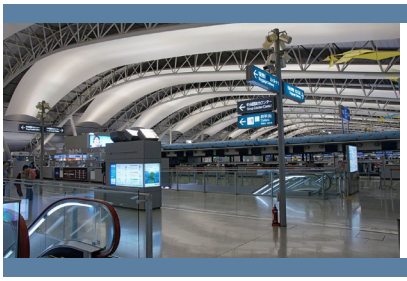
CASE SUMMARY

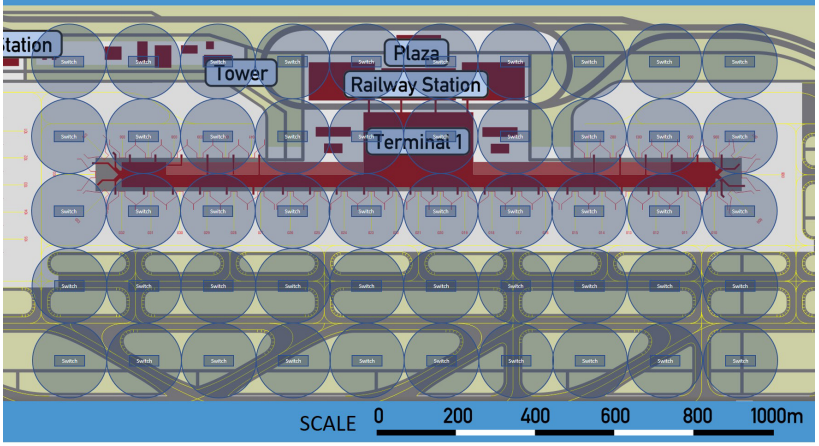


Kansai Airport Uses NVTP FLEX Technology to save over $75,000 and Accelerate Deployment of Person Tracking Sensors

Kansai International Airport, located near Osaka, Japan, was opened over 20 years ago and is now used as a gateway into Japan. In recent years, overcrowding in the international terminal facilities has become a major issue, causing a need for a system of Person Tracking Sensors (PTS) to monitor traffic within the airport. The system, comprised of over 250 sensors, allows for real-time tracking of all persons in the airport without using facial authentication, allowing the airport to manage the flow of traffic in congested areas and operate more efficiently. However, long reach requirements, time constraints, minimizing downtime and business disruption posed significant barriers to the deployment of the new system.

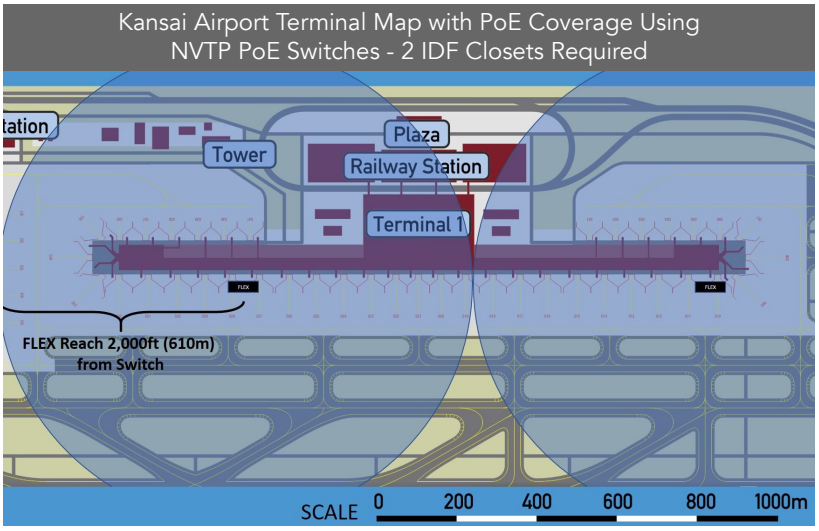
Challenge: The customer needed to better monitor the flow of traffic within the busy airport and planned to install a system of state-of-the-art Switzerland Xovis PTS. The implementation of the system posed many barriers to the 24-hour operation that services over 25 million customers per year. Each sensor covers a range of 100m^2 and would need to be mounted into the ceiling. The international departures terminals – where many of the sensors would be placed, had exposed steel beams as opposed to a closed ceiling, and even though the sensors could be installed on the steel beams, there was no space to place a power socket, or a switch to relay PoE to the sensors. This posed a significant barrier to the project as the distance between the IDF closets where the network switches would be housed, and the many sensors, far exceeded the 100m range of standard Ethernet switches, and there was no way to install the switches any closer to the sensors. The customer needed a simplistic, robust solution to complete the deployment of the sensors while also ensuring a quick, cost-efficient and non-disruptive roll-out.

Kansai Airport Terminal Map with PoE Coverage Using Standard PoE Switches - Over 50 IDF Closets Required



Solution: Reseller Nissho Electronics introduced NVT Phybridge FLEX24 technology to decision makers at Kansai Airport, a year prior to the outset of the project. When the time came to find a solution to enable the deployment of the sensors, FLEX24 was the clear choice. The FLEX24 switch has the ability to deliver Ethernet and PoE++ over multiple pairs of UTP wire, up to distances of 2,000ft (610m) – six times farther than the reach of standard Ethernet switches. The airport decided to engage in a no-obligation proof of concept to test the capabilities of the FLEX in their ModernLAN* environment. Immediately the customer recognized how the long reach PoE ability of the FLEX24 switch can greatly simplifying infrastructure requirements. The FLEX24 solution completely eliminated the complexities and frustrations of an infrastructure upgrade, and provided the flexibility to connect the sensors six times farther than standard Ethernet – with no extra IDF closets required along the way.

Kansai Airport Terminal Map with PoE Coverage Using NVTP PoE Switches - 2 IDF Closets Required



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Result: "Without FLEX, we would have had to change the entire deployment plan. Thanks to the NVTP FLEX solution, all of the sensors were installed by simply laying new CAT5 UTP wiring, allowing us to finish the project in a much shorter period of time and at a much lower cost," said Yuji Taniguchi – IT Department Project Group, Kansai Airport Co., Ltd. According to Taniguchi, the airport was able to complete the installation in just three months, experiencing minimal disruption to their 24 hour operations, and save over $75,000 by utilizing NVTP FLEX24 technology. The FLEX24 long reach PoE solution helped to facilitate a smoother and more efficient deployment of the PTS in both the Arrivals and Departures terminals. "If you compare the cost of the FLEX solution, with the cost of installing optical wiring and the construction of power supply outlets, or using traditional PoE switches, it is clear that FLEX allowed for a much more cost-effective installation of the sensors, and shortened the deployment time greatly. The FLEX definitely solved all of the problems we had with regards to the installation of the sensors," commented Taniguchi. "An additional benefit we realized is the long reach capabilities of FLEX allowed us to reduce IDF closet requirements by 90% simplifying and reducing the costs to establish backup power (UPS) in the case of power outage." With the FLEX, Kansai was able to deploy their new system without risk, disruption, network complexity, and high costs. This successful project was also recognized by IoT^{G} (IoT to the Power of Green), an association of businesses that support and recognize responsible digital transformations. Using an innovative analytic tool to measure environmental responsibility (viewable at www.iot-g.com), the Kansai traffic sensor project received a 5 star rating.

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