

Adding Security and Communication to Railroad Stations



THE SCENARIO

Attendants at this state's DOT (department of transportation) managed multiple lines of transit. These included a metro bus line, an underground subway, and their largest mode of transportation, a railroad system with over three million annual passengers. The railroad connected five major cities, making it highly used by civilians and tourists who wanted to quickly travel between popular destinations.

There were two attended railroad stations at either end of the route and three unattended stations in between. Located at the unattended stations were automatic ticket vending machines for passengers to self-serve. If there were issues with the vending machines, or if passengers had questions, there was not an easy way to request help from these unattended railroad stations. And without regular supervision, the unattended stations were prone to vandalism too.

Railroad management wanted a system with the capability to monitor the unattended stations from either of the two attended locations. They wanted the same system to provide a method for passengers to reach the attendants if the ticket vending machines malfunctioned or if they had questions to ask.

Railroad attendants used the IP intercom to regularly monitor the unattended stations, which helped deter crime at those locations.

THE SOLUTION

After reading a case study featuring the Shonan Monorail in Japan, directors at the DOT selected a similar IP intercom solution, but with upgraded equipment. They also installed a surveillance system that integrated with the intercom.

Compact, vandal-resistant intercoms were installed at the vending machines. These provided passengers with a simple way to call an attendant if they needed assistance. The intercoms had a touchless call sensor, which lowered the risk of spreading germs at these high-traffic stations.

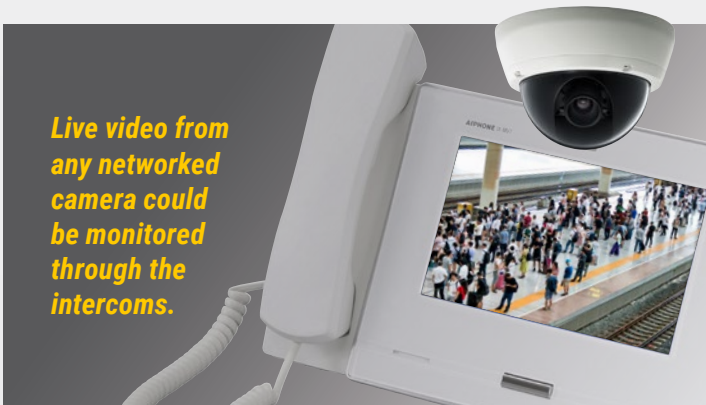
Each attended railroad station had a video intercom to answer calls from passengers. With the same touchscreen intercom, attendants could switch to the third-party cameras and oversee the unattended stations, which helped deter criminal activity.



Unattended Railroad Stations



Passengers could easily reach an attendant if they needed assistance at one of the unattended railroad stations.



Live video from any networked camera could be monitored through the intercoms.

Attended Railroad Stations



THE BENEFITS

- IP video intercoms provided help points for passengers to reach attendants if they had issues at the unattended railroad stations
- Built-in touchless call sensor reduced the spread of germs, lowering risk for passengers in these high-traffic areas
- Integration with third-party surveillance system gave attendants the capability to regularly monitor unattended railroad stations, helping deter crime at those locations
- PoE intercoms with a large touchscreen displayed clear details of each passenger when they called, giving attendants a better method to assess varying situations
- Feature-rich system allowed attendants to call each other across five cities, without an added phone line

System Configuration Example

Aiphone Components

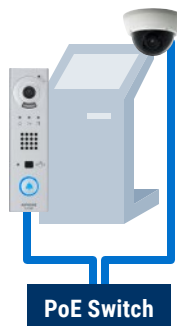


Application was for five railroad stations; two were attended, three were unattended. All locations were connected by a VLAN.

Railroad Station 1 of 5 ATTENDED



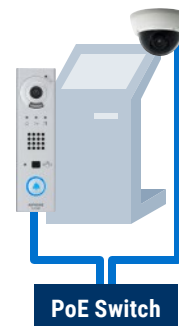
Railroad Station 2 of 5 UNATTENDED



Railroad Station 3 of 5 UNATTENDED



Railroad Station 4 of 5 UNATTENDED



Railroad Station 5 of 5 ATTENDED

