

Huawei E169 & E220 Status Lights

Indicator Status	Description
Off	Device is powered off.
Blinking twice every 2.7 seconds (green)	Device is searching for a network, or no network available.
Blinking twice every 2.9 seconds (green)	The GSM network is normal
Blinking every 2.9 seconds (blue)	The WCDMA network is normal
ON (green)	The GPRS data service is established
ON (cyan)	The HSPA data service is established
On (blue)	The WCDMA data service is established

3G Wireless Troubleshooting – Connection Issues

1. Have you correctly inserted the SIM card into the USB Modem?

Please ensure the SIM card is correctly inserted. The “gold plate” on the SIM card must be making contact with the pins on the modem.

2. Have you correctly attached the USB modem to the USB 2.0 ports on the PC?

Although in most cases only one of the USB plugs will need to be plugged in, in some cases both will need to be put in. Please ensure your system meets the minimum system requirements (you may check by clicking on ‘System Requirements’ on our 3G Wireless Broadband page). If you are still experiencing a problem, please follow the Installation Guide which can be found in our ‘Downloads’ section on our website.

3. Once the USB Modem is correctly attached to the PC, are there any lights flashing?

Please ensure the SIM card is correctly inserted and USB connectors are plugged into a USB 2.0 port (USB 1.0 will not work), also make sure the USB cables are plugged into the same ports that installation took place on (you may need to swap ports). If you are still experiencing a problem, please try the modem on another PC to ensure it is working OK.

4. Confirm there are no USB / PC resource Port conflicts.

Please check the modem / PC port status as follows:

Windows XP:

Start -> Control Panel -> System (may need to switch to classic view) -> Hardware Tab -> Device Manager

Windows Vista:

Start -> Control Panel -> System (may need to switch to classic view)-> Device Manager (in the left menu)

• Expand The "Modems" Section:

Ensure "HUAWEI Mobile Connect - 3G Modem" is listed.

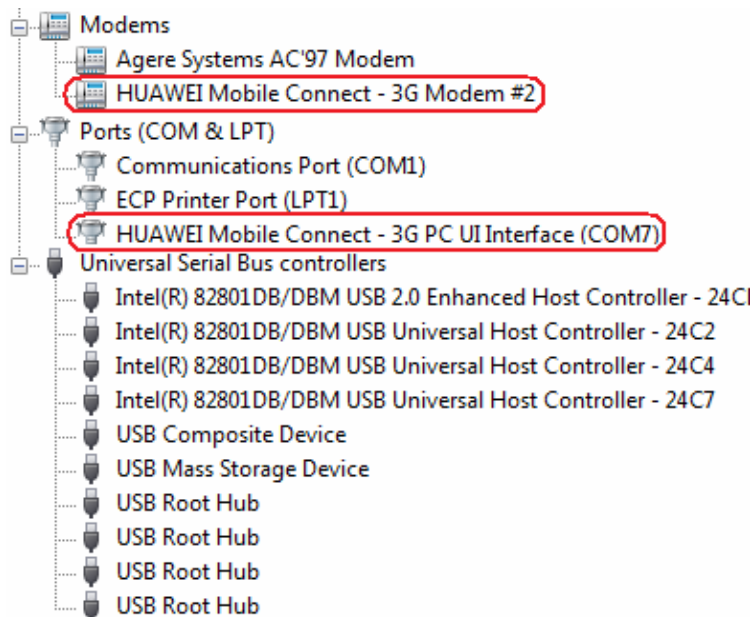
• Expand the "Ports (COM & LPT)" section:

Ensure "HUAWEI Mobile Connect - 3G PC UI Interface (COM [port#]) is listed.

• Expand the "Universal Serial Bus Controllers" section:

Ensure all the valid USB ports are listed.

e.g.



Make sure none of the above sections have either a '!' or '?' symbol in front or else there may be port conflicts. You may need to uninstall the modem and other devices on your machine and reinstall. If there is still a problem, please try the modem on another PC or Laptop.

5. Is the USB Modem / Wireless Application showing coverage?

Observe what lights are flashing on the USB modem. Perform a network select by going to **Settings -> Choose Network -> Manual**. Please double check coverage in your area on our website. It is possible there may be a coverage outage; please check our Network Status page on our website.

