

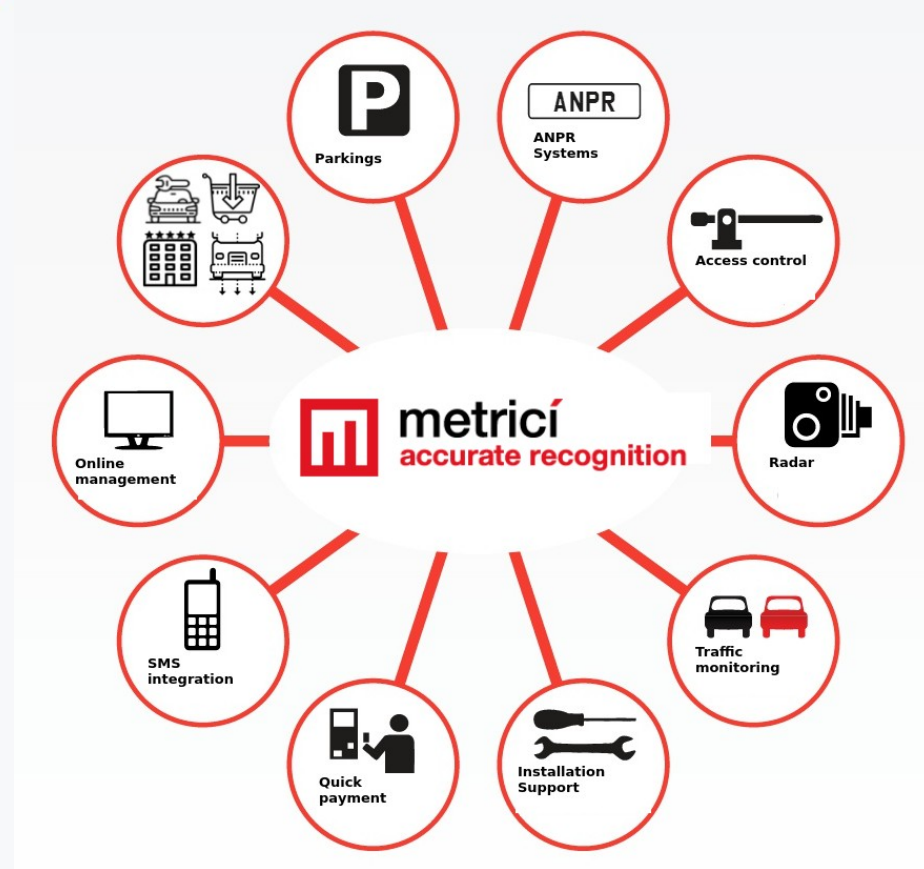


metricí
accurate recognition

PARKING MODULE

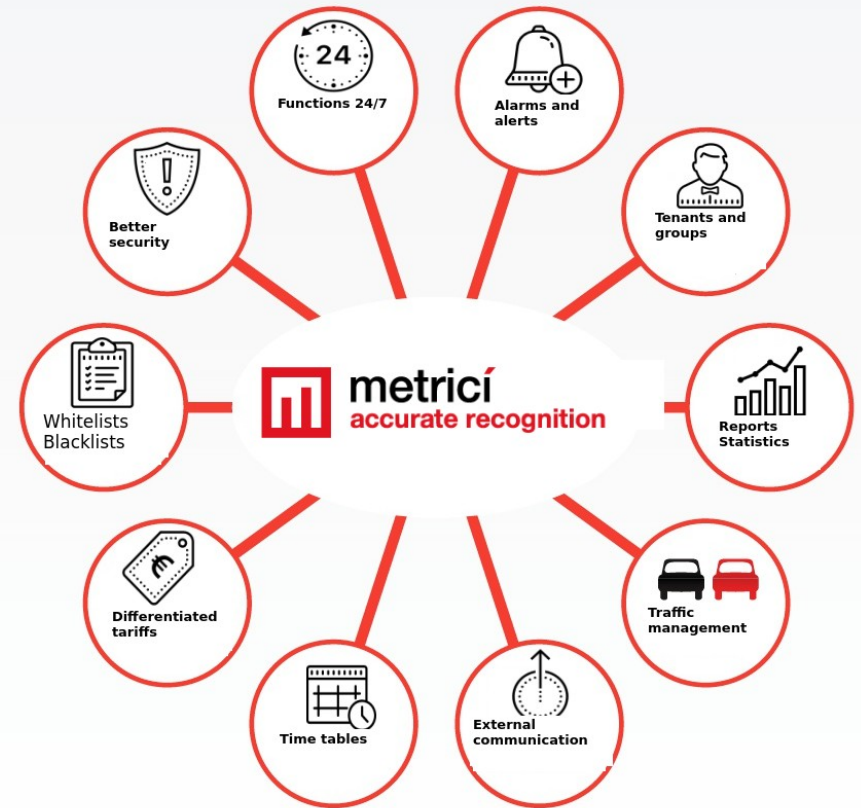
Who is Metrici

- 14 years of experience in advanced license plate recognition and management applications;
- Developments of deep neuronal networks software solutions on a large scale
- Large area of utilization, from paid parking to access control, retail and security, from a residential area to industrial parks or traffic monitoring;
- Income increase tool, better security and better traffic management;
- Technical support;
- Reports and statistics;
- Management tool;
- Complex database;
- Dedicated interfaces;
- Manage more locations on the same time, no matter where they are;
- Dedicated modules for Parkings, Toll Stations, Traffic management, Weighing stations, People Counter and many others



Metrici Parking Module

- LPR based solution for parking lots, commercial centers, industrial parks, hotels etc
- Access control when barriers are installed or free flow
- Free flow mode LPR recognition or at trigger: inductive loops, laser etc.
- Integration with barriers and other external systems
- Keeps track of number of cars entering and exiting the location even when the events are recorded at different cameras
- Keeps track of free/busy places inside the parking in any given moment
- Includes many features developed overtime to cover all the needs of our partners



LPR BASICA DATA

- Country
- Time
- Date
- Location
- Camera
- Direction
