

- **Step 6. Save your changes to the flash memory.**

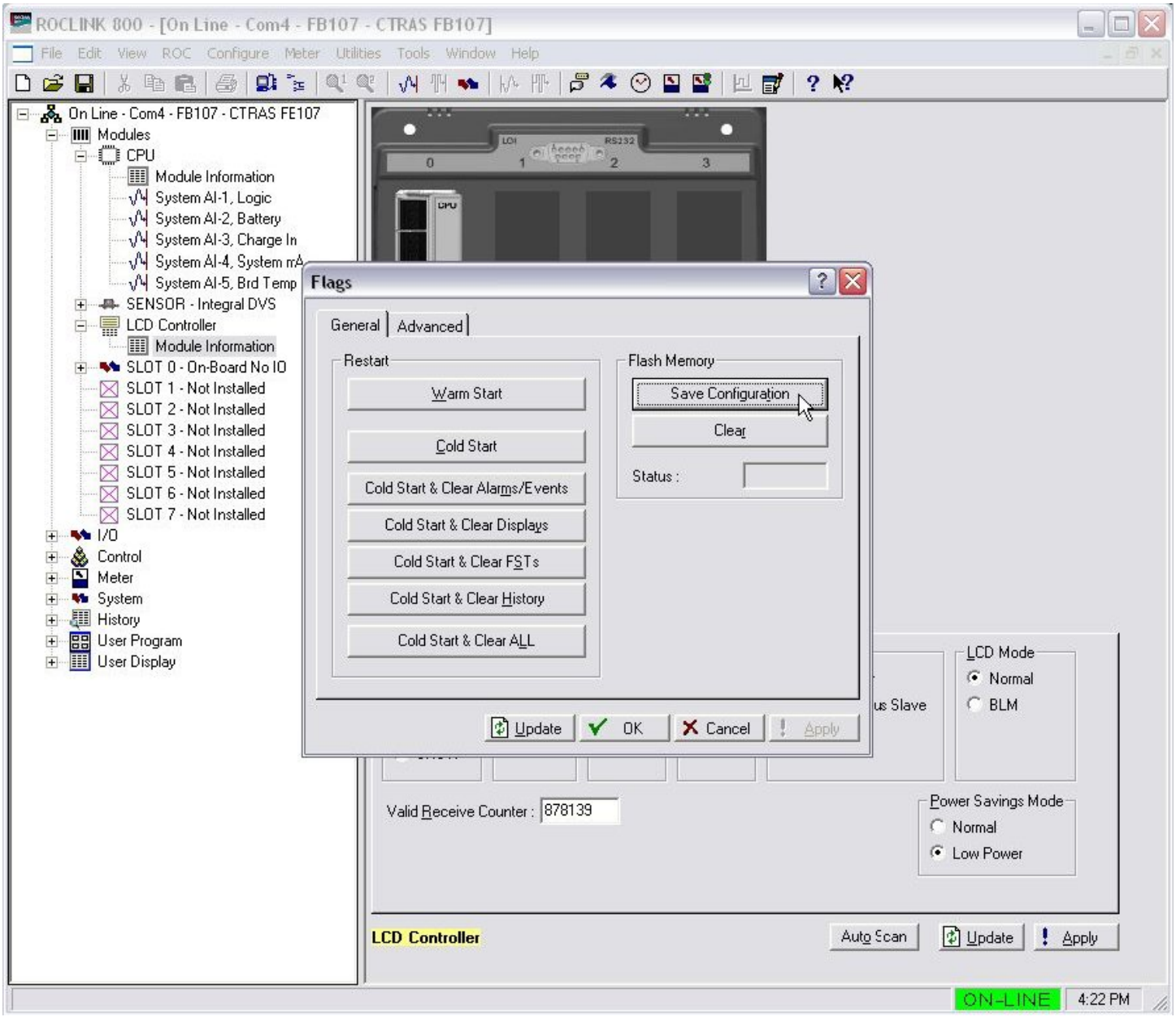
Saving your changes to flash ensures that the meter will load your new settings from memory if the power is lost.