6. Try to switch between 3G, HSPA and GPRS. Is connection still not possible?

Please select an alternative network bearer:
Settings -> Choose Connection Type -> GPRS/3G

Ensure the wireless application is set to correct network band:
Settings -> Network Band -> GSM900/1800/WCDMA2100

It is possible there is a network issue; please check our Network Status page on our website.

7. Is there any Planned & Unplanned GSM / HSPDA Outage Notifications in the area?

Please check our network status page on our website.

8. Has the Mobile Connect software been uninstalled / reinstalled?

Uninstall and reinstall the 3G Wireless software.

Troubleshooting – Intermittent Browsing

This is only to be followed if a **particular website** is either not displaying or is not displaying correctly. If you are unable to view any pages at all please follow the 'Connection Issues' guide.

1. Have you successfully connected to the 3G network?

Please ensure you are connected to the 3G Network and you have a signal.

2. Are you able to view other websites?

Please try to go to www.google.com.au via your web browser. If it does not come up, please follow the Speed/Throughput troubleshooting guide.

3. Confirm website is displayed correctly via an alternative internet connection.

Have you tried the website on an alternative internet connection? Is it working there? If not, then it is an issue with the particular site you are viewing.

4. Confirm browser compatible with website and browser settings correct.

Some websites will not display correctly in all browsers, if you can, please try another browser such as Mozilla Firefox or Opera. Ensure settings are enabled on the browser to display the features of the website (JavaScript, flash, active-x controls, etc...). If you need further assistance regarding the above please speak with a computer technician / computer shop.

5. Confirm that you have no proxy settings set within the browser.

If proxy settings are set, please disable them in the browser. Close the browser and reopen.

6. Does the fault still occur using another browser?

Please try another browser such as Mozilla Firefox or Opera.

7. Is the website still not visible when switching between 2G/3G?

Please try switching network bearers between GSM and HSPA and retest.

8. Does clearing the browser cache and cookies resolve the fault?

Please remove the temporary internet files (usually in Tools -> Delete Files). Close the browser and re-open and see if this resolves the problem.

9. Is there any Planned and Unplanned outages listed on our website?

Please check to see if there are any outages posted on our 'Network Status' page.

10. Does a network selection, power cycle or reboot of the PC resolve the fault?

Please follow the network selection guide below to see if it resolved the issue.

11. Confirm no firewalls or security programs causing website display issues?

Please confirm that you have no active firewall or security programs running on your computer. If you do, please disable them. Test again to see if there is any further problem.

Troubleshooting – Intermittent Browsing (Appendix)

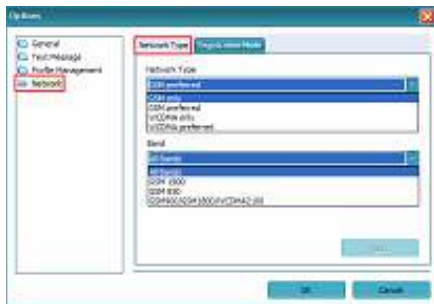
Switching Data Bearer GPRS/3G

1. To switch the data bearer you must be disconnected first. Please follow as below:

Tools -> Settings -> Network



2. Select the **Network Type** tab:



3. The Following options are available:

Network Type:

- GSM Only
- GSM Preferred
- WCDMA Only
- WCDMA Preferred

Band:

- All Bands
- GSM 1900 (Roaming Only)
- GSM 850 (Roaming Only)
- GSM 900/1800 WCDMA 2100

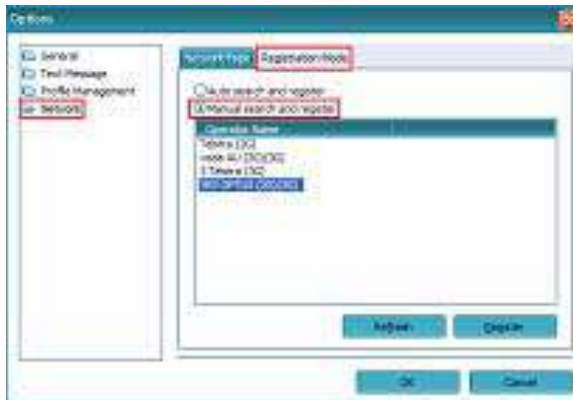
Network Selection

1. To perform a **Network Selection** you must be disconnected first. Then follow as below:

Tools -> Settings -> Network



2. You will then need to select the **Register Mode** tab followed by **Manual Search and Register** radio option. You will then need to select **Refresh**, the client should state searching:



3. You will then need to select **Register** on the desired network.

Troubleshooting – Throughput & Speed Issues

1. Connection polls between bearers at a static location

- Ensure that the **signal strength is good** for the selected bearer (GPRS / 3G / HSPA).
- Check preferred connection is set in Connection Type.
- Check coverage maps for location for desired bearer.