- Class- 8 types (Motorcycle, Car, Van, SUV/ Pickup, Bus, Truck, Tram, industrial and agriculture vehicles)

The screenshot shows the LPR system interface. At the top, there are filters for DATE & TIME (2024-03-03 00:00 to 2024-06-07 23:59), COUNTRY (ALL), LOCATION (ALL), CAMERA (ALL), DIRECTION (ALL), GROUP (ALL), CLASS (ALL), and INFO (?). Below the filters are export options: EXPORT PDF, EXPORT PDF, EXPORT EXCEL, and EXPORT CSV.

Plate	Country	Date	Time	Location	Camera	Direction	Class	Time Inside	Action
B 965 TGO	RO	2024-04-24	13:24:48	Bucharest	Gate 1	→	Car	0d 00:00:19	
B 965 TGO	RO	2024-04-24	13:24:32	Bucharest	Gate 1	←	Car	-	
B 123 AST	RO	2024-04-24	13:23:33	Bucharest	Gate 1	→	Car	1d 00:30:38	
B 808 MSR	RO	2024-04-24	13:21:45	Bucharest	Gate 1	→	Car	-	
B 113 EAO	RO	2024-04-24	13:19:55	Bucharest	Gate 1	←	Car	-	
IF 69 MVF	RO	2024-04-24	13:18:53	Bucharest	Gate 1	←	Car	-	
B 989 CKA	RO	2024-04-24	13:17:04	Bucharest	Gate 1	→	Car	-	
B 35 NOB	RO	2024-04-24	13:16:53	Bucharest	Gate 1	→	Van	-	
B 83 YHT	RO	2024-04-24	13:12:57	Bucharest	Gate 1	←	Van	-	
B 700 MYT	RO	2024-04-24	13:07:38	Bucharest	Gate 1	→	Car	-	
B 444 CDA	RO	2024-04-24	13:07:26	Bucharest	Gate 1	→	Car	-	
B 98 KNR	RO	2024-04-24	13:07:04	Bucharest	Gate 1	→	SUV/Pickup	-	
B 120 YFA	RO	2024-04-24	13:06:40	Bucharest	Gate 1	←	Car	-	
777 BWS	RO	2024-04-24	13:03:56	Bucharest	Gate 1	→	Car	-	
B 25 SDL	RO	2024-04-24	13:03:31	Bucharest	Gate 1	←	Car	-	
B 109 UMR	RO	2024-04-24	13:01:25	Bucharest	Gate 1	←	Car	-	
B 104 WOE	RO	2024-04-24	12:49:17	Bucharest	Gate 1	←	Car	-	

