With Our Customers – Safety and Security –

We strive to meet our customers' needs and ideas for building a safe and secure society.

Integrating video with wireless communication to realize improved safety and security in station platforms

Customers working for railroad services desire definitive safety and efficient operation.
We assist ensuring passenger's safety and security with our platform-monitoring video data transmission system that combines a security video camera with a 60 GHz wireless transmitter.
By using a large-capacity wireless transmission device for the 60 GHz band, this system transmits video images taken with video cameras installed on platforms to the train driver's cabin to enable the following:

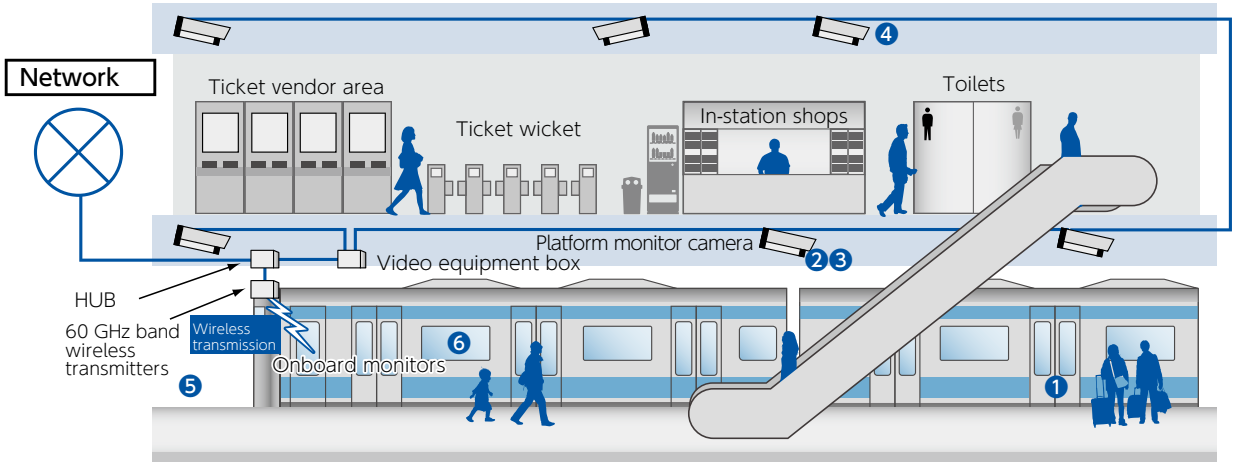
1) Checking the opening and closing of train doors
2) Checking passenger safety at the time of departure
3) Checking the status of congestion on platforms

thus helping to run trains more safely and smoothly.

A surveillance camera system is used to provide help in railroad service

The growing needs for a surveillance camera system in the railroad field stem in part from recent public concerns about sexual molesters onboard trains, along with other needs. In response to the confidence of our railroad-operator customers, we deploy proposal activities based on various scenes, thereby contributing to security and reliability, saving labor in service, and improving service for passengers.
Surveillance camera systems can give flexible help in numerous scenes including:

4) Station facilities: Toilets, shops, ticket vendors, and concourses
5) Platforms: Passengers getting on and off, falling, train entry, and escalators
6) Operation without conductors: Monitoring of the in-vehicle status and traffic status, and unattended stations
7) Substations and vehicle bases: Intruder detection and accident and disaster status
8) Vehicles, traffic tests, etc.: Video information in various tests and inspections



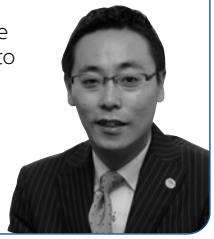
HiKQ ACTION

We developed this product with the keywords of "human safety" and "safe operation." We're happy to have successfully developed highly reliable products that dramatically improved the safety and convenience of the railroad, very familiar transportation infrastructure. Going forward, we will continue to incorporate customer's needs into product development in order to help build a safe, secure, and affluent society.

