



14 February 2022

IMPORTANT PRODUCT NOTIFICATION

To: CELL205, CR300-CELL205, CR310-CELL205 users

Re: Time sensitive – Important software updates

Dear Campbell Scientific Customer,

You or your organization has purchased a Campbell Scientific CELL205, CR300-CELL205, or CR310-CELL205. These products were designed for cellular communication on the AT&T network. AT&T is sunsetting their 3G network service on **February 22, 2022**. We have made critical software updates available on our website at <https://www.campbellsci.com/downloads> for the products noted above. We ask that you **deploy these software updates immediately** to ensure continued operation. Enclosed are instructions for updating the software remotely and/or with a local direct connect.

If you would like technical assistance in applying the update remotely, please contact our Client Services department. If you would like to physically send us the equipment to update, please contact Client Services to obtain a return material authorization (RMA) prior to returning the equipment. You may contact our service department at:

Phone: (435) 227-9105

Email: misty@campbellsci.com

On behalf of Campbell Scientific, I would like to express our appreciation for your business and offer our heartfelt apology for any inconvenience this problem may have caused.

Sincerely,

Sam Utley
V.P. Research & Development, Campbell Scientific

Reference:

- Operating System for CR300-CELL205 and CR310-CELL205:
<https://www.campbellsci.com/downloads/cr300-series-os>
- Operating System for external, serially connected CELL205:
<https://www.campbellsci.com/downloads/cell2xx>

Enclosed: Instructions for updating external, serially connected CELL205

AT&T 3G Sunset OS update process

The following process needs to be strongly considered for **CELL2XX** users using **AT&T SIM** cards:

1. Determine your update path

- ✓ **New Generation** refers to CR300, CR6, CR1000X, GRANITE 6, GRANITE 9, and GRANITE 10.
- ✓ **Old Generation** refers to CR200, CR800, CR1000, and CR3000.

1.1. CELL2xx connected to a New Generation data logger via the CSI/O port and using the PPP protocol

See section 2.1.

1.2. CELL2xx connected to a New Generation data logger via the RS-232 port and using the PPP protocol

See section 2.1.

1.3. CELL2xx connected to an Old Generation data logger via the CSI/O port using the PPP protocol

See section 2.2.

1.4. CELL2xx connected to an Old Generation data logger via the RS-232 port using the PPP protocol

See section 2.4.

1.5. CELL2xx being used as serial server. Connected to a data logger or other device not using the PPP protocol

If cellular plan is a Static IP, see section 2.3.