Open the “ROC” menu and click “Flags”



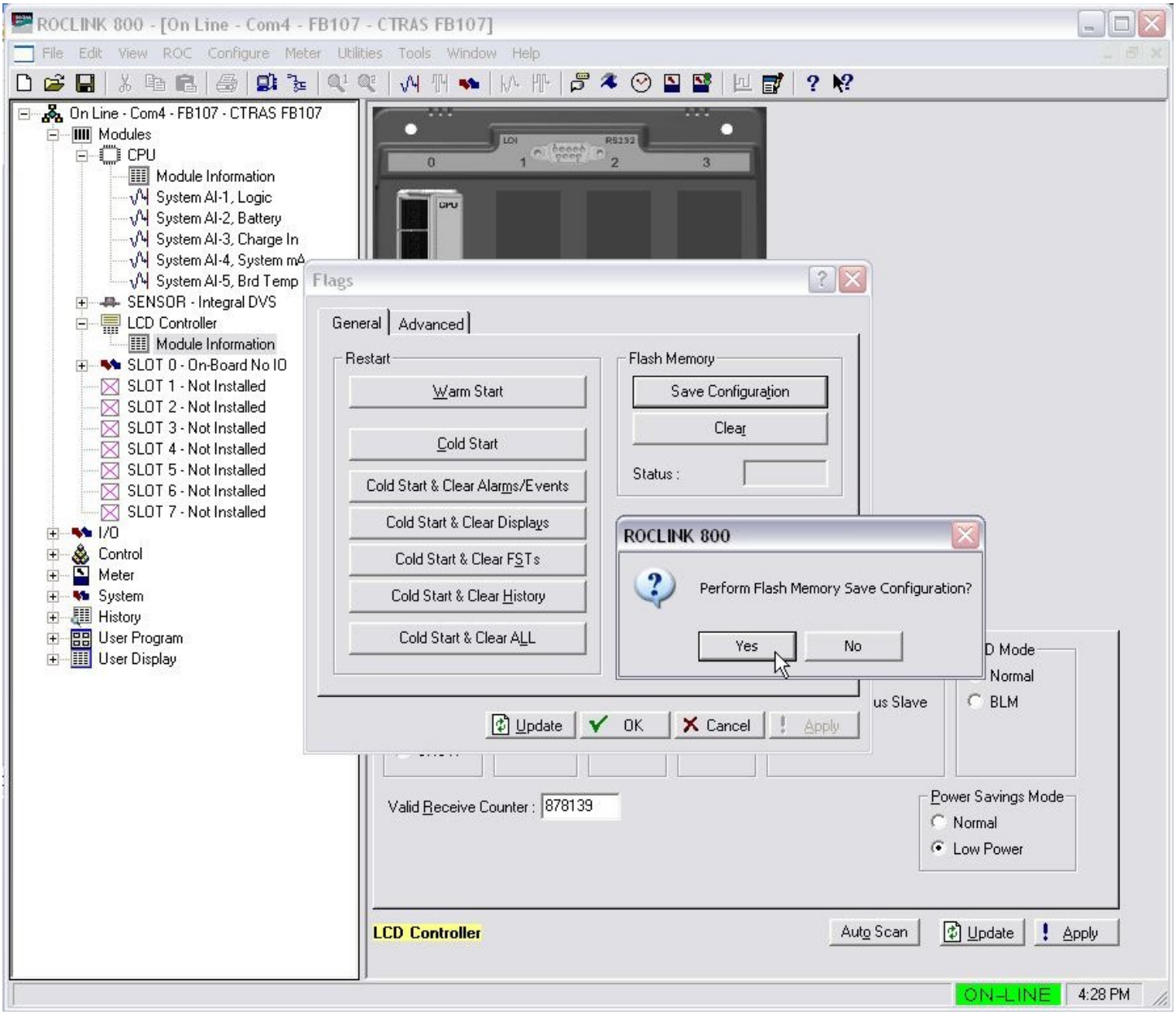
- **Step 6a.**

Click “Save Configuration”



