

**Hello,**

I would just like to say thank you on behalf of the entire group as we appreciate your business. To get you settled I would like to share with you some of the resources that you can use to contact us for any internet support related issues and also to get the best out of your internet connection.

So as to manage your expectations let us explain what service we provide and what we do not provide.

**Our Satellite service gateways are in Europe and what we are supplying you is a connection to that gateway. It is important to understand that we supply a connection to the internet or the world wide web as it is known. We do not supply or support the world wide web and have no influence over its performance or politics.**

Please also bear in mind that every internet connection is a shared resource with the world at large and internet usage is now growing at an unprecedented rate. As a result there will always be occasional bottlenecks which will increase the further away your connection is to Europe. These bottlenecks will sometimes cause unpredictable behaviour, however due to the self healing nature of the internet most speed or connection issues should resolve themselves in a few minutes.

Our staff are accredited in Satellite space technology and TCP broadband networking. They do not have any IT skills or accreditation in IT. **We therefore do not offer any IT support or configuration services.** Your PC operating systems and application support should be provided by accredited IT technicians.

Our standards of support are very high and we are the only company that provides a service level agreement on both Domestic and Enterprise packages. In order for you to benefit from those standards of support you must comply with the support procedures in this document. They are provided for your benefit and a quick resolution to any challenges that you may face.

**If your internet is completely off then here are some tips that may help you fix the problem quickly:**

1. On the Hughes modem please observe the flashing lights on the front and make a note of which are on or off.  
If they are all on and some are flashing then there is a good chance the internet is fine.
2. Turn the power to the router pictured here off and then back on. This will clear any faults or faulty software updates. If the system is now working properly then no further action needs to be taken.
3. Connect a cable directly to the Modem and a laptop. Can you browse and speedtest OK?  
If so then there is probably a problem with your WiFi router.



Please remember if you call for assistance we will need you to be in front of a PC that is connected to the modem. We cannot assist you with trouble shooting if you are not at the premises.

**To receive a rapid response please follow the support steps below.**

If you are an Enterprise customer or have a service level agreement or support contract with us then please use your dedicated support email, this will ensure that the appropriate dedicated staff are alerted all responses are time stamped and compliant with your SLA.

If you are a home or SOHO customer and do not have a support contract then we will try and resolve your support issue promptly. First we will remotely check that your internet is functioning correctly and you will be asked to run some tests. If you are unable to run the tests we have requested then we can attend your site and run them for you. This service will be charged for at a nominal hourly rate and a KM charge. You will need to accept a quotation before we can visit your site.

In the event that your hardware is installed by third parties or is purchased and over the 12 month warranty period then you should consult with an IT support company.

If you do not have a dedicated SLA or access to your email or support manager then please use any of the methods described below.

**By email [helpdesk@swazisat.com](mailto:helpdesk@swazisat.com)**

Please use the email above, this will ensure that all of our technicians have visibility of your support question and will assist you as soon as we are able. You may also email [support@swazisat.com](mailto:support@swazisat.com) but this email is not audited by a service level agreement and should only be used if the issue is not time sensitive.

**By Telephone:**

If you have a dedicated manager then you can contact them by the number provided. Alternatively you can call +268 78 08 18 18 and follow the prompts. If you are directed to an answerphone please leave a detailed message as this will be emailed to the support team.

It is most important that you leave an email address in your message as this will enable one of our support team to raise a support ticket on your behalf.

**By Facebook.**

We have a Facebook connector that will enable you to message us through Facebook. One of our team will then raise a support ticket on your behalf.

**Important Notice.**

Please always try to give us as much detail about your issue, that we can ensure that the most appropriate technician is directed to you and will assist in bringing your problem to a speedy resolution. Remember the most important things to have done before you call regarding internet performance.