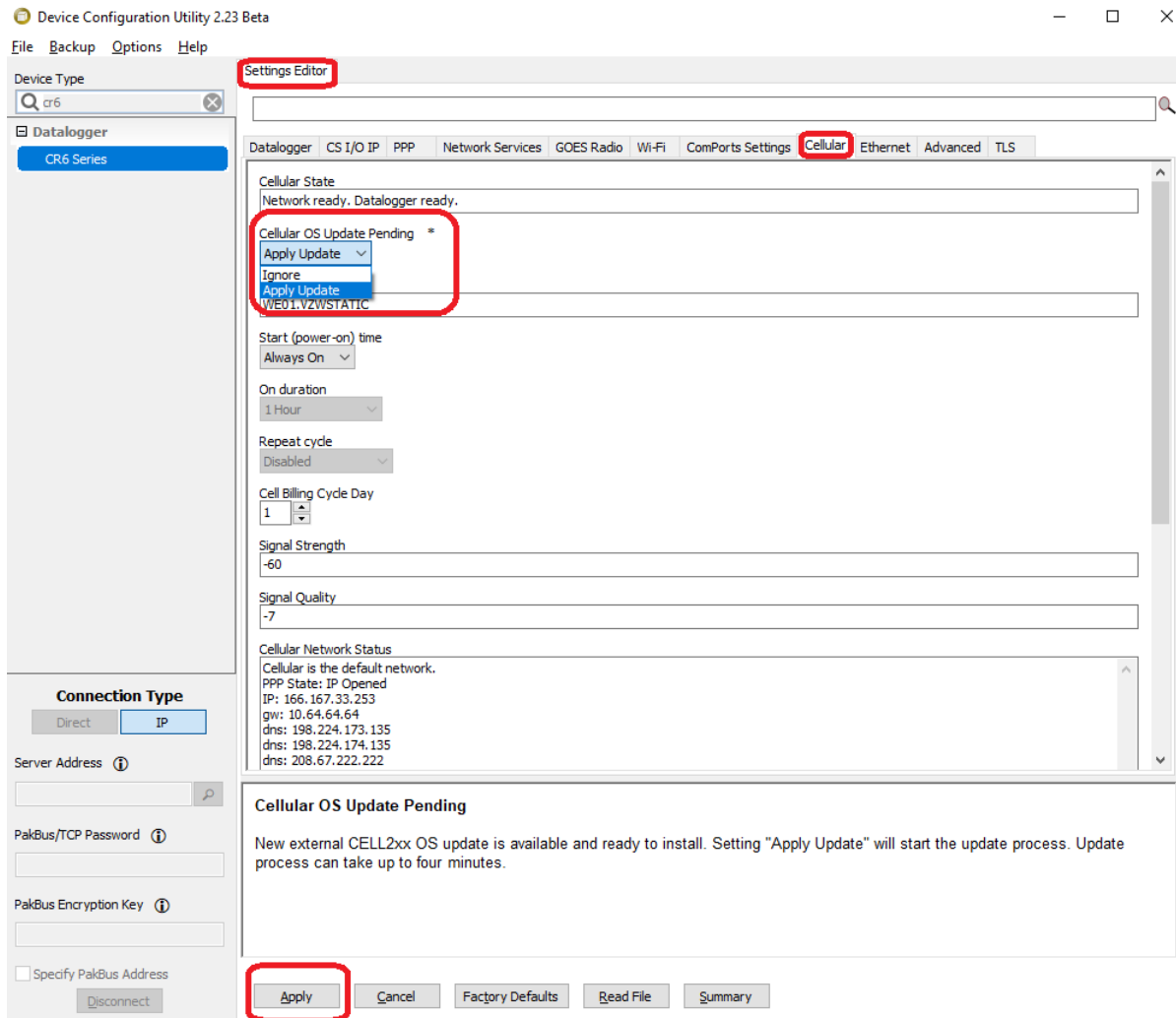
If cellular plan is a Dynamic IP, see section 2.4.

2. Update procedures

2.1. CSI/O or RS-232 PPP mode for New Generation data loggers

2.1.1. First check to see if an update is ready to be applied.

2.1.2. If there is a Cellular OS Update Pending field, select Apply Update, then skip to step 2.1.21. If this field is not present, proceed to next step.



The screenshot shows the 'Device Configuration Utility 2.23 Beta' window. The 'Settings Editor' is open, and the 'Cellular' tab is selected. The 'Cellular OS Update Pending' dropdown menu is open, showing 'Apply Update' selected. The 'Apply' button at the bottom is also highlighted.