The detailed view for plate B 120 YFA shows a detection image of a white car. The interface includes options for 'Events for B 120 YFA' (Today (0), This Week (0), This Month (0)) and 'Options for B 120 YFA' (+ Add to actions list, Export PDF).

This screenshot is similar to the one above, showing the LPR system interface. The table of results is visible, and the detailed view for plate B 120 YFA shows a companion image from the moment of detection, which is a wider shot of the parking area. The interface includes options for 'Events for B 120 YFA' and 'Options for B 120 YFA'.

Results

Detection

Companion image from moment of detection

Past events for this number and add to Action List

Metrici Parking Module- Features



FRIENDLY INTERFACE

Metrici has a friendly interface that can be accessed on a local server or from anywhere in the world where there is internet access. Thus one can monitor and manage a business from a distance.



UNLIMITED NUMBER OF TIME TABLES AND TARIFFS

As a paid parking means also a market analysis, and the traffic fluctuates, one can define **as many timetables and tariffs** it wants, so that the price offer be always fitted to the vehicle flow and demand.



ALARM SETTINGS

Metrici sends an alarm, by **mail or SMS**, in case of a predefined event. For example when a car spends more than X hours in the parking or when a certain license plate is detected.

The screenshot shows the Metrici LPR interface. On the left is a sidebar menu with options like 'Cars', 'Live view', 'Reports', 'Actions', 'Settings', 'QR Code', 'Parking module', 'Toll station module', 'Parking Place Detector', and 'Global settings'. The main area displays a table of license plates with columns for Plate, Country, Date, Time, Location, Camera, Direction, Time inside, Action, and Info. A camera feed on the right shows a car with license plate B 338 TEO.

Plate	Country	Date	Time	Location	Camera	Direction	Time inside	Action	Info
B 157 MRR	RO	2018-11-19	11:40:26	Bucharest	Gate 1	←	-	-	-
B 708 GX	RO	2018-11-19	11:38:58	Bucharest	Gate 1	←	-	-	-
B 777 DFS	RO	2018-11-19	11:38:34	Bucharest	Gate 1	←	-	-	-
B 218 GHI	RO	2018-11-19	11:37:38	Bucharest	Gate 1	→	-	-	-
B 121 WBX	RO	2018-11-19	11:36:37	Bucharest	Gate 1	←	-	-	-
B 943 MAR	RO	2018-11-19	11:35:36	Bucharest	Gate 1	→	-	-	-
B 29 EED	RO	2018-11-19	11:35:14	Bucharest	Gate 1	→	216d 01:20:26	-	-
B 338 TEO	RO	2018-11-19	11:34:54	Bucharest	Gate 1	→	-	-	-
B 04 SUN	RO	2018-11-19	11:34:45	Bucharest	Gate 1	→	-	-	-
F 19 YLO	RO	2018-11-19	11:34:32	Bucharest	Gate 1	→	163d 03:00:23	-	-
B 97 RXD	RO	2018-11-19	11:34:13	Bucharest	Gate 1	←	-	-	-
B 29 GNM	RO	2018-11-19	11:33:33	Bucharest	Gate 1	→	-	-	-
B 116 MZ	RO	2018-11-19	11:33:27	Bucharest	Gate 1	→	-	-	-
B 92 ELS	RO	2018-11-19	11:33:26	Bucharest	Gate 1	→	-	-	-
B 116 MZ	RO	2018-11-19	11:33:23	Bucharest	Gate 1	→	-	-	-
B 75 RHN	RO	2018-11-19	11:33:08	Bucharest	Gate 1	→	-	-	-

