

Before Installation and Configuration

1. H820 router has different version. Study your router version before installation.
2. For GSM/GPRS/EDGE/HSDPA/HSUPA/HSPA/HSPA+/4G LTE version, please get a SIM card with data business.
3. For CDMA2000 EVDO/CDMA1x version, please get a UIM card with data business or inform us before order if the network uses non-ruim (nam-flashing).
4. Make sure the sim card or uim card is with enough data business and balance.
5. Make sure the signal is good enough where you test or install the router. Weak signal will make the router no work. If you find your signal strength is not good, please contact us for high gain antenna.
6. Different countries and carriers use different network band and frequency. E-Lins packs units with free world-wide-use antenna. It can work, but the data speed or signal may not be good at your sites. Please buy dedicated high gain antenna from your local suppliers or contact E-Lins to OEM/ODM the antenna.

Notes: This quick start is for GSM/GPRS/EDGE/HSDPA/HSUPA/HSPA+/TD-SCDMA network only. For EVDO network or CDMA network, please refer to manual or contact us freely.

Step 1) Confirm the sim card if can work with other 2G/3G/4G router or modem. If the sim card can not work, the router will not work correctly.

Step 2) Connect the H820 Router LAN port to a PC via RJ45 cable. Make the PC automatically to get the IP, Submask, DNS.

The PC will be get a IP of 192.168.8.xxx.

Step 3) At PC IE browser, please type: <http://192.168.8.1>

Username: admin Password: admin

Step 4) Internet Settings – WAN – Cell Modem

Notes:

- 1) If you don't replace any cellular module or not do the "Load Default to factory", please skip this step and jump to Step 5.
- 2) Please be patient that the router will take some more time to dialup online for first configuration,

At "Cell Modem", please select "AUTO_DETECT", and click "Apply" button. The router will automatically detect the module modem.

Notes: we highly suggest that reboot the router (power off and re-power on) after we select "AUTO_DETECT".

WAN Connection Type: Cell Network

| Cell Mode | |
|-------------------|--------------------------|
| Cell Modem | AUTO_DETECT |
| Modem Description | HUAWEI CDMA 3G modem |
| Network Type | AUTO |
| Online Mode | Keep Alive |
| Parameter Groups | CDMA View Delete |
| | Advance Parameter Groups |
| | Advance Cell Options |

| MAC Clone | |
|-----------|---------|
| Enabled | Disable |

Apply Cancel

Step 5) Internet Settings – WAN – APN configuration

WAN Connection Type: Cell Network

| Cell Mode | |
|-------------------|---------------------------------|
| Cell Modem | Ericsson_F3607GW_IBM |
| Modem Description | Ericsson WCDMA 3G modem for IBM |
| Network Type | AUTO |
| Online Mode | Keep Alive |
| Parameter Groups | WCDMA View Delete |
| | Advance Parameter Groups |
| | Advance Cell Options |

| MAC Clone | |
|-----------|---------|
| Enabled | Disable |

Click “Advance Parameter Groups” button.

| Cell Modem Parameters Groups | |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameters Groups Name | WCDMA_test_E-Lins |
| Dialup | *99# |
| APN | 3gnet |
| User | wap |
| Password | wap |
| Command | |
| Auth Type | AUTO |
| Pin Code | |
| Local IP | |
| MTU | |
| Note: | If change this parameters groups, please press Add/Edit button first! |
| | <input type="button" value="Advance Parameter Groups"/> <input type="button" value="Add/Edit"/> <input type="button" value="Advance Cell Options"/> |

Fill in the related parameters. **And DO NOT FORGET TO CLICK "Add/Edit" button.**

Parameters Groups Name: you can fill in the name freely. But keep No Space between characters.

| | | |
|------------------------|-------------------|------------|
| Parameters Groups Name | WCDMA_test_E-Lins | Right name |
| Parameters Groups Name | WCDMA_test E-Lins | Wrong Name |
| Parameters Groups Name | WCDMA test E-Lins | Wrong Name |

Dialup: fill in the related parameters. Get this parameter from the Sim Card Provider or Carrier;

APN: fill in the related parameters. Get this parameter from the Sim Card Provider or Carrier;

User: fill in the related parameters. Get this parameter from the Sim Card Provider or Carrier.

Notes: If your SIM card has no user name, please input out default value, otherwise the router may not dialup. Our default value for GSM/WCDMA/LTE is "wap", and for CDMA/EVDO is "card".

Password: fill in the related parameters. Get this parameter from the Sim Card Provider or Carrier.


Notes: If your SIM card has no user name, please input out default value, otherwise the router may not dialup. Our default value for GSM/WCDMA/LTE is "wap", and for CDMA/EVDO is "card".

