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Make ideas real



R&S®QPS201 MAKES AIR TRAVEL SAFER AT HEATHROW AIRPORT

Highest precision, simple touchscreen operation, reduced wait times and enhanced security checkpoints: R&S®QPS201

AT A GLANCE

- ► Customer: Heathrow Airport Holdings Limited
- ➤ Tasks and requirements: Security control in critical infrastructures, with very high detection and low false alarm rates, providing positive passenger experience; reliable detection of metallic, non-metallic and liquid objects
- ► Project scope: Program to increase security at Heathrow Airport; project includes system design, customization, implementation, training, support and services



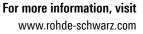
The customer

Heathrow Airport is Britain's aviation hub and one of the world's busiest airports that welcomed more than 80.1 million passengers before the pandemic. It serves 203 destinations in 84 countries and plays host to 84 airlines. Heathrow Airport is owned by Heathrow Airport Holdings Limited.

Customer situation and requirements

R&S®QPS201 quick personnel security scanners are planned to be rolled out at all passenger and staff security checkpoints across the airport. Installation of the R&S®QPS201 scanners will enable the airport to achieve its vision of a secure and safe environment while providing a positive experience for passengers by making their journey through the airport as fast and efficient as possible. With security scanners already in use, Heathrow Airport sought another solution that fully addressed current security and

throughput requirements. The Rohde & Schwarz solution is being continuously enhanced and improved to meet future security needs, with open architecture built into the core to promote interoperability and innovation. The customer was impressed with the Rohde & Schwarz commitment to upgrade its scanners with new algorithms after they have entered service. The scanners allow an easy, handsdown posture for scanning, which is comfortable while at the same time ensuring effective screening for safety and security. A full security scan is completed in seconds, and any suspect objects are marked on a neutral, symbolic body graphic to preserve passenger privacy.







Rohde & Schwarz solution

The R&S®QPS201 is designed to meet the requirements of high throughput and reliable detection. The scanners at Heathrow Airport were an instant hit with passengers and staff. They noticeably shortened the time taken to complete a scan and doubled the screening throughput. Airport staff particularly welcome the high throughput and have confidence that if the scanner displays alarm results on the human-like avatar, there is something there to find.

The R&S®QPS201 security scanner delivers high-performance security screening using safe, mmWave radio frequency technology for rapid, accurate and automatic passenger screening in order to detect concealed threats.

The R&S®QPS201 can operate in peak mode. For this purpose, up to four remote resolution stations are connected to the device. The scanner operator simply performs the scan and then sends the passenger to one of the free remote resolution stations. Here, the scan result is displayed and the result analyzed by another operator.

Results and achievements

The R&S®QPS201 security scanner, in use at some of the world's busiest airports since 2017, has been approved by the European Civil Aviation Conference (ECAC) and has been certified by the Transportation Security Administration (TSA) as meeting stringent detection requirements.

Heathrow Airport not only delivers an optimum user experience for passengers undergoing security screening today, but is well prepared to meet new, more stringent security standards that will become mandatory in the near future.

Heathrow Airport chose the R&S®QPS201 based on performance tests revealing very high detection capability and low false alarm rates. Rohde&Schwarz engineers provided data files with suspect items that were displayed on a symbolic body graphic, showing no gender or body contours, at exceptionally high scan rates and resolution. It showed that the R&S®QPS201 is able to recognize small objects hidden on a person with very high detection probability.

The tight encapsulated spaces of legacy security scanners have become a thing of the past. The sleek, space-saving flat panels can be integrated into the checkpoint area without barriers. The open design provides security personnel with an unobstructed checkpoint view. It also saves critical security space since persons in wheelchairs can pass through the scanner, eliminating the need for a separate gate. The compact yet open design facilitates rapid, high-volume screening to reduce queues and wait times. When using four resolution stations and sufficient staff, a single R&S*QPS201 system is able to handle more than 900 passengers per hour. A simple touchscreen interface and the absence of any moving parts simplify the screening process and also make maintenance quick and simple.

the R&S®QPS201, reinforcing our position as the go-to solution for airports around the world. This scanner addresses the three key airport requirements: high accuracy of threat detection, low frequency of false alarms to minimize time-consuming manual pat-downs, and high

"Heathrow Airport is the latest leading international airport to deploy

throughput to reduce passenger wait times even during busy periods."

Frank Mackel, Vice President Sales Europe, Rohde & Schwarz

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R&S®OPS201 makes air travel safer at Heathrow Airport
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