

LPR-ETC

License Plate Recogniser
(LPR) for Electronic Toll
Collection

Smart and Secure Living for All

ETC-Series



Industrial-grade License Plate Recogniser (LPR)
for Electronic Toll Collection

ETC-Series is industrial-grade vehicle license plate recogniser (LPR) designed and built to fit the LPR application in Electronic Toll Collection (ETC).



Revolutionizing **Electronic Toll Collection** with our **License Plate Recognizer**.

Are you tired of waiting in long lines at toll booths to pay your tolls? Look no further! Our license plate recognizer is here to revolutionize the way you pay your tolls. Our cutting-edge technology accurately captures and recognizes license plate numbers, making the toll payment process seamless and hassle-free. Say goodbye to lines and hello to a more efficient, convenient way to pay your tolls.

Key Features

1

Accurate license plate recognition

Our license plate recognizer uses advanced algorithms to accurately capture and recognize license plate numbers, ensuring that tolls are correctly charged to the right vehicle.



2

Real-time payment processing

Our system integrates with electronic toll collection systems, allowing for real-time payment processing. There's no need to wait in line or carry cash!



3

Easy installation

Our license plate recognizer is easy to install and can be integrated into existing electronic toll collection systems with minimal effort.



4

User-friendly

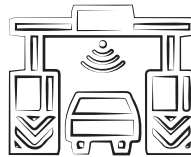
Our system is user-friendly, making it easy for toll booth operators to use and manage.



5

Increased efficiency

Our license plate recognizer increases the efficiency of the toll payment process, reducing wait times and improving overall traffic flow.



Why choose LPR for Electronic Toll Collection?

1

CONVENIENT

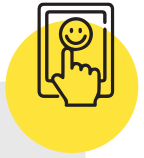
Say goodbye to waiting in long lines at toll booths. Our license plate recognizer makes toll payment fast and convenient.



2

USER-FRIENDLY

Our system is user-friendly, making it easy for toll booth operators to use and manage.



3

EFFICIENT

Our technology increases the efficiency of the toll payment process, reducing wait times and improving overall traffic flow.



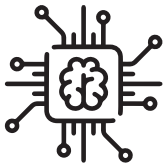
4

COST-EFFECTIVE

Our system accurately captures and recognizes license plate numbers, ensuring that tolls are charged to the right vehicle, providing long-term savings for both toll operators and customers.



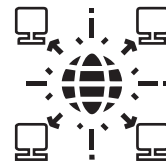
Technical Features



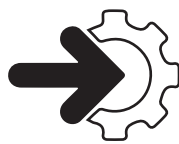
Powered by Deep Learning Technology



High Performance, High Precision



Support Both Centralized and Edge Processing



Easy Integration with ETC system



Industrial-proven, Wide Adoption

ETC Models



ETC-EX

Designed & built to fit industrial LPR application that requires real-time performance and on-site integration with third-party application.