1. Check you have used less than 50% of your monthly data quota here <https://client.konnect.com>
2. Ensure that the testing computer is connected to the router by a cable.
3. Perform the speedtest for SOHO at <https://speedprobe.konnect.com>  
Or the speedtest for MiMo <http://speedtest.frankfurt.linode.com/>
4. Have your modem ESN number handy (Its on the home page of the modem page 192.168.0.1)

**Please communicate these 4 points on any support ticket or support correspondence.**

## **A Cautionary Note on WiFi connections**

Many people confuse the internet with WiFi . They are not the same thing. The internet is your connection to millions of computers on the world wide web. These computers are all connected by cables of some sort or another.

WiFi is the wireless connection that allows you the convenience of connecting your mobile devices like laptops and phones without having any cables connected.

**The WiFi signalling technology due to its nature will always slightly or totally slow down your connection** depending on the quality of the wireless signal and the components and health of the WiFi device that is in your laptop , phone or other wireless device.

We do sell WiFi systems, these however are for commercial use and are more expensive and will be itemised on your bill as an “Access Point”. If however you have been issued with a free router that is fitted with a WiFi system then this is simply a domestic WiFi signal for convenience only and will have a limited performance and only support 10 – 15 connections.

These domestic wireless signals will propagate erratically throughout a building so unless you are within 5 Metres of the wireless router and can see it there is a good chance the signal will be degraded or unreachable. We make no guarantees of the performance of any free WiFi components in your system.

**For best performance or to check the health of your system, always plug directly into the router with a cable.**

### **A Cautionary Note regarding Latency (Ping times)**

Satellite based internet connection will have slightly higher latency than terrestrial systems, in most cases this will not be noticed such as web browsing and streaming. Some software however may not be compatible such as live action game playing and some VPN packages.

### **A Cautionary Note regarding VPN's**

A VPN is an application, for it to work correctly it must be configured to take into account the 650ms of latency that is introduced by the Satellite network. Alternatively employ the low latency option.

### **Low Latency option**

If you require some of your applications to use a low latency link then we have a component that directs this traffic over the 4G networks and will resolve any latency issues. This is included in the Mimo bundles but can also be purchased separately at a very reasonable rate.

### **A Cautionary Note regarding Speedtest sites.**

Before doing any speedtest always remember if you are connected wirelessly your speedtest will show your internet speed Minus any bottlenecks on your wireless channel. **It is always best to use a wired connection for speed tests.**

Your internet connection comes from Europe using a single hop from a satellite 38,000 Km in geosynchronous orbit. However we are a registered Afrinic Internet service provider and as such are issued with an IP address range that is Geocoded to Eswatini and South Africa. This is good for browsing as your browser and search results will be relevant to this country.

Having your IP address geocoded to Africa will sometimes cause speedtests to select a speedtest server in Africa. This will mean that your speed test not only tests the speed of the link but also then tests all of the

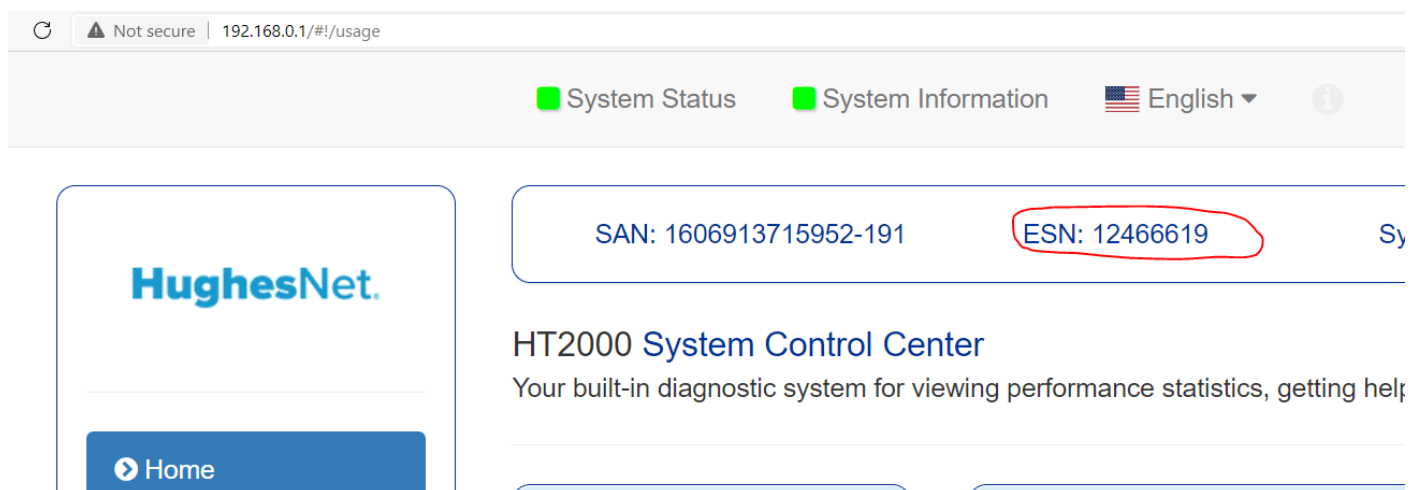
unknown transit cables and companies between Europe and Africa. **Wherever possible always choose a speedtest server that is in Europe (Frankfurt is best)**