Step 6) Click “Apply” button or Re-power the router to reboot. Then H820 router will dialup to be online.

Once it's online, the CELL LED will light on.

Notes: sometimes the router cannot dialup after the APN configuration, please power off the router, and re-power on it. Because some radio modules need reboot after the initial APN configuration.

Step 7) Once H820 router is online, it gets a WAN IP Address and Status Page will show similar info.

| | |
|--------------------------------|----------------------------------------------------------------------------------------|
| Series | H820 |
| SN | 086412090008 |
| Software Version | 2.2.1 (Sep 19 2012) |
| Hardware Version | 1.0.0 |
| System Up Time | 36 min |
| Operation Mode | Gateway Mode |
| Cell Network Info | |
| Cell Modem | Ericsson_F3607GW_IBM |
| IMEI/ESN | 356398030078636 |
| Sim Status | SIM ready |
| Selected Network | AUTO |
| Registered Network | Registered on Home network: "China Mobile",0 |
| Sub Network Type | EGPRS |
| Signal | 21  |
| Cell Status | UP |
| Internet Configurations | |
| Connected Type | CELL |
| WAN IP Address | 10.89.105.56 |
| Subnet Mask | 255.255.255.255 |
| Default Gateway | 10.64.64.64 |

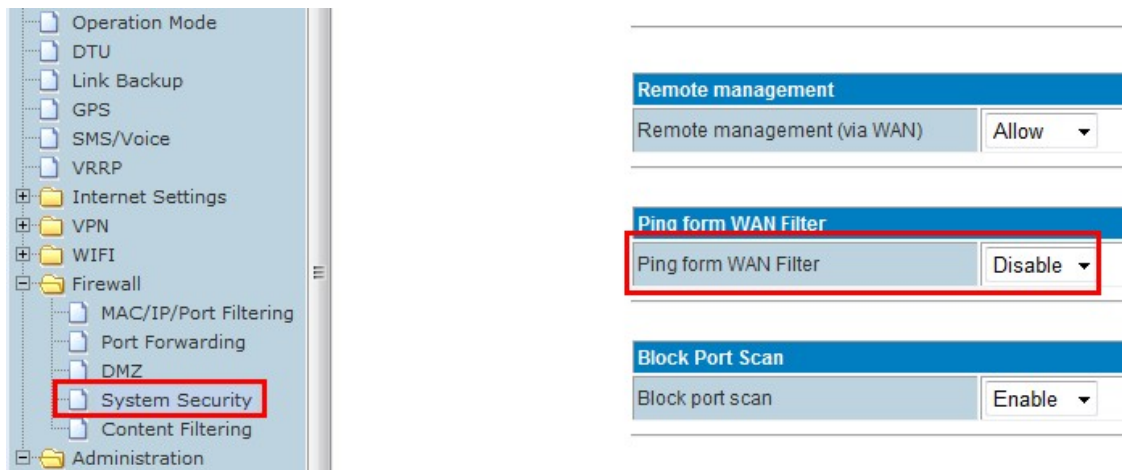
Step8) Activate the “Cell ICMP Check” feature

Notes:

1) For router working with best stability, we highly suggest activate and use this feature.

With this feature, the Router will automatically detect its working status and fix the problem.

2) Please disable the “Ping from WAN Filter” if use ICMP check feature, otherwise it cannot work.



| ICMP check and Reboot Settings | |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| Active | <input checked="" type="checkbox"/> |
| Check method | www.google.com <input type="button" value="Host/IP check"/> |
| | 112.134.33.8 <input type="button" value="Host/IP check"/> |
| Check interval time (sec) | 60 (60-86400) |
| Check Count | 3 (3-1000) |
| Reboot Count Before Sleep | 3 (2-50) |
| Sleep Time (min) | 5 (0-43200) |
| Comment: It is only used for Cell Keep_Alive and On_Time mode! if you active link_backup you mask set the interval bigger the 3 min | |
| <input type="button" value="Apply"/> | |

- **Active:** tick it to enable ICMP check feature
- **Check method:** fill in checking domain name or IP. Click *HOST/IP check* button to verify before using it.
- **Check interval time (sec):** set the interval time of every check
- **Check Count:** set the checking count number
- **Reboot Count Before Sleep:** H820 Router will sleep to stop checking after failed with set times.
- **Sleep Time (min):** H820 Router sleep timing before resume check.

Example with above picture:

H820 Router check "www.google.com" and "112.134.33.8", it will check 3 times. After the previous check, it will do next check after 60 seconds. Totally it will check 3 times. If 3 times all failed, H820 Router will reboot. If reboots 3 times continuously, H820 Router goes to sleep to stop checking. The sleep time is 5 minutes. After 5 minutes, H820 Router resumes to cycle the checking.