Cellular OS Update Pending *

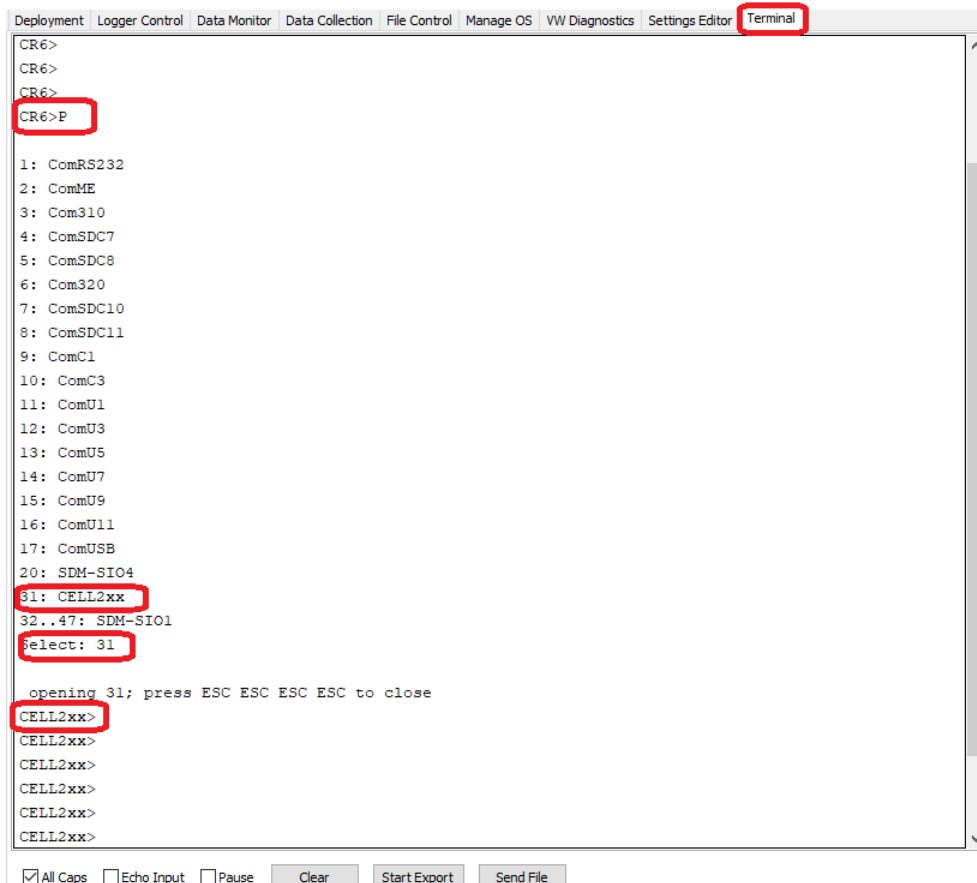
- Apply Update
- Ignore
- Apply Update
- WEB1LVZWSTATIC

Cellular OS Update Pending

New external CELL2xx OS update is available and ready to install. Setting "Apply Update" will start the update process. Update process can take up to four minutes.

Apply Cancel Factory Defaults Read File Summary

- 2.1.3. Collect data from the station.
- 2.1.4. This process may require the data logger program to be stopped. If the data logger program is controlling power to the CELL2xx, you may need to send a new or DEFAULT.CRB that keeps the modem on all the time (ask technical support for assistance, if needed). After the update process, the original program can be restarted.
- 2.1.5. Connect to the data logger using DevConfig and navigate to the Terminal tab.
- 2.1.6. Press the Enter key several times to get the data logger prompt >.
- 2.1.7. Send the P command.
- 2.1.8. Select comport CELL2xx.
- 2.1.9. Press the Enter key several times to get the CELL2xx> prompt. Note: Please be patient; the terminal may update slowly because of the cellular link.



```
Deployment | Logger Control | Data Monitor | Data Collection | File Control | Manage OS | VV Diagnostics | Settings Editor | Terminal
CR6>
CR6>
CR6>
CR6>P
1: ComRS232
2: ComME
3: Com310
4: ComSDC7
5: ComSDC8
6: Com320
7: ComSDC10
8: ComSDC11
9: ComC1
10: ComC3
11: ComU1
12: ComU3
13: ComU5
14: ComU7
15: ComU9
16: ComU11
17: ComUSB
20: SDM-SIO4
31: CELL2xx
32..47: SDM-SIO1
Select: 31
opening 31; press ESC ESC ESC ESC to close
CELL2xx>
CELL2xx>
CELL2xx>
CELL2xx>
CELL2xx>
CELL2xx>
```

All Caps Echo Input Pause

2.1.10. Send the CHECK UPDATE command.

```
CELL2xx>  
CELL2xx>  
CELL2xx>CHECK UPDATE  
Module/OS updates flag set.  
CELL2xx>  
CELL2xx>
```

2.1.11. Send the RESET MODULE command.

```
CELL2xx>  
CELL2xx>RESET MODULE  
Are you sure? (YES/NO):YES
```

Note: You will lose communication to the data logger after this command is issued.