Fast.com This site is hosted by Netflix in new York to test the Netflix connection viability and they are currently suffering oversubscription issues on their servers so some ISPgateway speeds have been throttled to approximately 4 Mbs per connection.

### If you are not getting reliable speed tests

Please unplug your router from the Hughes modem and connect your PC or laptop directly with a cable and try the same tests again. If the speeds are correct with a direct connection to the hughes modem then the issue is most likely with your downstream network such as your WiFi , router or switch and needs to be looked at by an independent IT technician.

If the speeds are still poor with only your device connected to the Hughes modem directly please contact the helpdesk for further assistance and report your modem serial number. This is the number shown on the Modem home page (192.168.0.1) that is marked ESN (See the snip below)



The screenshot shows a web browser interface for the HughesNet modem system control center. The address bar displays "192.168.0.1/#!/usage". The page features a navigation bar with "System Status" and "System Information" buttons, and a language dropdown set to "English". On the left, there is a "HughesNet." logo and a "Home" button. On the right, the "SAN: 1606913715952-191" and "ESN: 12466619" are displayed, with the ESN value circled in red. Below this, the text reads "HT2000 System Control Center" and "Your built-in diagnostic system for viewing performance statistics, getting help".

On a final note about performance, if your internet performance is not meeting your demands please consult with us about providing a bonded service from multiple ISPs for greater reliability, lower latency, higher speed and guaranteed up-time.

Before raising a support issue please use the system health checks as shown below.  
By browsing to web page 192.168.0.1. you will see your Hughes modem management portal.

You should see that your system status is green and your SAN number displayed and your ESN number displayed. These are often used as the default password of your router (try both). Always report these numbers to us on any enquiry so that we can easily cross reference your subscription.  
Press the home button and the below page will display

The screenshot shows the Hughes modem management portal at 192.168.0.1/#!/usage. The page includes a navigation bar with 'System Status' (green), 'System Information', and 'English'. A central navigation menu has 'Home', 'Connectivity Test', and 'Built-In Self Test'. A 'Usage Status' section displays 'Service Plan Data' with a 90% remaining gauge (429.5 GB in plan, 385.4 GB remaining) and 'Bonus Zone' with a 99% remaining gauge (429.5 GB in plan, 426.9 GB remaining). A 'Data Tokens' section shows 0.0 MB remaining. A 'Usage Status' box is circled in blue, containing 'Allowance Resets' (26 days/10 hrs/27 mins), 'Data Tokens' (0.0 MB remaining), and 'Bonus Period Starts' (10 hrs/28 mins). A legend explains indicator colors: red for a problem, orange for FAP condition, yellow for degraded condition, and green for normal parameters. The page also shows ESN: 13370472 and Diagnostic Code: 0000-0000-0000-0165.