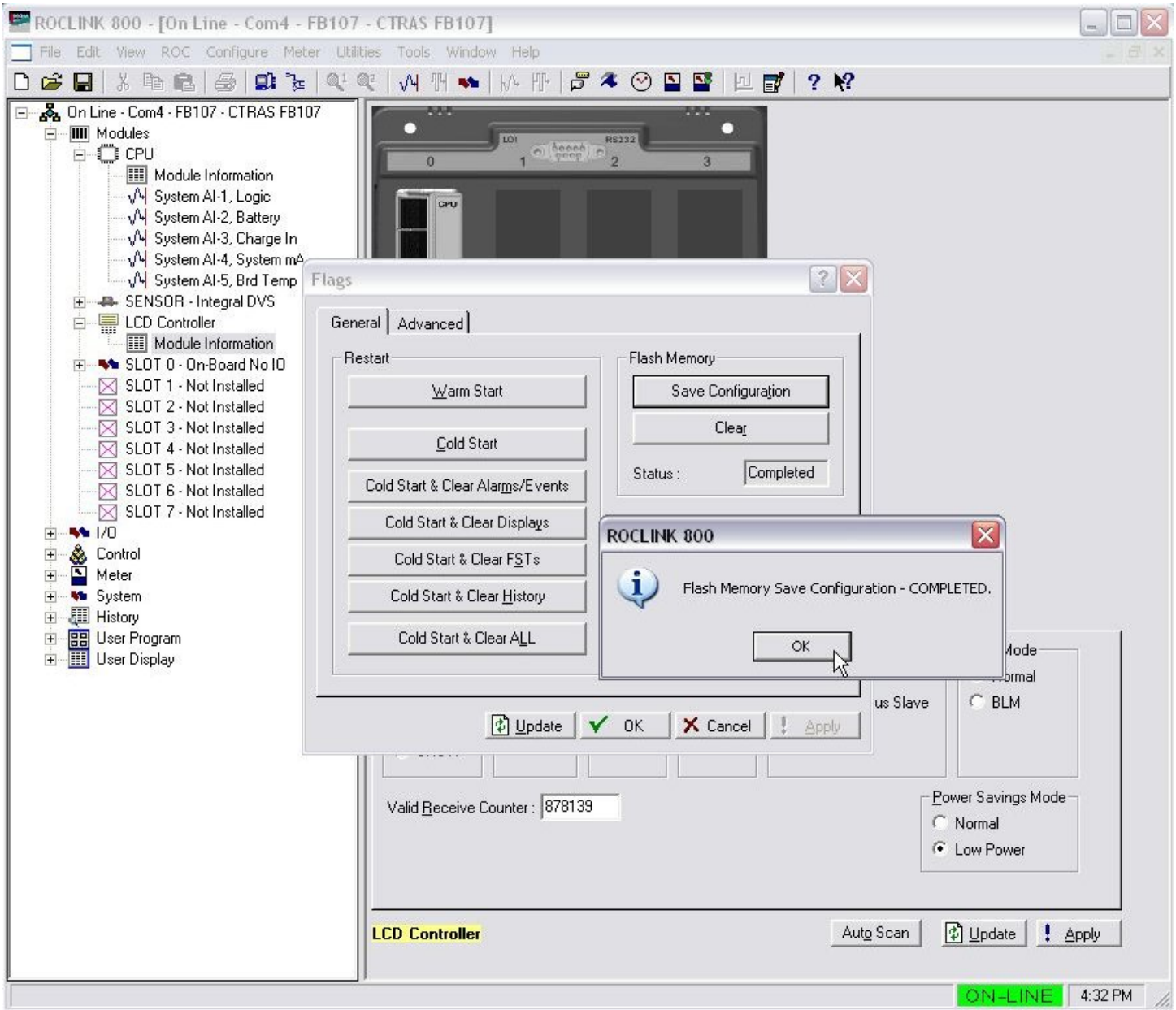
- **Step 6b.**

Click “Yes” on the confirmation dialog.



- **Step 6c.**

Success! You're finished. Click "OK" on the completed screen, click "ok" in the flags window, and disconnect from the meter by clicking "ROC" and then "disconnect."



- **Some observations**

The power light inside the meter can be difficult to see if the sun is shining on it. It's even harder with the light blinking. Now that the display is also blank, it may appear that the meter is completely offline if a closer observation is not made with the user actually pressing on the blank display to activate it. Inform other personnel of the changes you've made so that they are aware of this when they visit the site in the future.

ExtraNET Avalanche Version 2

- Designed on a new processor board with a very efficient voltage regulator
- Uses the latest Globalstar GSP-1720 satellite data modem
- Uses 50% less power than the previous model
- Wide operating voltage
- Designed, built, and fully tested in the USA by an American company