The screenshot shows the Metrici interface for configuring parking spots. It includes a sidebar menu and a main table with columns for Plate, Info, Location & Cameras, Time Tables, Active, Open Barrier 1, Open Barrier 2, Send Email, Show Pop-up, Expires, Group, and Actions. A search bar and filter options are visible at the top.

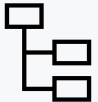
Plate	Info	Location & Cameras	Time Tables	Active	Open Barrier 1	Open Barrier 2	Send Email	Show Pop-up	Expires	Group	Actions
B 040915	-	Bucharest / Service road 1	All the time	✓	✓	✗	✗	✗	Never	N/A	Delete
B 100LSI	Test Viad	Bucharest / Gate 1 Bucharest / Gate 2	All the time	✓	✓	✓	✓	✓	2018-02-28 11:04:00	Test Dragos	Delete
BY1213XXX	-	-	All the time	✓	✓	✗	✗	✗	2018-03-27 09:41:00	N/A	Delete
BV596BBY	Dragos	Bucharest / Gate 1 Bucharest / Back entrance Bucharest / Back exit	All the time	✓	✓	✓	✓	✗	Never	N/A	Delete
BY 59 BBY	dragos 2	Bucharest / Gate 1 Bucharest / Gate 2 Bucharest / Service road 1 Bucharest / Service road 2 Bucharest / Transit 1 Bucharest / Transit 2	All the time	✓	✓	✓	✗	✗	Never	N/A	Delete
BV59BBY	dragos 2	-	All the time	✓	✓	✗	✗	✗	2018-07-13 09:40:00	N/A	Delete
B8 06 LHM	-	Bucharest / Service road 1	All the time	✓	✓	✗	✗	✗	Never	N/A	Delete

Metrici Parking Module- Features



SMS INTEGRATIONS

The phone numbers that are in a database can allow **access** for a vehicle in a parking by SMS, according to a predetermined settings established by the administrator, for temporary or unlimited access



FLOORS OR SECTIONS MANAGEMENT

Metrici can be set in such manner that can **manage apart individual sections or floors** of a parking lot. It will automatically calculates the free/busy spaces for each sections/floor.



TENANTS AND SUBTENANTS

Metrici **allows defining tenants and subtenants** of a parking lot, for unlimited levels. An office building may create tenants for each company in that building and establish a certain parking spaces for each. The company can also creates subtenants for each of its departments, and these another subtenants for teams. Each one of these tenants and subtenants has its own interface where can manage the license plates in the whitelist/blacklist, timetables etc.