2.1.12. Wait approximately six minutes.

2.1.13. Reconnect to the data logger using DevConfig.

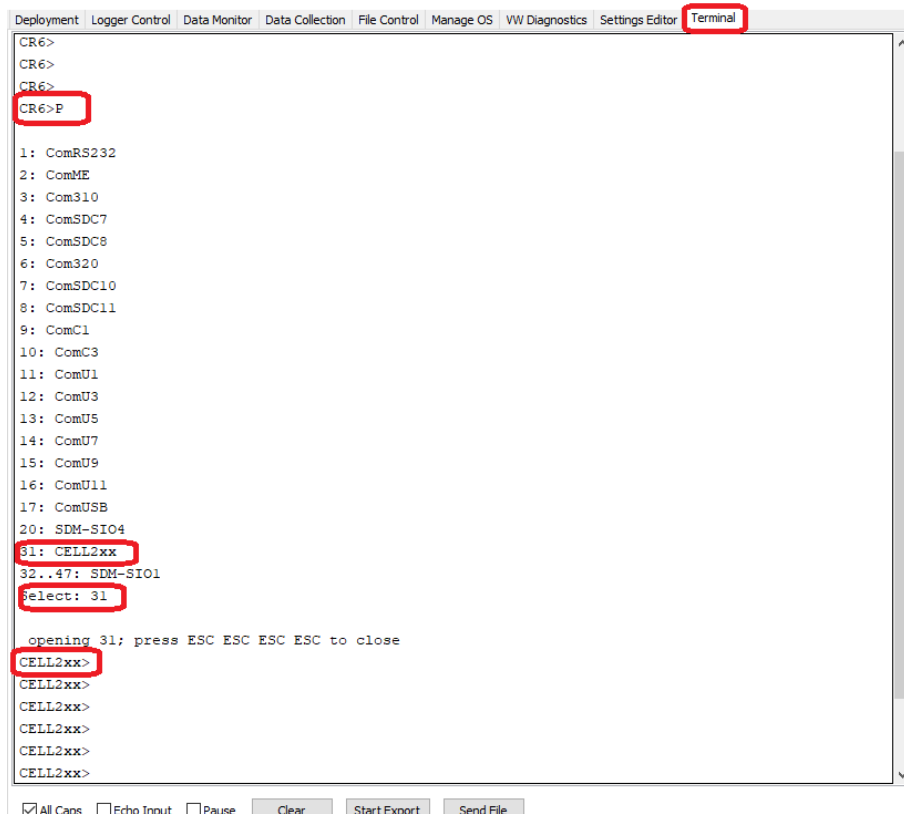
2.1.14. Navigate to the Terminal.

2.1.15. Press the Enter key several times to get the data logger prompt >.

2.1.16. Send the P command.

2.1.17. Select comport CELL2xx.

2.1.18. Press the Enter key several times to get the CELL2xx> prompt. Note: Please be patient; the terminal may update slowly because of the cellular link.



```
Deployment | Logger Control | Data Monitor | Data Collection | File Control | Manage OS | VW Diagnostics | Settings Editor | Terminal  
CR6>  
CR6>  
CR6>  
CR6>P  
1: ComRS232  
2: ComME  
3: Com310  
4: ComSDC7  
5: ComSDC8  
6: Com320  
7: ComSDC10  
8: ComSDC11  
9: ComC1  
10: ComC3  
11: ComU1  
12: ComU3  
13: ComU5  
14: ComU7  
15: ComU9  
16: ComU11  
17: ComUSB  
20: SDM-SIO4  
31: CELL2xx  
32..47: SDM-SIO1  
select: 31  
opening 31; press ESC ESC ESC ESC to close  
CELL2xx>  
CELL2xx>  
CELL2xx>  
CELL2xx>  
CELL2xx>
```

