



Please read directions completely before starting.

Thank you for your purchase of our Indoor kit, feel free to call or text if you need anything. The following instructions will allow for a simple DIY setup. This system is for the most part plug and play aside of putting the modem in different locations in the home to get the best cell signal.



The indoor system will broadcast Wi-Fi inside the house, when you plug it in you are up and running. Generally, we recommend you have a Wi-Fi router inside your house for the best results.

Your modem has been preconfigured for you and the SIM card is also already installed and activated. There will usually be a second SIM card with your system. This card is usually white and is for AT&T. We include it to easily switch you to AT&T. *Note: this card isn't active. You must call in to activate it.*



Cell signal is broadcasted from the tower and provides your modem access to the internet.



Step One: Screw the antennas on and power up the modem.

Step Two: Connect to the Wi-Fi network or plug a computer into the LAN port.

Step Three: You will usually be on the internet. Sometimes you may need to Login to the modem to check your connectivity.

Connecting to Wi-Fi:

Go to the wireless networks on your phone or computer and look for the network name **SecureWISP**.

You will then use the password: **Letmein2**


Now let's continue to get your system setup, if you want to change the Wi-Fi password you can come back later to do so.

Logging into the router:

In a browser, type **192.168.1.1** in the URL address bar and press enter.

It will ask for a password, enter: **Securewisp01**

Once you have logged in to the modem, you will be on the **Overview** page.



Authorization Required

Please enter your username and password.


Username

admin

Password

Securewisp01

Login



Status ▾ Network ▾ Services ▾ System ▾

Logout

FW ver.: RUT2XX_R_00.01.11.2

Overview

System ⓘ ⓘ

9.0% CPU load

Router uptime

9d 20h 43m 25s (since 2020-02-26, 20:45:47)

Local device time

2020-03-07, 17:29:12

Memory usage

RAM: 88% used FLASH: 13% used

Firmware version

RUT2XX_R_00.01.11.2

Mobile ⓘ ⓘ

Information icon
Change APN

-61 dBm

Data connection

3d 16h 28m 50s (since 2020-03-04, 01:00:22)

State

Registered (home); T-Mobile; 4G (LTE)

SIM card status

SIM (Ready) Make sure SIM is Ready

Bytes received/sent *

54.9 GB / 2.2 GB

Wireless ⓘ ⓘ

Change SSID Here

ON

SSID

SecureWISP (AP)

Mode

1- AP; 11 CH (2.462 GHz)

WAN ⓘ ⓘ

Mobile

IP address

28.228.164.183 Public IP address

WAN failover status

Failover link is enabled

Local Network ⓘ ⓘ

IP / netmask

192.168.1.1 / 255.255.255.0

DHCP Leases

1

Remote Management System ⓘ ⓘ

ON

Status

Standby

Connection State

Error: Expired license.

Recent System Events ⓘ

1 2020-03-07 17:28:24 - Web UI: Authentication was succesful fro ...

2 2020-03-05 09:46:53 - Web UI: Authentication was succesful fro ...

3 2020-03-05 09:46:37 - Web UI: Authentication was not succesful ...

4 2020-03-04 18:45:55 - DHCP: Leased 192.168.1.126 IP address fo ...

Recent Network Events ⓘ

1 2020-03-04 06:56:49 - WiFi client disconnected: 7C:38:AD:9B:39 ...

2 2020-03-04 01:08:34 - Connected to T-Mobile operator


3 2020-03-04 01:01:06 - Mobile data connected, IP: 28.228.164.18 ...

4 2020-03-04 01:00:56 - Joined 4G LTE


* Your carrier's data usage accounting may differ. Teltonika is not liable should any accounting discrepancies occur.

You will then click on the information icon on the Mobile section and this will bring up the signal information page.

This is the screen you will use to get the signal optimized.




Status ▾Network ▾Services ▾System ▾

Logout 


FW ver.: RUT2XX_R_00.01.11.2


Mobile | WAN | LAN | Wireless | OpenVPN | VRRP | Access


Mobile Information


Mobile 

Data connection state	Connected	You are successfully connected to tower
IMEI	861641041302869	
IMSI	310260183891612	
ICCID	8901260185738916126F	Your SIM Number
Sim card state	Ready	SIM State needs to be Ready
Signal strength	-53 dBm	Must be above -80 for faster speeds
Cell ID	18138114	ID to the Cell Tower Sector your connected to
RSRP	-89 dBm	
RSRQ	-17 dB	
SINR	6.9 dB	Must be a positive number for faster speeds
Operator	T-Mobile	
Operator state	Registered (home)	
Connection type	4G (LTE)	
Connected band	LTE BAND 4	
Bytes received *	58.1 GB (62434703731 bytes)	
Bytes sent *	2.2 GB (2395347110 bytes)	

Reboot modem 

Restart connection 

(Re)register 

Refresh 

*Your carrier's data usage accounting may differ. Teltonika is not liable should any accounting discrepancies occur.

