The QuadraFlex Range

At Datasat, we know that every network is different. Every WiFi access point is different. We deliver wireless networks based on the best technology for the task - the QuadraFlex range.

The QuadraFlex range was created with the core connectivity elements in mind: Reliability, Resilience, Versatility, Ease of use, Security, and Scalability. Key features include:

Power of four
The QuadraFlex DN200 can run four WiFi streams concurrently, with a maximum throughput of 300Mbps on each radio, or 1200Mbps aggregate. This means, we can design networks that are more versatile, more manageable and ones that don't interfere with each other. The networks we design have resilience built into them. The four stream capability also gives our customers the ability to expand and add more services, making scalability and growth possible.

High Power
Our QuadraFlex series of products use high power WiFi radios, which make use of every possible milliwatt of power available, to make sure a fully efficient link budget is executed. However, power is not everything. Our wireless solutions perform equally across along the entire range and not just at the peak points. This allows to easily extend the range of our networks.

802.11 a/b/g/n Dual Band 2.4GHz & 5GHz
Featuring the latest 802.11 standards, QuadraFlex solutions are also backwards compatible with all popular standards. Our independent radios can work in the 2.4GHz or 5GHz band. Multiple radios per unit give us the freedom to run legacy (802.11a/b/g) and 802.11n networks simultaneously so that independent QoS can be provided.

> ### End to end turnkey service provision

A group of three companies, Datasat provides the full end to end solution to our customer to make sure it gets done. In most cases the customer is usually only interested in the solution, and not the method. With expertise in satellite, fibre and wireless technology, we aim to provide infrastructure that fits. We also realise the key to any infrastructure is running effective services. That is why we supply and support major services like surveillance, mVoIP, captive portals, position based marketing and data offloading.
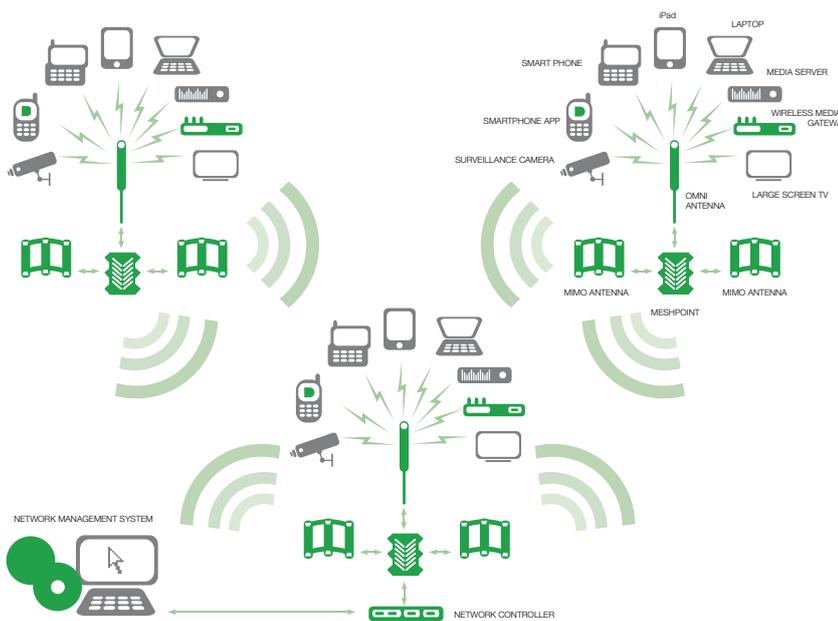
MiMo 2x2:2 300Mbps

The QuadraFlex range features MiMo technology, which makes use of multiple streams of data to get every additional bit of throughput possible into the air interface. Two transmit streams and two receive streams and the diversity available make sure multipath reflections and fading work to your advantage. Low loss connectors and cabling maximises power efficiency. Every bit of the RF power gets to the antenna. In tests published by major test houses, the performance improvement of 3x3:2 vs 2x2:2 is negligible compared to the additional investment in equipment, antennae and design needed for 3x3:2 installations.

Dual Core

The number of interfaces and throughput are important to network design. However, if the processor is overloaded, network performance will suffer regardless of these factors. To overcome this challenge, our QuadraFlex products have dual core processors, because one is rarely enough.

Gigabit Networking

With up to 1.2Gbps of aggregate throughput, the QuadraFlex radios have their work cut out. To make sure all this data throughput goodness is available to the actual user, we have equipped our QuadraFlex series with with two Gigabit Ethernet ports. No point having all that throughput in a unit, and have a 100 Mbps bottleneck.

Layer 3 Management

The Datasat DN100 is a true Layer 3 device. Operating in a controllerless environment, it brings routing, Firewall and QoS policies to the edge of the network. We call this the Distributed Intelligence Architecture, which improves bandwidth, reach and provides a smaller attack surface area for intruders. In addition, Layer 3 designed networks have native network segregation which ensures better data security and better network control. Keeping the intelligence at the edge also prevents bandwidth clogging associated with Layer 2 devices where data flows through a central router.

Independent Antenna support

The QuadraFlex series is designed to support any of the dozen or so antennas officially registered with the radio. This list is constantly being updated. Antennae of different types and gains varying from 2dBi to 34dBi are supported. This provides the flexibility of running different types of networks, without getting tied down to an in-built antenna. It also allows for simultaneous use of the 5GHz band on all interfaces, or 2.4Ghz band on all interfaces or vice versa.

Outdoor and extreme

We know the cost of rackspace and associated issues with indoor installations. Our products have minimal rack footprint to deliver a full outdoor solution. Whether it is the IP67 design to be water and dust protected, or the extended heat protection due to the unique heat reflective paint, we have engineered robustness to the component level.

Contact us today with your communications requirements on +44 (0)118 934 9199 or email us at sales@datasat.com