

# Intelligent Wireless Networks for Airports



**Airport operators must provide flexible communications infrastructure that drive business efficiency, reduce costs and create new revenue potential. Datasat deliver a single, intelligent wireless network solution that integrates voice, video and data traffic to securely connect airport, airline and tenant operations.**

The communications infrastructure of an airport is highly complex. In addition to the business and operational systems of the airport operator and the carriers, airport tenants require business, mobile and POS/promotional systems while passengers now expect continuous high bandwidth connectivity wherever they are. However, most airports have seen the development of multiple single-use networks to meet different business and operational needs. This has created growing management and cost overheads while increasing the complexity and time involved to introduce new services.

Datasat has created a range of intelligent wireless solutions that address these issues to enable an airport operator to provide an integrated wireless infrastructure offering better service and security for employees, airlines, tenants and passengers. It integrates seamlessly with existing, intelligent Layer 3 wired infrastructure to bring the advantages of Layer 3 management on WiFi to the network edge.

Key benefits include:

- **Operational efficiency**  
By delivering a single, multi-service infrastructure, the airport operator can link disparate internal systems while providing a secure network to carry traffic from airlines and tenants. This reduces the amount of physical infrastructure required – a benefit that is further enhanced as the wireless systems from Datasat are designed to provide extended coverage with fewer wireless access points than competitive systems.

## > DATASAT DELIVERS

- Unprecedented coverage, both indoors and out, requiring fewer Access Points than standard WiFi infrastructure and simplifying network planning, management and maintenance.
- Unique public and enterprise traffic share of the same network. It effectively and securely segregates Enterprise traffic from public applications, using IP layer traffic management to allow different applications, users or devices to be given individual SLAs across the WiFi network.
- WiFi network to extend beyond the building interior, with rugged construction and superior radio performance offering exceptional outdoor coverage for surveillance, logistics, maintenance operations and mobile communications.
- Optimised HD video and audio delivery to WiFi enabled devices allowing information or promotional messages to be delivered to handsets, large screen displays, laptops or tablets.
- State of the art link sharing techniques intelligently allocate bandwidth according to the network management priorities & airtime.
- Carrier grade reliability, meaning fewer maintenance and repair windows.



### > New revenue streams

Airport operators can deliver new revenue-generating services to airlines and tenants. From simple network access to public hotspots, these services can be provided at very little cost. In addition, the network allows retail tenants to accept mobile payments while improving POS and stocktaking. End devices such as digital barriers can be easily added to the network infrastructure.

- **Improved performance**

The Datasat DN200 wireless system is a true Layer 3 device. Operating in a controllerless environment, the DN200 brings routing, Firewall and QoS policies to the edge of the network. This Distributed Intelligence Architecture 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 network control. This enables the NMS to be more of a monitoring tool and less of a management tool. Keeping intelligence distributed at the edge also prevents bandwidth clogging associated with central routing designs used in Layer 2 devices. This high power router inadvertently becomes the single point of failure for the network and is always a target for cyber attackers.

- **Network reliability**

Datasat delivers a self healing wireless network optimised for video and rich media network traffic. Its network equipment is ruggedised and designed to operate in the harshest environmental condition. In addition, Datasat

wireless systems come with a versatile range of choices for configuration and a variety of power options for rapid deploy and low to no touch operation.

- **Multi-service capabilities**

Airport, airline and tenant systems can seamlessly and securely co-exist on the same network. Terminal and airside applications – such as baggage handling and aeroplane maintenance – are delivered in a responsive and secure network environment. The network provides seamless and secure integration with a range of end-point devices - such as IP CCTV cameras – and data acquisition formats including RFID.

- **Improved passenger experience**

Public Internet access can be provisioned over the wireless network to create hotspots through the building. Layer 3 management reduces the need for multiple SSIDs so passengers experience a seamless voice and data roaming service as they pass through the airport. In addition, the network has the capability to provide mobile VoIP calls. Intelligent network management enables dynamic bandwidth allocation to an individual user level.

- **Single point of management**

Datasat provides a single management solution to ensure the airport has one point of contact for all network issues.

Contact us today with your communications requirements on +44 (0)1707 665 320 or email us at [sales@datasat.com](mailto:sales@datasat.com)