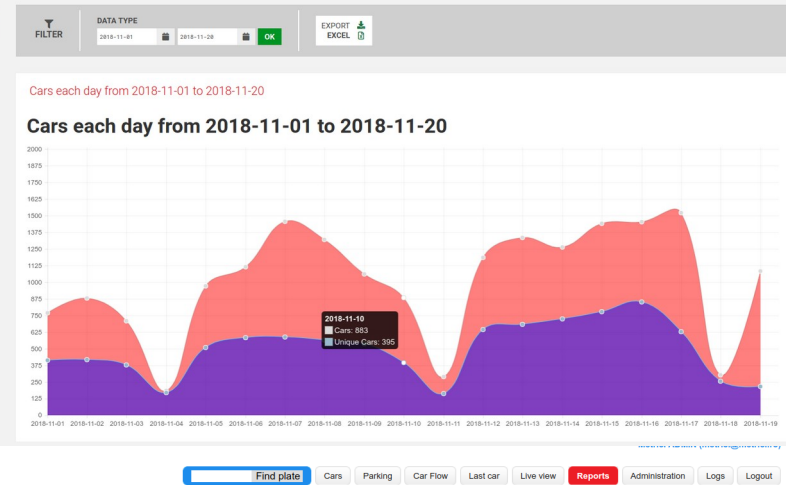
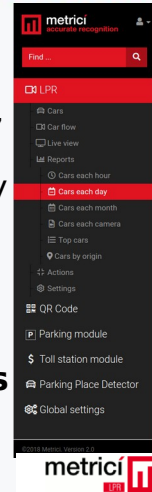


Plate number:	Country:	Total events:	Today events:	This week events:	This month events:	Actions list:
B 987 ATB	RO	169	0	169	169	Add
B 83 AYL	RO	151	0	0	151	Add
B 987 ATF	RO	102	0	102	102	Add
CT 01 KGB	RO	99	0	3	99	Add
B 29 GNM	RO	68	0	68	68	Add
B 56 MLL	RO	67	0	67	67	Add
B 48 GIA	RO	66	0	0	66	Add
B 436 SSS	RO	62	0	0	62	Add
B 333 ZDC	RO	60	0	0	60	Add
B 500 FLA	RO	55	0	55	55	Add
B 861 ZEN	RO	54	0	0	54	Add
B 908 MLC	RO	52	0	0	52	Add
B 74 MUT	RO	51	0	0	51	Add
B 28 DIP	RO	50	0	0	50	Add
B 191 HAI	RO	48	0	0	48	Add
B 336 YAK	RO	46	0	0	46	Add
IL 04 JMZ	RO	42	0	0	42	Add
B 75 WOW	RO	40	0	0	40	Add
B 115 AYI	RO	40	0	0	40	Add
B 696 LEX	RO	39	0	0	39	Add

Metrici Parking Module- Features



SMS PAYMENT

The SMS tool can be used for **parking payment** if the system is configured in such a way.



TIME INTERVALS

The administrator of a parking can set **time intervals** in which a client can exit a parking without payment or the interval in which he can exit the parking after a payment was made.



LED DISPLAY AND TRAFFIC LIGHT INTEGRATION

Metrici can be integrated with a traffic light or a **LED display** for showing info regarding the free/busy spaces inside the parking.

The screenshot displays the Metrici Parking Module web interface. The top navigation bar includes 'HOME', 'CARS', 'PARKING', 'CAR FLOW', 'ACTIONS LIST', 'LIVE VIEW', 'REPORTS', and 'SETTINGS'. Below the navigation bar, there are filters for 'DATA TYPE', 'Period (start-end)', 'COUNTRY', 'LOCATION', 'CAMERA', 'DIRECTION', and 'INFO'. The main content area features a table with the following columns: Plate, Country, Time, Location, Camera, Direction, Time inside, Action, and Info. The table contains 15 rows of data, with the row for plate 'B 52 DVH' highlighted. To the right of the table, there is a camera view showing a silver car with license plate 'B 52 DVH' and another car. Below the camera view, there are GPS coordinates: Lat: 44.432806, Long: 26.125562, and a 'View on map' button.