2. You are connected, but there is no data flow (throughput)

- Check to make sure the web browser does not have any proxy settings configured.
- **Internet Explorer:** Tools -> Internet Options -> Connections Tab -
 - LAN Settings -> Either on Automatic or not set to use proxy server.
- **Mozilla Firefox 2:** Tools -> Options -> Advanced -> Network Tab -> Connection Settings -> Either on Automatic or not set to use proxy server.
 - Please make sure you do not have **DNS values** set manually on the connection and that its server assigned. You can run **ipconfig** in command prompt to check if a valid IP address has been assigned.
 - Check to ensure you do not have a firewall or anti-virus program that may be affecting the applications ability to access the Internet. (Note – Our technical support team are not obliged to provide assistance on disabling Personal Firewall or Antivirus programs due to the multitude of products available).
 - Check to ensure there are no USB/Modem Port conflicts. Check under the following:

Start → Control Panel -> System -> Hardware Tab -> Device Manager

- **Expand The "Modems" Section:**
Ensure "HUAWEI Mobile Connect -3G Modem" is listed.
- **Expand the "Ports (COM & LPT) section:**
Ensure "HUAWEI Mobile Connect →3G PC UI Interface (COM [port#]) is listed.
- **Expand the "Universal Serial Bus Controllers" section:**
Ensure all the valid USB ports are listed.

Make sure none of the above sections have either a '!' or '?' symbol in front else likely port conflicts. You may need to uninstall the modem and other devices on your machine and reinstall.

- Choose the other network type, check for connection and throughput. If throughput is possible, switch back to desired connection type and attempt connection / throughput again.

- Shutdown the application, safely remove the modem and reboot the PC. Once you are back into the Operating System, attempt connection / throughput again.

3. You are connected but you are experiencing slow throughput

- Verify coverage / signal strength at your location.
- Check the settings in the Wireless Connect application; ensure the correct APN is being used i.e. 'Connect'.
- Determine whether the connection to the network has been established.
- Which application are you using which is experiencing difficulty connecting?
- Perform ping tests:

•Click Start -> Run.

•Type command in the Run dialog box.

•This will initiate a terminal session. At the prompt, type **ping smtp.ispone.com.au**

•Note down results and any loss. The ping results should be within **100-400ms (normal)**.

- Perform a bandwidth test via our website. speedtest.ispone.com.au

•**GPRS:** 20 - 50Kbps

•**3G:** 50 - 384Kbps

•**HSPA:** 384Kbps - 3.6Mbps

- Disconnect and reconnect and retest.
- A re-boot of the Operating system may be required, re-connect and test again after the re-boot.
- Retest in another location.

3G Wireless Troubleshooting - Known Installation Fault

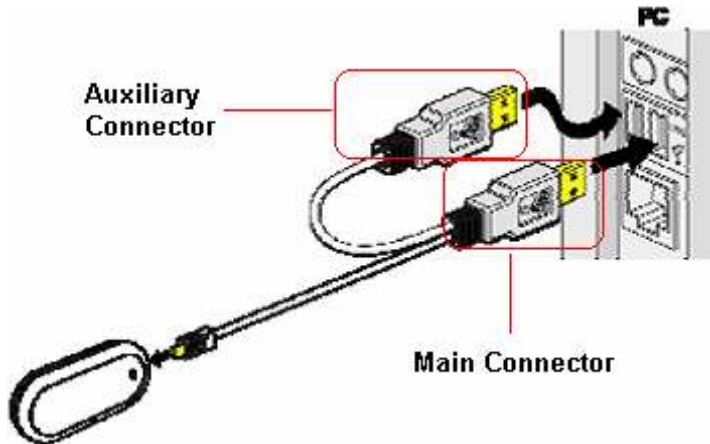
It is a **known fault** that if a customer attempts to start the Wireless Connect/Broadband client before the installation is allowed to complete all the required steps, the client will fail with the error: ***'The device has been disconnected or is unavailable'***.

