

## Before Installation and Configuration

1. H720 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.

**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 H720 Router LAN port to a PC via RJ45 cable. Make the PC automatically to get the IP, Submask, DNS.

The PC will get an 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.

WAN Connection Type: Cell Network

Cell SIM1	
Cell Modem	<span style="border: 1px solid blue; padding: 2px;">AUTO_DETECT</span>
Modem Description	HUAWEI WCDMA 3G modem
Network Type	AUTO
Online Mode	Keep Alive
Parameter Groups	<span style="border: 1px solid black; padding: 2px;">WCDMA</span> <span style="margin-left: 10px;">View</span> <span style="margin-left: 10px;">Delete</span>
	<span style="border: 1px solid gray; padding: 5px 20px;">Advance Parameter Groups</span>
	<span style="border: 1px solid gray; padding: 5px 20px;">Advance Cell Options</span>
Cell SIM2	
Cell Modem	<span style="border: 1px solid blue; padding: 2px;">AUTO_DETECT</span>
Modem Description	HUAWEI WCDMA 3G modem
Network Type	AUTO
Online Mode	Keep Alive
Parameter Groups	<span style="border: 1px solid black; padding: 2px;">WCDMA</span> <span style="margin-left: 10px;">View</span> <span style="margin-left: 10px;">Delete</span>

**Step 5) Set Cell SIM1**

Setting location: H720 web “Internet Settings – WAN – APN configuration”

Click “Advance Parameter Groups” button, the H720 router will display the configuration page.

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)** Set Cell SIM2. Follow Step 6 of setting Cell SIM1.

**Step 7)** Activate the “Cell SIM Switching Trigger” feature

Setting location: H720 web: Internet Settings – WAN -- All Cell Option

All Cell Option	
Cell Option Mode	cell1 prefer ▾
Cell Check Method	ping ip ▾
Check Cell1 IP	8.8.8.8 4.2.2.2
Check Cell2 IP	8.8.8.8 4.2.2.2
Check Time (for Prefer mode)	5 min
Cell Modem Status	modem number:1

There are 6 types of Cell Switching Mode,

Mode	Description
cell1 only	With this mode, only sim1 works
cell2 only	With this mode, only sim2 works
fail switch cell1 first	With this mode, it works like this, sim1 on – switch to sim2 on if sim1 failed, and keep working on sim2 – switch to sim1 on if sim2 failed, and keep working on sim1 –switch to sim2 on if sim1 failed, and keep working on sim2 – “cycling”
fail switch cell2 first	With this mode, it works like this, sim2 on – switch to sim1 on if sim2 failed, and keep working on sim1 – switch to sim2 on if sim1 failed, and keep working on sim2 –switch to sim1 on if sim2 failed, and keep working on sim1 – “cycling”
cell1 prefer	With this mode, it works like this, sim1 on – keep working on sim1 – if sim1 failed, switch to sim2 – keep working on sim2 for “Check Time (for Prefer mode)”, then try to check if sim1 is restored, if restored, switch to sim1 – “cycling”
cell2 prefer	With this mode, it works like this, sim2 on – keep working on sim2 – if sim1 failed, switch to sim1 – keep working on sim1 for “Check Time (for Prefer mode)”, then try to check if sim2 is restored, if restored, switch to sim2 – “cycling”

Notes: Sometimes it may happen the following,

1) Choosing "fail switch cell1 first" or "cell1 prefer", SIM2 is firstly online, this is not problem because sometimes the SIM1 has some problem to be online.

2) Choosing "fail switch cell2 first" or "cell2 prefer", SIM1 is firstly online, this is not problem because sometimes the SIM2 has some problem to be online.

**Check Time (for Prefer mode):** set the time for "cell1 prefer mode" or "cell2 prefer mode"


**Step 8)** Click "View" button to double check if the settings are correct.

**Step 9)** Click "Apply" button or Re-power the router to reboot. Then H720 router will reboot and dialup 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 10)** Once H720 router is online, it gets a WAN IP Address and Status Page will show similar info.

System Info	
Series	H700_H720
SN	086413065D4F
Software Version	2.0.0 (Jun 14 2013)
Hardware Version	1.0.0
System Up Time	1:06
Operation Mode	Gateway Mode
Cell Network Info (SIM1)	
Cell Modem	HUAWEI-EM820
IMEI/ESN	354946041138914
Sim Status	SIM ready
Selected Network	AUTO
Registered Network	Registered on Home network: "46001",2
Sub Network Type	WCDMA
Signal	23 
Cell Status	UP

Internet Configurations	
Connected Type	CELL_SIM1
WAN IP Address	10.108.194.43
Subnet Mask	255.255.255.255
Default Gateway	10.64.64.64
Primary Domain Name Server	210.21.196.6
Secondary Domain Name Server	221.5.88.88
MAC Address	08:66:01:01:6C:C6

**Step 11)** Activate the “Cell ICMP Check” feature

Setting location: H720 web: Internet Settings – Cell ICMP Check

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.

The screenshot shows the router's web interface. On the left is a navigation tree with 'System Security' highlighted in red. On the right, the 'System Security' settings are displayed. The 'Remote management' section has 'Remote management (via WAN)' set to 'Allow'. The 'Ping form WAN Filter' section has 'Ping form WAN Filter' set to 'Disable', which is highlighted with a red box. The 'Block Port Scan' section has 'Block port scan' set to 'Enable'.

ICMP check and Reboot Settings	
Active	<input checked="" type="checkbox"/>
Check Method SIM1	112.113.8.8 <input type="button" value="Host/IP check"/>
	www.google.com <input type="button" value="Host/IP check"/>
Check Method SIM2	112.113.8.8 <input type="button" value="Host/IP check"/>
	www.google.com <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:** H720 Router will sleep to stop checking after failed with set times.
- **Sleep Time (min):** H720 Router sleep timing before resume check.

**Example with above picture:**

H720 Router check "[www.google.com](http://www.google.com)" and "112.134.8.8", 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, H720 Router will reboot. If reboots 3 times continuously, H720 Router goes to sleep to stop checking. The sleep time is 5 minutes. After 5 minutes, H720 Router resumes to cycle the checking.