If the weather is or has been very stormy it would also be worth checking the signal strength of your system, simply click on the system status light and you will be taken to another parameters page where you can check your signal strength and any warnings that may be about degradation.

The signal should be above 70 and usually above 100 for optimal performance. If the level is persistently below 100 then this may indicate that the dish has moved in the wind or possibly some wildlife has taken up residence 😊. In such cases please give us a call so we can pay a site visit and correct the situation.

System Status System Information English

**HUGHES**  
An EchoStar Company

- Home
- Connectivity Test
- Built-In Self Test

SAN: DIP2000068951 ESN: 13370472 Diagnostic Code: 0000-0000-0000-0165

**System Summary**

State Code	0.0.0 -- Fully operational	✓
Summary Operational State	Up	✓
Usage Remaining	385.368 GB	✓

**System Status**

Satellite Receive Status	Up	✓
Satellite Transmit Status	Up	✓
LAN Status	Up 1G FD	✓
IP Gateway Association State	Associated (Data IPGW - Y3L27IGW11V1A002)	✓
TCP Acceleration	Up	✓
Web Acceleration	Up	✓
Suspension State	Not Suspended	✓
Software Download Status	Up to date	✓

**WAN Info**

Satellite Receive Signal Strength	121
Data Packets Received	54419792
Control Packets Received	56440748
Bursts Transmitted	13587863
Packets Transmitted	23638281

**LAN Info**

Packets Received	40647121
Packets Transmitted	57728447

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## Speedtests:

### For SOHO customers please use the tests below

If all system parameters look good then Please then do 3 speedtests from the gateway site.

<https://speedprobe.konnect.com>

To check your quota and usage please login using the email you gave us to your customer portal.

<https://client.konnect.com> You may need to perform a password reset the first time you access this portal

### MiMo and General third party speed test sites

If those speed tests are good then try <http://speedtest.frankfurt.linode.com/>

If you like to use <https://www.speedtest.net/> please ensure you select a server in Frankfurt as this will test the true internet connection speed. Other country servers will always show slower speeds as you are also measuring the speed of the internet gateways from Europe to wherever the server is hosted. There will often be congestion that is outside of our control.

## FAQ.

### **Q. Why am I not getting the speed I am paying for?**

**A. You are not paying for speed but rather a quota of data. The speed quoted is an indication of the best speed you should encounter in ideal conditions.**

As the internet is a shared resource and we have unprecedented and sometimes unexpected atmospheric changes you will inevitably experience changes in speed. We do however endeavour to ensure the best available speed is delivered. We guarantee 80% advertised speed 80% of the time on SoHo packages. We Guarantee 95% speed for 95% of the time on MiMo packages.

### **Q. My speedtest through the suggested portal is half what I signed up for?**

**A. Check that you have not used more than 50% of your allowance as this will step your speed to half.**

### **Q. Why is my status light on the Hughes control panel 192.168.0.1 showing degraded (Yellow)**

**A. Don't panic more often than not this is just the TCP accelerators being automatically turned off due to encrypted traffic. This will usually automatically reset when the encrypted traffic has stopped.**

### **Q. Why does my Realnet or EPTC mail not send?**

If you can receive your emails but you cannot send them and you are on a .sz domain, this is because the SMTP servers being used are not compatible with other ISP IP address ranges. This can easily be fixed.

Please check that you are on our network before making any changes. You may check your IP address on this website. <https://whatsmyip.com/>

If it is between '102.68.48.0 – 102.68.51.255' Then you may use our smtp server

**SMTP Server:** mail.smtp2go.com

**SMTP Port:** 2525

**Alternative ports:** 8025, 587, 80 or 25. TLS is available on the same ports.

SSL is available on ports 465, 8465 and 443.

