High-speed ETC Gantry Outdoor Integrated Smart Cabinet Project

Monitor. Integrate. Alert. Peace of Mind.

Our Customer

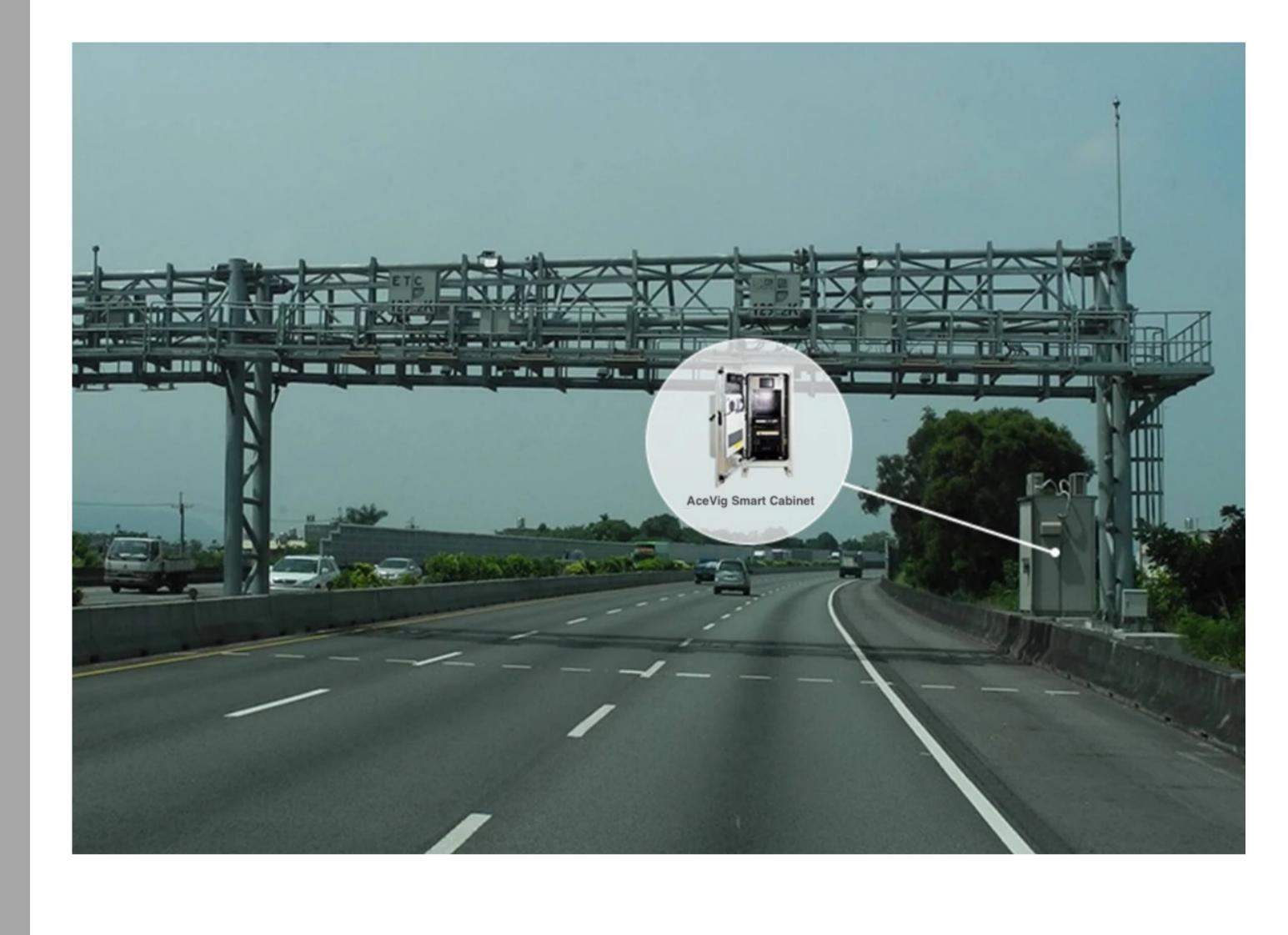In order to improve highway traffic efficiency and reduce congestion. A certain place in Indonesia plans to use ETC (electronic toll collection system) for vehicles at highway entrances.

These ETC gantries require the deployment of outdoor integrated smart cabinets to support the installation and operation of the ETC system. These smart cabinets need to have strong weather resistance and high protection levels, and can integrate various intelligent monitoring devices to monitor and manage the operating status of toll stations in real time.

As a professional supplier of intelligent monitoring software and hardware, our company actively participates in the construction of highway ETC systems.

AceVig's smart cabinets help us better realize intelligent and unmanned management of highway toll stations.

Customer demands

The ETC gantry system consists of lane controller, ETC antenna, license plate image recognition equipment, fill light equipment, high-definition panoramic camera, etc.
In order to ensure the safe, stable and reliable operation of the ETC gantry system, the smart cabinet needs to have functions such as high-power power supply, multi-voltage input and output, online floating backup power supply, uninterrupted power supply zero-time switching, and power environment control.

Solution technical features

Rugged and durable smart cabinet:
The smart integrated cabinet is equipped with a smart cabinet lock and waterless air conditioner. It has an IP65 protection level, is waterproof, dustproof, theft-proof and sunproof, and can operate stably for a long time in extreme environments.

Integrated monitoring equipment:
The smart cabinet integrates a variety of monitoring equipment such as 24-hour high-resolution night vision cameras, temperature and humidity sensors, smoke detectors, and automatic fire extinguishers.

Remote management platform:
We equip the smart cabinet with the AceVig Cowin remote management software platform. Operation and maintenance personnel can monitor the operating status of each toll station in real time through the software platform, and perform remote diagnosis and maintenance, such as remote access management, remote power control, automatic closing, etc.

High-power power supply design:
The cabinet is equipped with a power supply module that can withstand and distribute high power to meet the power needs of lane controllers, ETC antennas, high-definition panoramic cameras and other equipment.

Multi-voltage input and output support:
The cabinet is equipped with an efficient voltage conversion module that supports a wide range of voltage range input and output (such as 12V, 24V, 48V, etc.) to be compatible with the power needs of various ETC system equipment.

Uninterrupted power supply with zero time switching:
Dual power supply. When the main power supply is interrupted, the backup power supply can take over the power supply instantly without any delay.

We have deployed 20 outdoor integrated smart cabinets at 10 ETC toll stations. Operation data shows that the ETC utilization rate has reached more than 90%, and the traffic efficiency has been significantly improved.