Teltonika solutionsWiki Teltonika | teltonika-networks.com

This is the page you will use to get the signal optimized.

Note: If signal is enough throughout the home, this step may not be necessary.

If not you will then move the modem into different areas of the home until you get the RSRP as low as possible. -55 is a very strong signal and -100 is a poor signal, so in the -80 to -65 range is ideal or as low

as you can get it. You also want the SINR (signal to noise) as high a positive number as you can get. 14 is a very strong signal and -1 is a poor signal. The RSRP & SINR have a direct control of the download speeds you get. The easiest way to do this is by connecting to the modem with a smartphone so you can take this information with you and see it as you are finding a location. Optionally, go outside and see what the readings are, if speeds and signal improve you may need to upgrade to the outdoor antenna.

Here is a table that shows the relevance of each signal and what good readings are. Use it as a reference.

RSSI Received Signal Strength Indicator 4G signal levels		
RSSI	Signal strength	Description
> -65 dBm	Excellent	Strong signal with maximum data speeds
-65 dBm to -75 dBm	Good	Strong signal with good data speeds
-75 dBm to -85 dBm	Fair	Fair but useful, fast and reliable data speeds may be attained, but marginal data with drop-outs is possible
-85 dBm to -95 dBm	Poor	Performance will drop drastically
<= -95 dBm	No signal	Disconnection
RSRP Reference Signals Received Power		
RSRP	Signal strength	Description
>= -80 dBm	Excellent	Strong signal with maximum data speeds
-80 dBm to -90 dBm	Good	Strong signal with good data speeds
-90 dBm to -100 dBm	Fair to poor	Reliable data speeds may be attained, but marginal data with drop-outs is possible. When this value gets close to -100, performance will drop drastically
<= -100 dBm	No signal	Disconnection
RSRQ Reference Signal Received Quality		
RSRQ	Signal quality	Description
>= -10 dB	Excellent	Strong signal with maximum data speeds
-10 dB to -15 dB	Good	Strong signal with good data speeds
-15 dB to -20 dB	Fair to poor	Reliable data speeds may be attained, but marginal data with drop-outs is possible. When this value gets close to -20, performance will drop drastically
<= -20 dB	No signal	Disconnection
SINR Signal-to-Interference-plus-Noise Ratio		
SINR	Signal strength	Description
>= 20 dB	Excellent	Strong signal with maximum data speeds
13 dB to 20 dB	Good	Strong signal with good data speeds
0 dB to 13 dB	Fair to poor	Reliable data speeds may be attained, but marginal data with drop-outs is possible. When this value gets close to 0, performance will drop drastically
<= 0 dB	No signal	Disconnection

Switching from T-Mobile to AT&T you will need to change your APN. This can be found by going to NETWORK > MOBILE

On this screen you will see the APN set for T-Mobile below.

Connection type: QMI ▾

Mode: NAT ▾

ⓘ Passthrough and Bridge modes are

APN: T-Mobile GPRS (fast.t) ▾ ☒ Auto

PIN number:

PUK code:

Dialing number: *99#

MTU: 1500

Service mode: Automatic ▾

Once you have made the change you need to click the SAVE button on the bottom right of the screen. You need to wait 5 minutes for it to reconfigure your modem then unplug for 60 seconds and plug back in.

NOTE: Your kit will sometimes have a white AT&T SIM card, but it is not active. You will need to call in to activate it before it will work.

Status ▾ Network ▾ Services ▾ System ▾

Mobile

- WAN
- LAN
- VLAN
- Wireless
- Firewall
- Routing
- Load Balancing

You will want to uncheck the Auto box and type in the word broadband as seen below.

Connection type: QMI ▾

Mode: NAT ▾

ⓘ Passthrough and Bridge modes are

APN: broadband ☐ Auto

PIN number:

PUK code:

Dialing number: *99#

MTU: 1500

Authentication method: None ▾

If you can't figure it out or if you have any questions, reach out using the support numbers.

Thank you for your business and we hope you enjoy our product.