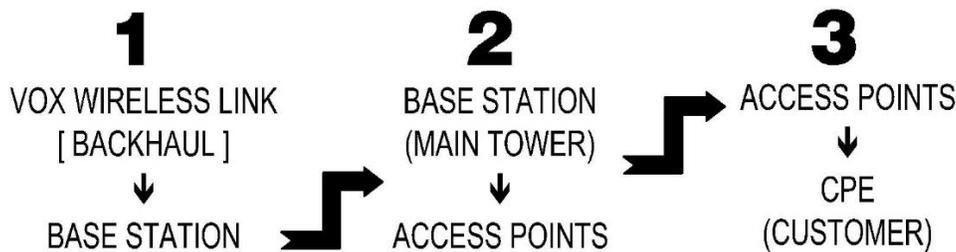




WIRELESS NETWORK



KIS WIRELESS POINT-TO-MULTIPOINT NETWORK uses fixed wireless equipment to connect its customers and scalable, interference-resistant, high-speed connectivity in Klerksdorp. The platform combines exceptional reliability with robust performance, scalability, multiple layers of security, ease-of-use, accelerated deployment and remarkable affordability.



1. BASE STATION

- Base Station (Main Tower) at original Vox Premises receives symmetrical Vox Wireless link from Vox Telecom
- Kis Network uses the 5GHz unlicensed band which offers plentiful spectrum, and works well for long-distance links. By using only Advanced Technology Equipment the obstacle of the frequency's difficulty passing through obstacles has been overcome. Some of the advanced features in our chosen equipment
 - 4 x Antennas gives Base Station 360° view to our Access Points. Antennas have symmetrical beams and is designed to significantly decrease interference
 - MIMO Technology radio features enhanced receiver performance and breakthrough speed. The device was specifically designed for outdoor PtP bridging and PtMP Airmax base-station applications.
 - Unlike standard WiFi protocol, the advanced protocol allows each client to send and receive data using pre-designated time slots scheduled by an intelligent AP controller. This "time slot" method eliminates hidden node collisions and maximises air time efficiency. It provides many performance improvements in latency, throughput, and scalability compared to all other outdoor systems in its class.
 - Industrial grade super-fast router with cutting edge 16 core CPU. If you need many millions of packets per second - Cloud Core Router is your best choice. The cloud core router is powered by a fully featured routing operating system. Dynamic routing, hotspot, firewall, MPLS, VPN, advanced quality of service, load balancing and bonding, real-time configuration and monitoring - just a few of the vast number of features supported by RouterOS.

2. ACCESS POINTS

- Base Station transmits data to one of our 5 existing Access Points which then transmits to the CPE (PtMP)
- Benefits of the PtMP-design includes:
 - Circumvent congested network traffic via the use of a base station and multiple Access Points
 - Shorter distance from Access points to CPE (customer) reduce data travel distance and therefor ensure Low Latency Speed
 - Availability of a second circuit that accommodates the connection failover which provides additional protection against extended downtimes.

3. CPE

- A wireless CPE is installed on your premises.
- The mounted CPE needs to be installed in such a location as to have a clear line of sight to one of our APs. From there the signal is routed through our network to provide the specific services you require.
- The type of Standard Client Premises technology of equipment included in the Standard Installation provide near-line-of-site (nLOS) coverage and longer distance to Access Points that present significant obstruction challenges.

