Before Installation and Configuration

1. H685 router has different version. Study your router version before installation.

2. For GSM/GPRS/EDGE/HSDPA/HSUPA/HSPA/HSPA+/4G LTE + 5G(SA) or 5G(NSA) 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/4G LTE 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 H685 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 192.168.1.xxx.

Step 3) At PC web browser, please type: http://192.168.1.1

   Username: admin   Password: admin

Step 4) System – Setup Wizard

4.1) General

Step - General

First, let's change your router password from the default one.

Password settings

New password   ●●●●●

Confirm new password   ●●●●●

System Settings

Current system time   Sun May 29 12:43:34 2016   ▶ Sync with browser

Timezone   UTC

Hostname   Cell_Router

Language   auto

Save & Apply   Save   Reset

a) Set the Web Login password;

b) Sync with system time with clicking "Sync with browser", or select the "Timezon";

c) Click "Save & Apply" button for next step;

4.2) Mobile

Mobile Configuration

SIM 1

Enable	☑
Mobile connection	pppd mode ▾
APN	3gnet
PIN number	
Dialing number	*99#
Authentication method	None ▾
Service Type	automatic ▾
Demand	0
MTU	1500

Save & Apply   Save   Reset

Item	Description	
Enable	Check it	
Mobile connection	"DHCP mode" or "PPP mode". Normally system will automatically select	
PIN code	If the SIM card uses PIN code, please put here. Wrong PIN code makes router no work. If the SIM card doesn't use PIN code, please keep blank here.	
Dialing number	Fill in the right parameters. Get this parameter from the Sim Card Provider or Carrier. With experience, most of time, 2G/3G/4G use *99#, and CDMA/EVDO use #777.	
APN	Fill in the right parameters. Get this parameter from the Sim Card Provider or Carrier;	
Authentication method	Fill in the right parameters. Get this parameter from the Sim Card Provider or Carrier;	
	None	No more settings
	CHAP	Need set "Username" and "Password"
	PAP	Need set "Username" and "Password"
Dual APN support	Most of SIM cards or Carriers/Operators just use one APN, but some use two APNs. Check	

	this feature to use. Second APN: configure it referring to "APN"; Second Authentication method: configure it referring to "Authentication method";
Network Type	Select the network you want to use. Normally keep default settings
Demand	Normally keep default settings. For some models, there is no this option.
MTU	Normally keep default settings

Click "Save & Apply" button for next step;

4.3) LAN

Set the router LAN IP parameters. Click "Save & Apply" button for next step;

4.4) WiFi

Step - Wireless

Now let's configure your wireless radio. (Note: if you are currently connecting via wireless and you change parameters, like SSI you will have to reconnect with a new set of parameters.)

WiFi Configuration

Enable wireless	☑
SSID	Cell_AP_0001c9
Transmit Power	20 dBm (100 mW)
Band	2.4GHz (802.11g+n)
HT mode (802.11n)	disabled
Channel	11 (2.462 GHz)
Encryption	No encryption
Country Code	00 - World

Save & Apply   Save   Reset

Notes: for security, it is highly recommend to set "Encryption" for the WiFi Radio.

Step 5) once the router is online, it gets a WAN IP Address and Status Page will show similar info, also the "Cell LED" will light on. And "Cell Signal LED" flash if there is enough signal.

Level	Signal Strength Value	Cell Signal LED Flashing Speed
1	1-4	Flash per 2 seconds
2	5-17	Flash per 1 second
3	18-31	Flash per 0.5 second

5.1) Status – Overview

Mobile 1

Celluar Status	Up
IP Address	10.70.20.35/255.255.255.255
Cell Modem	Ericsson_F5321_HP
IMEI	359166046151839
Sim Status	SIM Ready
Strength	10 / 31
Selected Network	Automatic
Registered Network	Registered on Home network: "", 2,
Sub Network Type	
Location Area Code	A54D
Cell ID	0D9A76DF

Step 6) In order to keep the router working stably, it's highly recommended to activate the "ICMP Check" feature.

ICMP Check

Enable	☑
Host1 to ping	www.google.com
Host2 to ping	110.110.12.10
Ping timeout	4
Max retries	10
Interval between ping	2
Restart mobile module	☐
Restart router	☑

Save & Apply   **Save**   **Reset**

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) You can fill in Host1 only, also you can fill in Host1 and Host2 together.

Below list the ICMP checking principle diagram.

Continuous Ping Fail
Record = 0 to start

Ping www.google.com

Failed/Pass?

Pass

Failed

Ping 110.110.12.10

Failed/Pass?

Pass

Failed

Add 1 to Fail Record

Set Fail Record=0

Continuous Ping Fail Record > 10 ?

No

Sleep 2 minutes before
restarting to check

Yes

Restart mobile module / Restart router