

Upgrading Onsite Technical Support with Efficient Remote Device Management

Power ON and Think Smart: Allxon Out-Of-Band Power Cycling Service Keeping All Business ON

Intelligent traffic flow monitoring systems have become the driving force in building progressive cities. How are remote management services, along with NVIDIA Jetson embedded edge devices, helping urban planners keep within budget to engineer smarter, safer, and stronger roads?

Traffic Flow Turned Smart

From shuffling through paper road maps to having random conversations with our digital devices, giving us suggested routes to our desired destinations, the digital age has inspired countries to build its cities upon the latest technology. Intelligent traffic flow monitoring systems that use embedded AI and edge computing solutions from NVIDIA® Jetson™ have paved the way for optimal inner-city transportation operations. Installed on



traffic light signaling poles, edge AI devices grant smart cities the advantages of gaining control over roads and events. With NVIDIA's renown GPU-accelerated parallel processing, the Jetson embedded AI computing platform detects and classifies vehicle types. Simultaneously capturing driving paths, the collection of data analytics helps operators monitor traffic flow dynamics to determine the best travel times. In Taiwan,

government transportation bureaus have also reported an increase in better traffic law enforcement as these traffic flow monitoring systems also function as regulators to ensure citizens do not violate rules on the road. Using advanced edge AI solutions to configure urban design for public safety and manage traffic issues, intelligent traffic flow systems, like the NVIDIA Jetson edge AI platform, have become a decisive strategy for smart cities to predict events for safer roads.

Outdated Onsite Engineering

Though smart traffic flow systems bring effective ways for travelling, maintaining these edge devices may not be as practical. Mounted above the bustling roads, the NVIDIA Jetson embedded edge AI computing devices may require timely, costly, and labour intensive care. Engineers are called to travel onsite to troubleshoot and maintain system operations. Service providers for intelligent traffic

control in southeast Asia have reported that a single visit for onsite technical support averages an approximate cost of \$1,700 USD. Nevertheless, 90% of these visits start off their operations by performing conventional rebooting services, and only 70% of the devices recover after power cycling. Not only is a simple rebooting service expensive and time consuming, it also increases labour risks if safety measures are not fully taken into account. The inconveniences of onsite engineering can cause unwanted delays in receiving the latest transportation information and may result in a disorientated transport system.

Allxon Out-Of-Band Power Cycling for a City that Never Sleeps

Allxon provides time and cost effective remote device management services that cut away labour intensive ways of solving technical operational issues. What remains one of

the most important features in the digital age is simply a way to recover an AIoT system that is down. Allxon features the most high in demand solution with its Out-Of-Band Power Cycling service that ensures edge computing devices, like the NVIDIA Jetson AI platform, can be remotely switched ON, OFF, or RESET through Allxon's cloud service portal. Allxon, as a remote device management, also includes but not limited to functions like monitoring edge device health statuses, detecting device intrusion from potential hackers and violators, recovering OS backup on selected SSD, and so much more. With Allxon Out-Of-Band embedded in leading smart traffic systems, like NVIDIA Jetson edge, updates on the latest traffic information are received safely and efficiently, helping urban planners effortlessly conduct power cycling actions offsite - anywhere, anytime, keeping all systems ON, for a city that never sleeps.