



The Toll Vehicle Recognition System, developed and patented by Sinoits, employs 3D vision and sensor integration technology to accurately detect and identify the data of passing vehicles. This innovative solution provides reliable data for the establishment of a new non-parking charging method, effectively addressing the pain points of companies in the transportation industry."

President of a Leading Intelligent Transportation Company



Toll Vehicle Recognition System

Empowering Smart Transportation Systems with Automated Toll Collection



Smart transportation systems are widely adopting electronic toll collection to enhance toll collection efficiency and safety. However, this technology still poses the challenge of accurately identifying vehicles on busy expressways at all hours to determine the correct toll collection standards. The Toll Vehicle Recognition System solves this challenge by performing precise vehicle classification and license plate recognition with AI. This capability is made possible through the solution's multi-feed 3D vehicle identification technology, which collects and analyzes frontal, side, and rear vehicle features and vehicle body characteristics. The solution contains an edge AI box equipped with Intel® processors and VPUs to support timely AI inference, reduce deployment costs, and offer the most accurate AI models to recognize nuanced variances in vehicle models.

Key Features				
	Automated Toll AI Models	Vehicle Feature Extraction	Ultra-Long Vehicle Compatibility	High-Accuracy Assessment

Verticals: <ul style="list-style-type: none"> Transportation Government 	Use Cases: <ul style="list-style-type: none"> Situational Monitoring Asset & Operations Optimization 	Country/Geo: <ul style="list-style-type: none"> East Asia (China, Japan, South Korea, Mongolia, Taiwan) 	Learn more: <ul style="list-style-type: none"> The Sinoits Website Sinoits Toll Vehicle Identification System Case Study
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