Plate	Country	Time	Location	Camera	Direction	Time inside	Action	Info
B 63 JSW	RO	15:57:06	Bucharest	Intrare Splai	→	2m	✉	
SM 532 WWW	RO	15:56:29	Bucharest	Intrare Splai	←	2m	✉	Firma etaj 2
GR 55 JAR	RO	15:54:53	Bucharest	Intrare Splai	?	2m	✉	Firma etaj 1
B 63 JSW	RO	15:36:21	Bucharest	Intrare Splai	→	2m	✉	
B 52 DVH	RO	15:35:38	Bucharest	Intrare Splai	←	2m	✉	Firma etaj 2
GR 55 JAR	RO	15:33:50	Bucharest	Intrare Splai	?	2m	✉	Firma etaj 1
B 63 JSW	RO	15:33:36	Bucharest	Intrare Splai	→	2m	✉	
SM 532 WWW	RO	15:30:42	Bucharest	Intrare Splai	←	2m	✉	Firma etaj 2
GR 55 JAR	RO	15:24:43	Bucharest	Intrare Splai	?	2m	✉	Firma etaj 1
SM 532 WWW	RO	15:23:46	Bucharest	Intrare Splai	←	2m	✉	Firma etaj 2
B 63 JSW	RO	15:22:52	Bucharest	Intrare Splai	→	2m	✉	
SM 532 WWW	RO	15:22:15	Bucharest	Intrare Splai	←	2m	✉	Firma etaj 2
GR 55 JAR	RO	15:21:02	Bucharest	Intrare Splai	?	2m	✉	Firma etaj 1
SM 532 WWW	RO	15:17:33	Bucharest	Intrare Splai	←	2m	✉	Firma etaj 2

Metrici Parking Module- Features



SPECIAL LISTS

Whitelist: The vehicles in this list can have different settings: open the barrier, free access, unlimited access, special time tables etc;
Blacklist: when a vehicle in this list is detected, Metrici can send an alert: mail, SMS, popup.

CASH REGISTER INTEGRATION

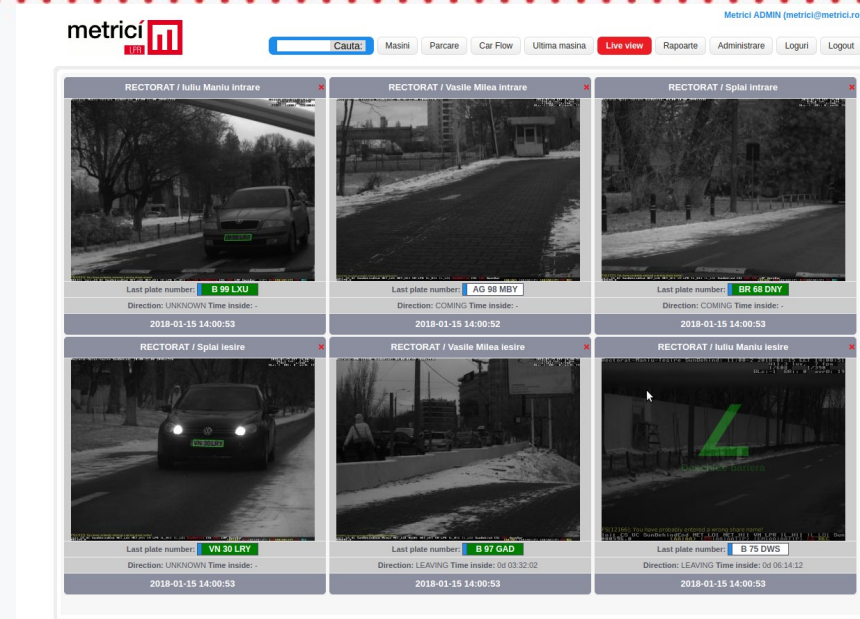


The system can be integrated with as many cash registers and can print receipts: the cost is automatically calculate depending on the predefined time tables, tariffs and time spent by the vehicles in the parking.

RESERVED PARKING SPACES



One can guarantee the parking spaces for each tentant, if the administrator wants it: in this case the parking spaces will not be considered as free and displayed as such for other clients of the parking lot, even if a tenant did not occupy all of them.



Metrici Parking Module- Features



COMPANION CAMERAS

Companion cameras can be installed along the detection ones so that every detection can be **linked** also to an image captured from the companion: for example with a wider lens, or another angle etc.