To resolve this issue the customer must:

- Remove the USB modem from the PC.
- Uninstall the client (via control panel -> Add / Remove Programs -> Wireless Connect/Broadband Remove).
- Reboot the PC.
- Re-install the USB modem and follow the installation steps (in the Installation Guide).

Troubleshooting Steps

1. Please ensure you have the modem plugged into a **fully compliant USB 2.0 port** (you may have to have both cables plugged in if the power is too low from one port).



Note: The "**Main Connector**" must always be plugged in, however if when the modem is plugged in and there are no lights flashing, the second Auxiliary Connector must also be plugged in for correct operation. (Modem requires at least 5V from the USB connector for successful operation).

2. Please ensure you have the modem plugged into the **same port** that it was originally in on first installation (you may need to swap the modem between USB ports).
3. Please reboot the machine and re-connect USB modem to PC.
4. Please confirm that there is no **software installed** on the laptop that prevents communication with the installed USB ports (spy ware detector / internet security suite, etc).
5. Please ensure you have setup dialing location for the phone and modem options:

Windows 2000/XP:

- Start -> Control Panel -> Phone & Modem Options -> Dialing Rules should have a Location & Area Code (will prompt if not set).

Windows Vista:

- Start -> Control Panel -> Phone & Modem -> Dialing Rules should have a Location & Area Code (will prompt if not set).

6. Uninstall the **Wireless Connect software** and make sure the USB modem is connected to the USB port that it was installed on.

For Win 2000/XP:

- Start -> Control Panel -> Add or Remove Programs -> Wireless Connect -> Uninstall

For Windows Vista:

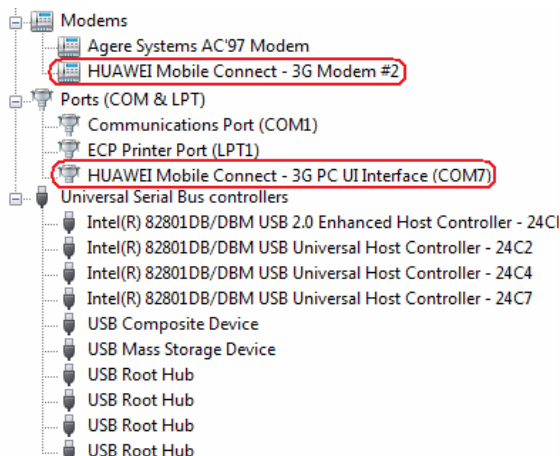
- Start -> Control Panel -> Programs -> Programs & Features -> Wireless Connect -> Uninstall

Once un-installation is successful, reboot the PC and attempt installation again (ensure the USB modem is not disconnected).

7. Check for **Modem/USB Port conflicts:**

- Click Start and go to the **control panel**
- Ensure customer set to **Classic view** (top left)
- Click on the **System icon** and go to the **Hardware tab**
- Click on **Device Manager** to view current devices
- Expand the "Modems" & "Ports (COM & LPT)" sections and ensure the Huawei Modem is listed.
- Expand the "Universal Serial Bus Controller" sections to ensure USB ports listed.
- Ensure no **questions marks '?'** or **exclamation marks '!'** listed along devices
- Expand the **modem** option and double click on the **Huawei Modem**
- Go to the **Diagnostic tab** and click on **Query Modem**
- If all working should see diagnostic info.
- If error appears about port in use or questions marks '?' or exclamation marks '!', you will need to:
 - uninstall all installed modems
 - uninstall Wireless application
 - Reboot laptop, reinstall the Wireless application first
 - Confirm it is all working

e.g.



8. Possible USB port driver issue, get the customer to uninstall the ports (only attempt if customer has correct manufacturer drivers for USB Port for re install and no devices connected):

- **Uninstall the Wireless application** and disconnect USB modem from PC.
- Click **Start** and go to the **Control Panel**.
- Ensure control panel is set to **Classic** view (top left)
- Click on the **System icon** and go to the **Hardware tab**
- Click on **Device Manager** to view current devices
- Expand the **Universal Serial Bus Controller** option
- Right click on each option and **Uninstall**
- Once complete, reboot the laptop once windows loads, USB port installation should start.
- Then re-install the Wireless application.