Yohei Yamamoto
Communication System Engineering Department,
Wireless Communication Systems Division

HiKQ ACTION

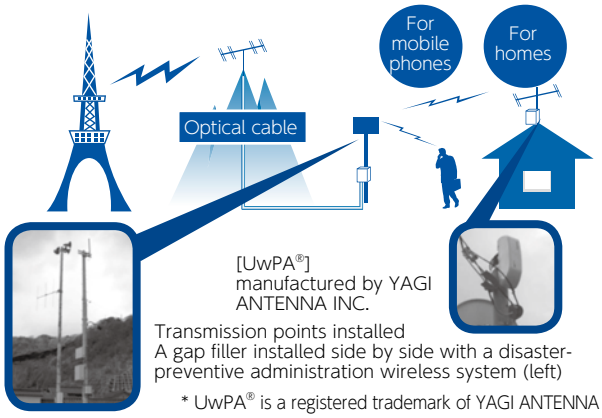
Due to the recent growth in security needs, monitoring systems are increasingly important equipment for railroad operators. We are proud that our monitoring systems are used on station platforms, in wickets and at other commonly used facilities. We will continue meeting customer expectations and provide more comfortable systems that contribute to society.



Makoto Daihoji
Video Systems Sales Center,
Broadcasting & Video Systems Division

Resolving poor reception by using a gap filler system and providing disaster prevention information by using OneSeg service

The gap filler system resolves, by means of wireless system, receiving disturbances in view-disrupted areas where the residents cannot directly receive terrestrial digital TV signals. This system equipment is simple and easy to install. In addition to terrestrial digital broadcasting, this system is applicable to area-limited One Segment broadcasting service, which is designed for video and data broadcasting (called OneSeg broadcasting) within a limited area. OneSeg broadcasting can be received through mobile phones and other widespread mobile terminals, so that it is advantageous in allowing people to easily obtain appropriate information in an emergency disaster while moving outdoors.
Customers who have already taken delivery of this system expect it to be useful as a third disaster prevention information transmission system, following radio and disaster prevention wireless systems.



[UwPA®] manufactured by YAGI ANTENNA INC.
Transmission points installed
A gap filler installed side by side with a disaster-preventive administration wireless system (left)

* UwPA® is a registered trademark of YAGI ANTENNA INC.

HiKQ ACTION

The TV Co-viewing Facility Union for the Agewa district in the city of Kashiwazaki, Niigata Prefecture, introduced this system in 2009. The union is Japan's second user and the Shinetsu region's first user of this system as a measure to address the poor reception in terrestrial digital TV signals due to geographical features. People in that region experienced a difficult time as evacuees due to the Chuetsu offshore earthquake in Niigata Prefecture that occurred on July 16, 2007. Moreover, these people highly evaluate this system because of its ability to provide TV information from OneSeg broadcasting outdoors in case of a disaster or similar emergency.

Yoshikazu Yokota
YAGI ANTENNA INC.

Realizing broadcasting with CD-level sound quality by using a short-wave-band transmitter

DRM (digital radio mondiale) is a digital system for short wave broadcasting. It can therefore secure a sound quality comparable to that of CDs and also provide text broadcasting, image transmission and other high-value-added communications as well, and is mainly being spotlighted in Europe these days.
Our DRM 26 MHz radio transmitter for local broadcasting covers an entire city by transmitting data from a TV/FM antenna tower using power as low as 500 W or less. This system has been introduced to customers in Europe as a transmitter for radio broadcasting.
This small-power transmitter offers lower pricing thanks to its reduced size and simplified parts and functions, and represents an unrivaled high-performance product.

DRM transmitter

HiKQ ACTION

During the development process, I traveled to France a number of times to attend meetings about the functions, interface and other specifications, and also confirmed system performance by demonstration equipment with our co-developer Thomson. Because the system was intended to offer easy installation and operation, our downsized design also features a structure that allows extremely easy operation. At the moment, field testing is under way in various parts of the world by using demonstration equipment. We will work in the future to have this transmitter used for DRM broadcasts worldwide.

Takeshi Fujimoto
Engineering Department I, Hamura Works