All Caps Echo Input Pause

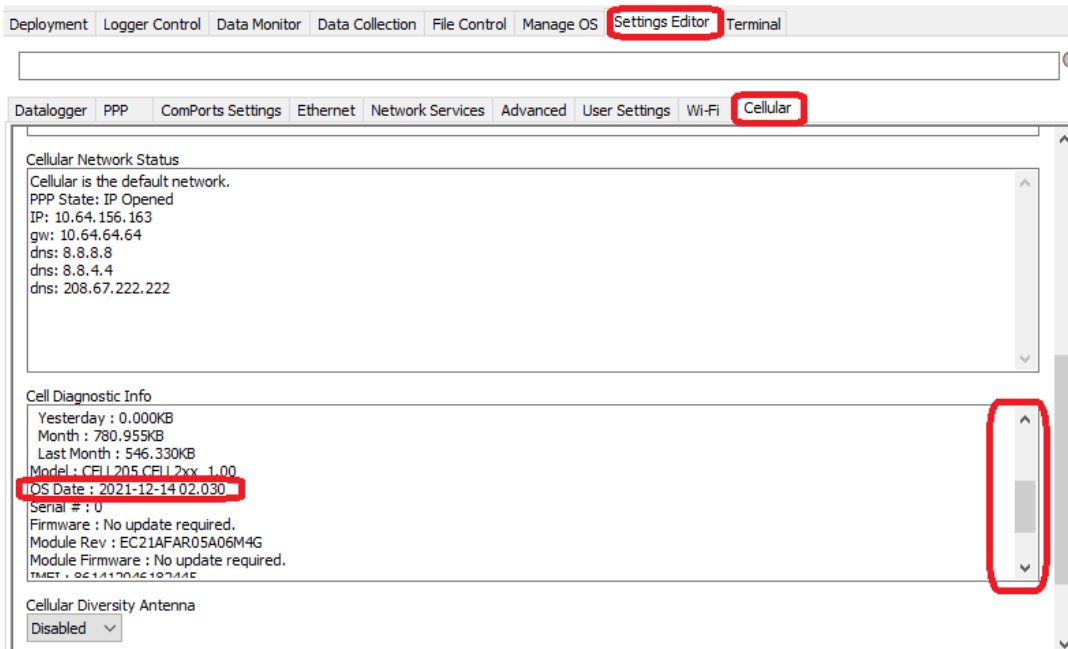
- 2.1.19. Send SHOW OSUPDATE PENDING command. True means the OS is in the CELL2xx waiting to be applied.
- 2.1.20. Send the START OSUPDATE command.

```
CELL2xx>  
CELL2xx>  
CELL2xx>SHOW OSUPDATE PENDING  
True  
CELL2xx>START OSUPDATE  
Are you sure? (YES/NO):YES  
CELL2xx firmware update started. Please wait for firmware to load.  
CELL2xx>
```

All Caps Echo Input Pause

Note: You will lose communication to the data logger after this command is issued.

- 2.1.21. Wait approximately four minutes then reconnect to the data logger using DevConfig.
- 2.1.22. Verify the OS was updated. The OS date should be as shown below.