You will not need a username and password as the SMTP server qualifies your mail by the sending IP address range of our network

**Here is a description of the fair access speed steps you may encounter on our unlimited plans.  
All unlimited plans will not cap, however the speed will be reduced at various stages of data usage.  
Upgrade the home or enterprise packages at any time by email or telephone no site visit is required.**

**SoHo 10 Mbs unlimited: Upload speed unthrottled always 3Mbs**

Fair access policy Speed Step rules:

After 125 Gigs used @ 10 Mbs speed will reduce to 2.5 Mbs

After 200 Gigs used speed will reduce to 1.0 Mbs

OFF peak period is 22:00 – 06:00 where a further 810 Gigs at 10 Mbs are available.

**SoHo 20 Mbs unlimited: Upload speed unthrottled always 3Mbs**

Fair access policy Speed Step rules:

After 125 Gigs used @ 20 Mbs speed will reduce to 5.0 Mbs

After 200 Gigs used speed will reduce to 2.0 Mbs

OFF peak period is 22:00 – 06:00 where a further 1620 Gigs at 20 Mbs are available

**SoHo 30 Mbs unlimited: Upload speed unthrottled always 5Mbs**

Fair access policy Speed Step rules:

After 125 Gigs used @ 30 Mbs speed will reduce to 10.0 Mbs

After 200 Gigs used speed will reduce to 4.0 Mbs

OFF peak period is 22:00 – 06:00 where a further 2430 Gigs at 30 Mbs are available

**SoHo 50 Mbs unlimited: Upload speed unthrottled always 5Mbs**

Fair access policy Speed Step rules:

After 200 Gigs used @ 50 Mbs speed will reduce to 15.0 Mbs

After 300 Gigs used speed will reduce to 5.0 Mbs

OFF peak period is 22:00 – 06:00 where a further 4050 Gigs at 50 Mbs are available

**Home10 10 Mbs unlimited: Upload speed unthrottled always 3Mbs**

Fair access policy Speed Step rules:

After 150 Gigs used @ 10 Mbs speed will reduce to 5.0 Mbs

After 250 Gigs used speed will reduce to 3.0 Mbs

After 300 Gigs used the speed will reduce to 1.0 Mbs thereafter (Unlimited)

OFF peak period is 00:00 – 06:00 where a further 300 Gigs at 10 Mbs are available

**Home20 20 Mbs unlimited: Upload speed unthrottled always 4 Mbs**

Fair access policy Speed Step rules:

After 200 Gigs used @ 20 Mbs speed will reduce to 10.0 Mbs

After 350 Gigs used speed will reduce to 5.0 Mbs

After 400 Gigs used the speed will reduce to 2.0 Mbs thereafter (Unlimited)

OFF peak period is 00:00 – 06:00 where a further 400 Gigs at 20 Mbs are available



## Additional Technical information for IT technicians

### SoHo and Enterprise

You are automatically Given a Public IP address. You can check this at <https://whatsmyip.com>

### Lan IP Address ranges:

The Hughes satellite modem will issue a /24 IP private address range by DHCP.

**Do not use address range 192.168.0.nn Also known as 192.168.0.0/24 on any of your your local or downstream equipment**

192.168.0.1 is both the address for the usage and diagnostics page it is also the local cacheing DNS server. If you introduce the same subnet downstream then this will cause unpredictable results.

### Inbound Traffic

If you require inbound traffic on your router then please change the WAN address to a fixed IP of 192.168.0.200 with a subnet mask 255.255.255.0 and Gateway and DNS servers to 192.168.0.1 All traffic directed to your Public IP address will then arrive on the WAN port of your router.

**Do not use address range 192.168.0.1 on any your your local or downstream equipment**

192.168.0.1 is both the address for the usage and diagnostics page, the gateway (Modem) and it is also the local cacheing DNS server. If you use the same address this will cause unpredictable results.

**By signing I acknowledge and understand the the above support document:**

**Please ensure a hard copy of this document is left in a convenient place so that all stakeholders understand the support procedures.**

<b>Name</b>	<b>Signature</b>
<b>Business name :</b>	<b>Date of Birth</b>
<b>TIN Number or ID number</b>	<b>Date        /        /</b>