

Fleet Management & Anti-Theft for Shared Electric Scooters

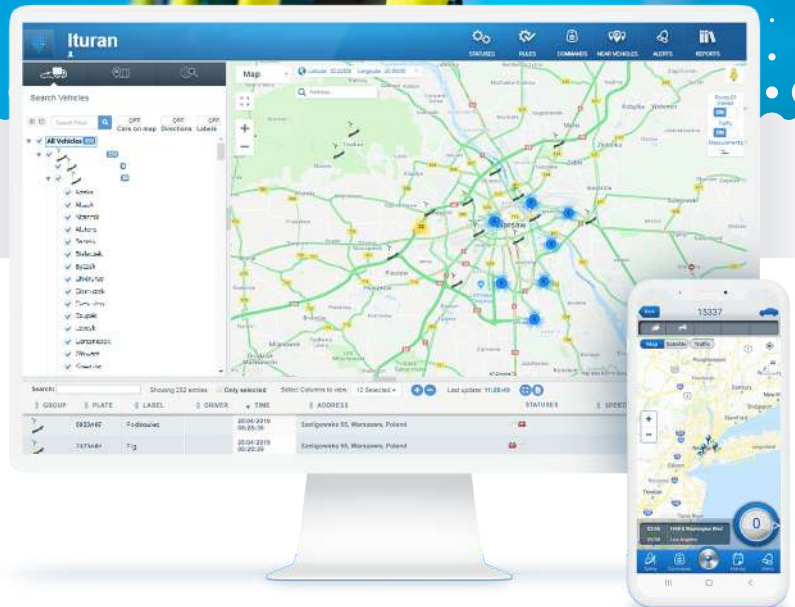


Industry **Shared Mobility**
Location **Global** Fleet Size **Thousands**

Electric scooter sharing is becoming a popular form of the peer-to-peer (P2P) sharing economy: Instead of owning certain goods and services, consumers gain temporary access to them in a sharing service allowing subscribers to rent electric scooters for short periods, with convenient pick-up and drop-off around town.

Since its founding in 2009 our client, Israel-based electric scooter brand Inokim, has become a leader in the micro-transit global scene, operating its scooter sharing services under the LEO brand.

LEO is one of four companies offering P2P scooter rentals in Israel; other operators are California-headquartered Bird Rides Inc. and Lime and Berlin-based Wind.



The Challenge

Managing a fleet of thousands of micro-vehicles, each of which may be shared by dozens of people daily.

The shared economy, specifically in the micro-vehicle category, presents some unique challenges:

- Users must be able to determine the exact location of any available scooters in their vicinity
- Scooters are exposed to theft and vandalism and require 24/7 monitoring
- Locating stolen scooters in a timely manner is essential in order to operate a successful service

Our Solution

Ituran developed a hardware/software solution that identifies the exact location of each scooter at all times, and alerts in real time when suspicious activity occurs

Hardware

An Ituran IOT Sensor was installed in each scooter to enable precise locating of the entire fleet in real time. The sensor utilizes Ituran's GPRS/GPS advanced location technology, combined with broadband cellular technology to transmit the location of each scooter as it moves from one point to another.

Software

Ituran's renowned big-data platform was utilized to analyze location information and alert in real time when activity that does not fit the standard user pattern occurs. Suspicious patterns include out of town travel, speeding and more.

Vehicle Name	Heading	Dist. (Miles)	Odometer	Address	Speed
0848	NW	0.0	89496.85	10000 To a Dr Houston, TX 77061, USA	17
0848	W	0.1	89496.899	10000 To a Dr Houston, TX 77061, USA	16
0848	NW	0.1	89496.957	10000 To a Dr Houston, TX 77061, USA	9
0848	N	0.1	89496.957	10000 To a Dr Houston, TX 77061, USA	11
0848	NE	0.1	89496.957	10000 To a Dr Houston, TX 77061, USA	9
0848	E	0.1	89496.957	10000 To a Dr Houston, TX 77061, USA	12
0848	E	0.3	89497.151	10000 To a Dr Houston, TX 77061, USA	19
0848	E	0.4	89497.277	10000 To a Dr Houston, TX 77061, USA	19
0848	NE	0.6	89497.296	10000 To a Dr Houston, TX 77061, USA	17

Suspicious activity recognized, what happens next?

An alert is automatically sent to Ituran's service center, LEO is notified.

Ituran determines the exact location of the scooter, notifies the police and sends out a recovery team to find the scooter and return it to LEO. During the recovery operation, Ituran's service center provides the recovery team with real-time data on the location of the moving scooter. Ituran's locating technology and professional know-how enable location of vehicles in crowded areas including, large apartment and office buildings.

The recovered scooter is returned to LEO, and data from the event is used to analyze behavioral patterns during theft.

In addition to theft control, Ituran provides LEO scooters with Fleet Management platform:

1. Software to maintain an optimal distribution of scooters around town, based on consumers' needs.
2. A SaaS-based reporting system for monitoring usage and gathering business intelligence.
3. IOS and Android IQ applications for real-time fleet management by LEO.
4. Remote control of basic scooter functions: lock, release, stop and battery information.
5. Backend system for operation management with the ability to define: geo-fence, speed, hours/duration of use/and more.



Founded in 1995, Ituran (NASDAQ: ITRN) is a global leader in telematics solutions and services for professional fleets, insurance companies, automotive companies, government institutions, companies from a range of verticals and private customers. We offer a full suite of hardware, software and services which together provide an end-to-end solution to our clients.

With over two decades of experience in the telematics field, Ituran has over 3,000 employees serving over 1.8 million customers in 20 countries around the globe.

At Ituran, our customers are our biggest asset. We make sure to be at the forefront of technology and to develop innovative solutions to answer any challenge our customers face.