The screenshot shows the 'Settings Editor' window with the 'Cellular' tab selected. The 'Cellular Network Status' section displays the following information:

- Cellular is the default network.
- PPP State: IP Opened
- IP: 10.64.156.163
- gw: 10.64.64.64
- dns: 8.8.8.8
- dns: 8.8.4.4
- dns: 208.67.222.222

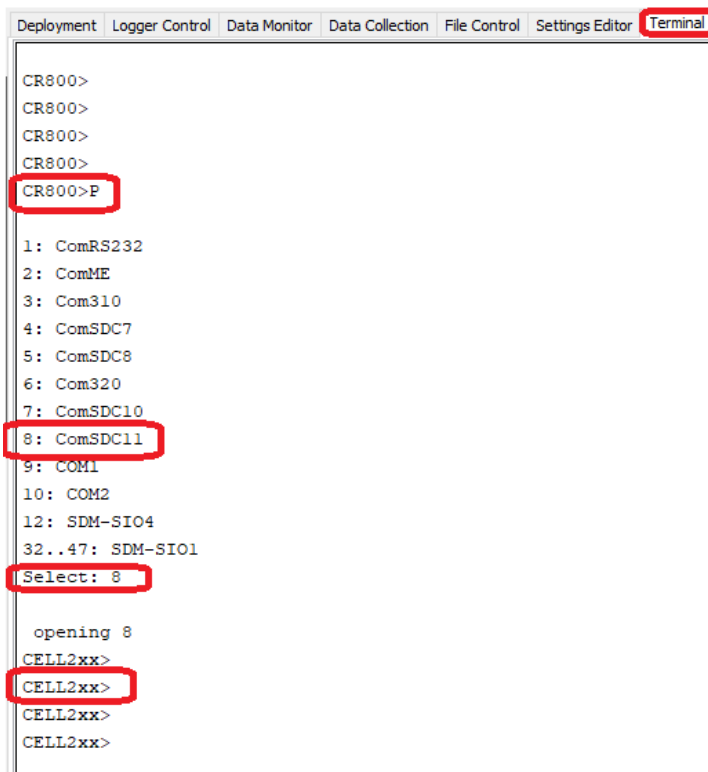
The 'Cell Diagnostic Info' section displays the following information:

- Yesterday : 0.000KB
- Month : 780.955KB
- Last Month : 546.330KB
- Model : CELL205 CELL2xx_1.00
- OS Date : 2021-12-14 02:03D**
- Serial # : 0
- Firmware : No update required.
- Module Rev : EC21AFAR05A06M4G
- Module Firmware : No update required.
- TMET : 06141704610744E

The 'Cellular Diversity Antenna' is set to 'Disabled'.

2.2. CSI/O port PPP mode for Old Generation data loggers

- 2.2.1. Collect data from the station.
- 2.2.2. This process may require the data logger program to be stopped. If the data logger program is controlling power to the CELL2xx you may need to send a new or DEFAULT.CRB that keeps the modem on all the time. After the update process, the original program can be restarted.
- 2.2.3. Connect to the data logger using DevConfig and navigate to the Terminal tab.
- 2.2.4. Press the Enter key several times to get the data logger prompt >.
- 2.2.5. Send the P command.
- 2.2.6. Select comport SDC11.
- 2.2.7. Press the Enter key several times to get the CELL2xx> prompt. Note: Please be patient; the terminal may update slowly because of the cellular link.



```
Deployment  Logger Control  Data Monitor  Data Collection  File Control  Settings Editor  Terminal
CR800>
CR800>
CR800>
CR800>
CR800>P
1: ComRS232
2: ComME
3: Com310
4: ComSDC7
5: ComSDC8
6: Com320
7: ComSDC10
8: ComSDC11
9: COM1
10: COM2
12: SDM-SIO4
32..47: SDM-SIO1
Select: 8
opening 8
CELL2xx>
CELL2xx>
CELL2xx>
CELL2xx>
```

- 2.2.8. Check to see if a CELL2xx Update is available. If the Response is True skip to step 2.2.19. If the Response is false, continue to next step.

```
CELL2xx>SHOW OSUPDATE PENDING  
True
```

- 2.2.9. Send the CHECK UPDATE command.

```
CELL2xx>  
CELL2xx>  
CELL2xx>CHECK UPDATE  
Module/OS updates flag set.  
CELL2xx>  
CELL2xx>
```

- 2.2.10. Send the RESET MODULE.

```
CELL2xx>  
CELL2xx>RESET MODULE  
Are you sure? (YES/NO):YES
```

Note: You will lose communication to the data logger after this command is issued.