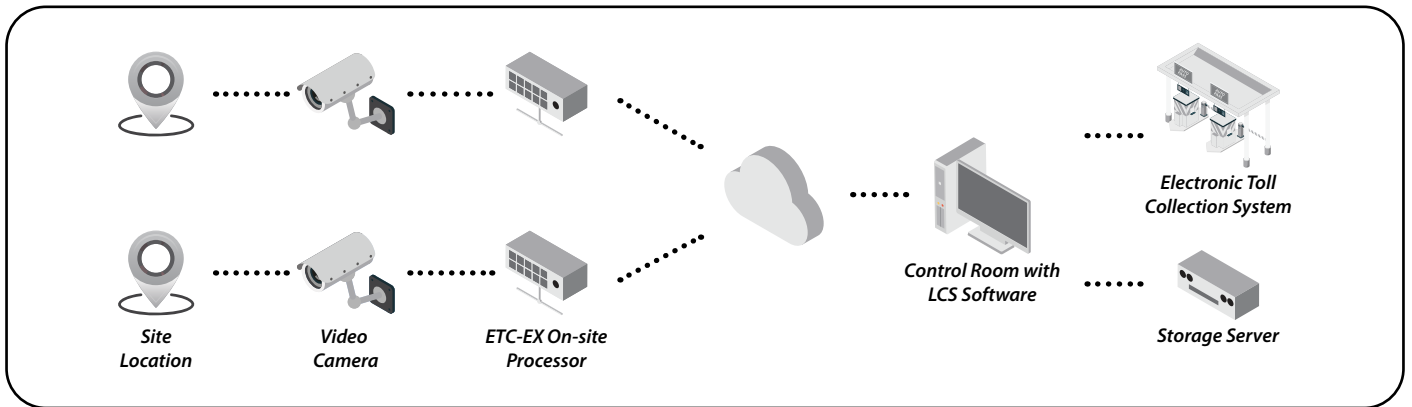


ETC-C

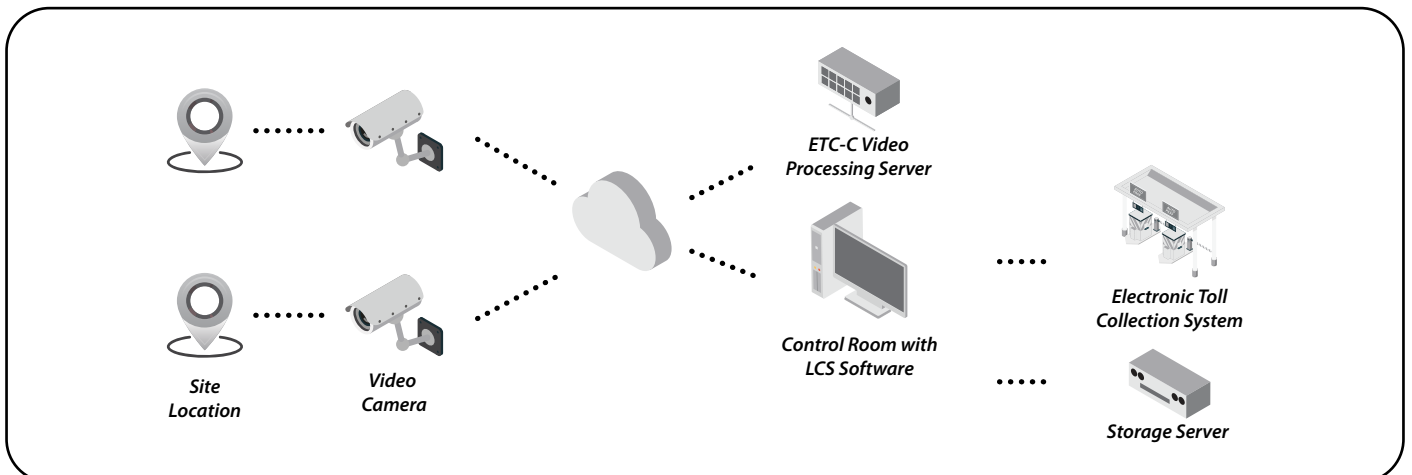
Rack-mounted LPR engine server product designed and built to fit large-scale LPR application capable of processing up to 10 channels (real-time).

*All pictures shown here are for illustration purpose only. Actual product size may vary.

System Architecture for ETC-EX



System Architecture for ETC-C



ETC Series Functions



Real time license plate recognition



Process up to 10 video streams



Vehicle classification



Web-based statistical report



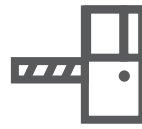
Image snapshot & timestamp



ONVIF compliant



Error notification & alarm



Ready to interface with ETC systems

Use Cases



Stop & Go (S&G) Plaza

At the toll plaza, an LPR application that is robust is needed to interact with the various toll collection system in real time. The dedicated configuration allows barrier gates to reduce lead times and risk.



Single Lane Free Flow (SLFF)

The LPR application is an integral part to allow free passage of vehicles while still collecting payment. RTC series is able to provide clarity of plates even while they are moving.



Multi Lane Free Flow (MLFF)

Open Road Tolling requires an LPR that can communicate at high speed and interface with RFID technology. RTC series is able to process the license plates moving at high speeds by operating on the gantry.

Optional Report Module

Models	ETC-EX1	ETC-EX2	ETC-C5	ETC-C10
Ambient Operating Temperature	-40°C to 70°C	-40°C to 70°C	-10°C to 50°C	-10°C to 50°C
Max. No Channel Supported	1	2	5	10
Number Lane (Road) per channel	1	1	1	1
Virtual Loop (Vehicle Detection)	Yes	Yes	Yes	Yes
3rd Party API Interfacing	Yes	Yes	Yes	Yes

Optional ETC-Camera

Model	ETC-SR250
Effective Pixels	2592 (H) x 1944 (V)
Video Resolution	1944P, 1080P, 720P, 480P, 360P, 240P
Frame Rate	30fps max
Max Vehicle Speed	200 km/h
Weatherproof	IP67
Ambient Operating Temperature	-40°C to 60°C (-40F to 140°F)
Humidity	90% RH (No Condensation)



LPR specific camera product which is designed and built to fit different use cases of LPR application.

Benefits

Adaptive algorithm

Designed to perform in various harsh weather conditions, camera position and to read unique local car plates for consistent readings

User friendly & easy to understand

The simple designed report helps operators to quickly understand the data collection

Time tested performance

With 10 years of optimizing and improving the video algorithm, our LPR has proven itself at numerous sites internationally

Ready to integrate at ETC system

Gateway is provided to interface and communicate at Toll Collection environment and 3rd party systems for seamless operation



www.recogine.com

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