

Istanbul Grand Airport

Turkey



Improving Airport Passenger Experience with Contactless Temperature Monitoring

Improved Passenger Flow – Staff Productivity – Future Proofed

IGA (Istanbul Grand Airport) was opened in 2018 to redevelop and operate Istanbul Airport for 25 years. The hub airport - which is 35km outside the city – already has two runways and a terminal with a passenger capacity of 90 million. Once redeveloped, the airport will serve over 300 destinations and handle 200 million passengers a year.

Risks & Challenges

When the COVID-19 pandemic hit the world, it impacted the aviation industry particularly severely. Airports were seen as places that were particularly susceptible to spreading COVID-19. IGA had to find an efficient and practical way to minimize this risk, ensure passengers could pass through the airport safely, and keep the airport and air travel going as much as possible during lockdown. Istanbul Airport is different from many other large hub airports in that security checks take place before passengers and visitors enter its terminal building. There are seven separate entrances, each manned by a team of security guards. To spot anyone coming into the airport with a high temperature range, guards used handheld devices to measure each person. But this was slow, inefficient and, because of the high volume of people, the devices would start to overheat and not work effectively.

Solutions & Benefits

IGA considered several different solutions, but finally decided on one from MOBOTIX. It was chosen for the knowledge and experience of the team, and the flexibility and scalability of the MOBOTIX technology for additional applications such as high-performance perimeter protection. IGA's technical team was particularly impressed with the accuracy and intelligence of the MOBOTIX thermal camera technology and its ability to manage even the most critical challenges. The aesthetic design of the terminal includes several glass screens which would usually interfere with many „AI Thermal Camera” readings. However, MOBOTIX cameras are able to differentiate between a human and their reflection, which is an important factor to work efficiently at terminal gates.

Key Data

Customer

Istanbul Grand Airport

Sector

Transportation/Aviation

Time Frame

2020

Products

7 M16 Thermal TR

MxManagementCenter (MxMC)



The solution comprises seven MOBOTIX thermal imaging cameras one at each terminal entrance. The cameras connect to a screen at the security desk running the MOBOTIX Management Center (MxMC). Although each camera functions as an intelligent, standalone unit, the MOBOTIX solution also integrates seamlessly with the airport wide video management system provided by Genetec, a MOBOTIX technology partner, so the airport management has centralised control of all its CCTV applications.

The cameras monitor people as they pass through the entrances to identify ranges of temperatures. Heat thresholds and parameters can be customised as required. When the system signals an alert as a first line of warning, security guards draw the individual aside for further investigation using a medical temperature device. They could also be directed to the airport's COVID-19 testing centre which is also used to check incoming passengers.

Using the MOBOTIX system enables the airport to increase flow into and through the airport faster than before. The cameras act instantly when someone has a heat abnormality allowing others to carry on without interference. The system handles large traffic flows without slowing down or impacting performance. The MOBOTIX solution forms part of a package of defence measures - including UV light disinfection, wearing masks and social distancing - that the airport has put in place.

One of the key requirements of IGA was leveraging the technology after the pandemic. The existing cameras will stay in place as an early fire warning system. The cameras can identify a potential fire hazard up to 300 metres in complete darkness long before there is smell, smoke or visible fire. For example, they can spot equipment inside a unit or room overheating, alerting staff to deal with it before it turns into a fire. Other applications could include motion detection in the dark.

Summary

The MOBOTIX solution at Istanbul Airport has helped the airport improve the way it has dealt with the COVID-19 pandemic, improving passenger flow, mitigating risk and enabling people to travel as efficiently and normally as possible. The cameras have improved productivity and efficiency for entrance staff since they no longer have to measure every person coming into the airport. Passengers also get a better experience because there is less delay. IGA is now working with MOBOTIX to identify other areas around the airport site where MOBOTIX thermal cameras can be located.



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