- 2.2.11. Wait approximately six minutes.
2.2.12. Reconnect to the data logger using DevConfig.
2.2.13. Navigate to the Terminal.
2.2.14. Press the Enter key several times to get the datalogger prompt >.
2.2.15. Send the P command.
2.2.16. Select comport CELL2xx.
2.2.17. Press the Enter key several times to get the CELL2xx> prompt. Note: Please be patient; the terminal may update slowly because of the cellular link.


```
Deployment | Logger Control | Data Monitor | Data Collection | File Control | Settings Editor | Terminal
CR800>
CR800>
CR800>
CR800>
CR800>P
1: ComRS232
2: ComME
3: Com310
4: ComSDC7
5: ComSDC8
6: Com320
7: ComSDC10
8: ComSDC11
9: COM1
10: COM2
12: SDM-SIO4
32..47: SDM-SIO1
Select: 8
opening 8
CELL2xx>
CELL2xx>
CELL2xx>
```

- 2.2.18. Send the SHOW OSUPDATE PENDING command. True means the OS is in the CELL2xx waiting to be applied.
- 2.2.19. Send the START OSUPDATE command.

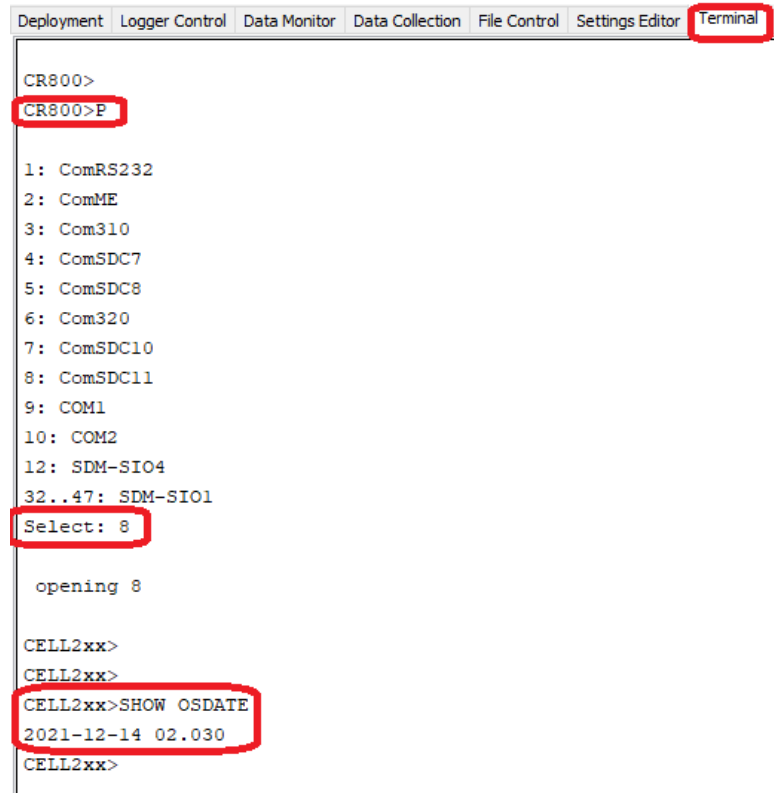
```
CELL2xx>
CELL2xx>
CELL2xx>SHOW OSUPDATE PENDING
True
CELL2xx>START OSUPDATE
Are you sure? (YES/NO):YES
CELL2xx firmware update started. Please wait for firmware to load.
CELL2xx>
```

All Caps Echo Input Pause

Note: You will lose communication to the data logger after this command is issued.

