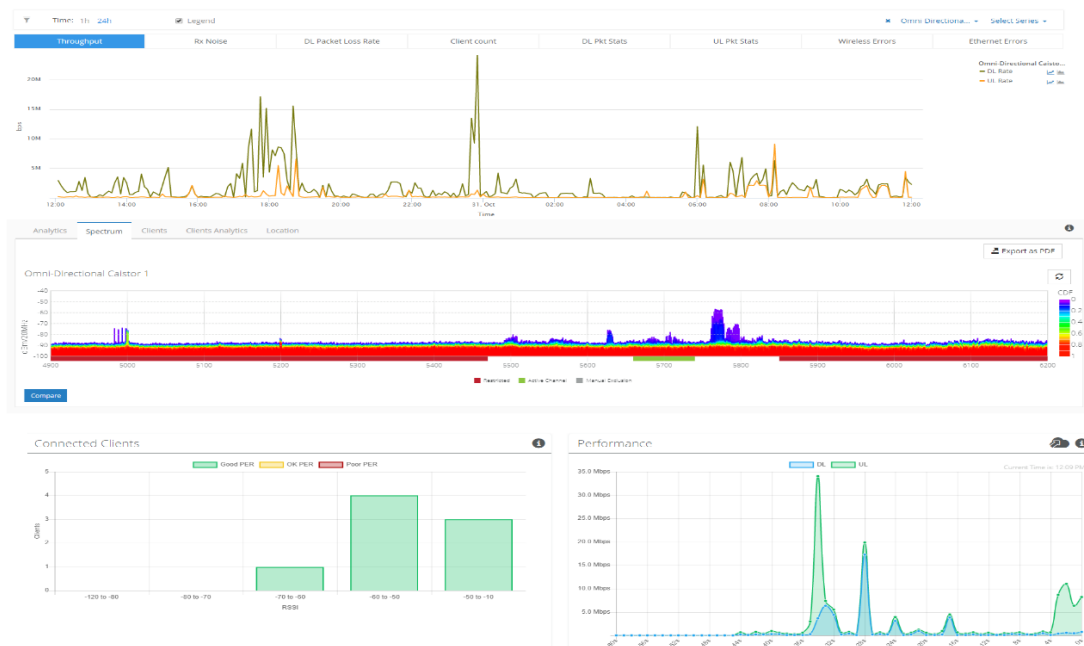




Network Standards

Network Monitoring

- Our monitoring platform continuously monitors the status of the core Backhaul and Access Layers, and includes automated alerting on all core infrastructure.
- Core Network- Mimosa by Airspan
- Residential Customers – Mimosa by Airspan, Sonar Pulse
- Business Customers – Mimosa Airspan, Sonar Pulse
- Every device on the network is monitored 24/7 x 365 with historical data and graphic available to Network Engineers
- Example monitoring screens:



Contention Planning

- When designing our system we take into account the likely numbers of customers for both our residential and business services. A maximum limit is then established to ensure that we do not exceed the number of customers than can be connected through the particular section of our core network.
- If in the event that our infrastructure reaches capacity, we investigate solutions through upgrading the equipment used for that section.
- We monitor capacity through our monitoring systems to identify any heavy load areas prior to any reduction in service to our customers.
- For Private Link and Business SLA, contention is defined via the SLA agreement with the customer.

Speed Measurement

- During our installation handover, our engineers will use a company device to run a speed test with a public speed test server.
- The result of the speed test will be given in Megabits per second (Mbps). This differs from Megabytes per second (MBps); Megabytes per second (MBps) refers to how much of a file has been upload/downloaded, whereas Mbps is predominantly used in measuring the speed of the internet connection.
- Speed testing over WiFi should be avoided, as this may provide an inaccurate reading. The device testing the speed should therefore be plugged directly into the router, and no other devices should be connected to the internet during speed testing.

Network Uptime

- We continually monitor through monitoring systems core network uptime and availability. This includes all routers, nodes and network switches across our network.
- We take great care to ensure that at critical locations there is no single point of failure.
- For any impacting events on network uptime, we complete an RFO (Reason for Outage) document for each event.

Fault Management Procedures

- We have a set procedure for dealing with network issues, within the procedure different types of faults are defined. For example, an issue with a repeater site would be treated with greater urgency / response than a residential customer.
- We have a system in place to monitor the progress of faults and the conclusion of each fault. This is then available to all members of the team, to ensure that any improvements that could be made are implemented.

Support Procedure

- We have a customer facing web page on our website for customers to find out how to receive support from us – https://quantumairfibre.com/for_home/support/
- We ensure that we inform customers, verbally and by email of any additional charges before an engineer is booked to carry out any work.
- Customers do not have to click more than twice from our website to reach this web page.