2.2.20. Wait approximately four minutes then reconnect to the data logger using DevConfig.

2.2.21. Verify the OS was updated. Send the SHOW OSDATE command. The OS date should be as shown below.



```
Deployment | Logger Control | Data Monitor | Data Collection | File Control | Settings Editor | Terminal
CR800>
CR800>P
1: ComRS232
2: ComME
3: Com310
4: ComSDC7
5: ComSDC8
6: Com320
7: ComSDC10
8: ComSDC11
9: COM1
10: COM2
12: SDM-SIO4
32..47: SDM-SIO1
Select: 8
opening 8
CELL2xx>
CELL2xx>
CELL2xx>SHOW OSDATE
2021-12-14 02.030
CELL2xx>
```

2.3. CELL2xx Serial Server mode (Static IP)

2.3.1. Open a web browser and navigate to <https://www.campbellsci.com/cell205>

2.3.2. Navigate to the CELL2xx downloads and download the latest version.

Downloads


CELL2xx Operating System v.2.030 (699 KB) 02-07-2022

To update the CELL200 series operating system:

1. Connect a USB cable between your module and computer.
2. Open a web browser and go to: www.cell.linktodevice.com/.
3. On the OS Update tab, click on the **Send File** button and select the new firmware file. (i.e. CELL_2xx_01_02_029.WEB.OBJ.GZ)

The update process can take 2 to 4 minutes.

Why Update? This OS resolves network registrations issues. Updated CELL205 to manage the AT&T 3G sunset

[Download Now](#) 

[View Update History](#)

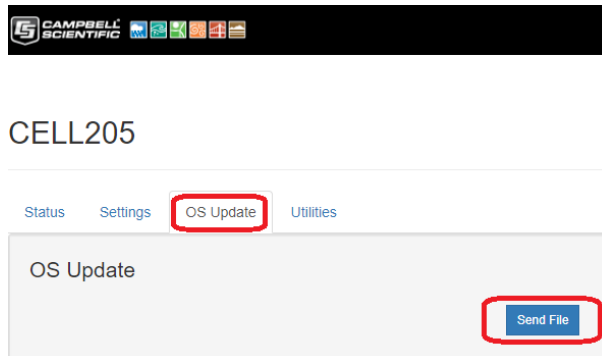
2.3.3. In the web browser URL, input the Cell2xx IP address.

2.3.4. A logon prompt should be displayed.

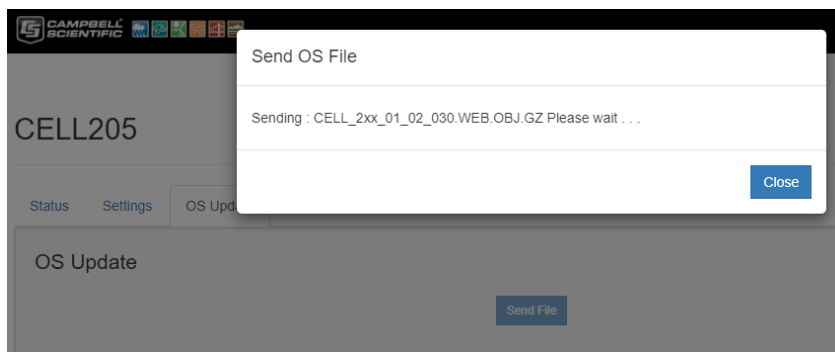
2.3.5. After logging on to the CELL2xx, web pages should be displayed.

2.3.6. Navigate to the OS Update tab.

2.3.7. Send the CELL_2xx_XX_XX_XXX.WEB.OBJ.GZ



2.3.8. Allow several minutes for the file to be sent and applied.



2.4. Site Visit

- 2.4.1. This will require a site visit.
- 2.4.2. Prior to the site visit, download the CELL2xx operating system from the Campbell Scientific website.
- 2.4.3. Attach a USB cable from the PC to the CELL2xx.
- 2.4.4. Open a Web Browser and type cell.linktodevice.com in the URL.
- 2.4.5. Navigate to the OS Update tab.
- 2.4.6. Send the CELL_2xx_XX_XX_XXX.WEB.OBJ.GZ