CONTINUOUS OR TRIGGER DETECTION

The system can search for a license plate in continuous mode, at trigger or a **combination** of the two: laser, inductive loop for situations when the license plate is not visible and the event will be recorded in database.



EXTERNAL SYSTEM INTERGRATION

Integration with external system, such as Skidata or Scheidt and Bachman, for example, or **external databases**.



LOG FILES

Metrici **saves all the data** referring to the internal processes or communication with external systems. In case of a malfunction, one can instantly see where the problem is and fix it.

Parking management

REPORTS AND STATISTICS

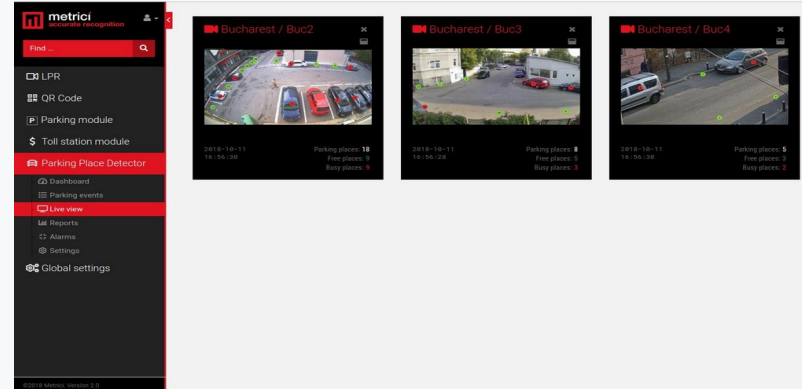
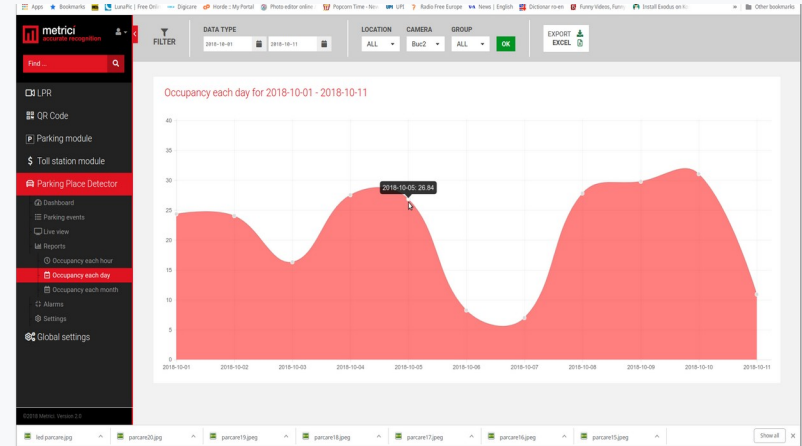
It generates detailed reports and statistics about the activity in the parking
These may be divided for each camera, for all cameras in location or for a group; Detail about the **receipts** and **top cars** and **place of origin**

LIVE VIEW

You can see live as many cameras as you want

LIVE VIEW OPEN BARRIER

An operator can open a barrier from live view menu, if the number plate is not visible or is damaged. The event will be recorded in database



Parking management

- Unlimited number of locations and cameras that can be monitored from same interface;
- Groups, tenants and action lists;
- Alerts and alarm settings;
- LED Display information: number of free/busy places, which tenant is at the gate, indications to follow, how many other places are free for that particular tenant etc
- Log file for each user with the actions made in interface
- See which cars are inside in any given moment
- Automatic calculation of the price to be paid accordingly to the set timetables and tariffs



Metrici hardware - LED Display

- Direct communication with Metrici Interface
- Can show all information that is to be found in Metrici Database: speed, license plate, tenant, weight, indications for the driver (no more parking places/ tenant full etc)
- Useful in parking lots, industrial parks, cities, residential areas
- Water resistant coating for LED lights
- 6 types of display

Models:
32x16 cm
64x32
Custom



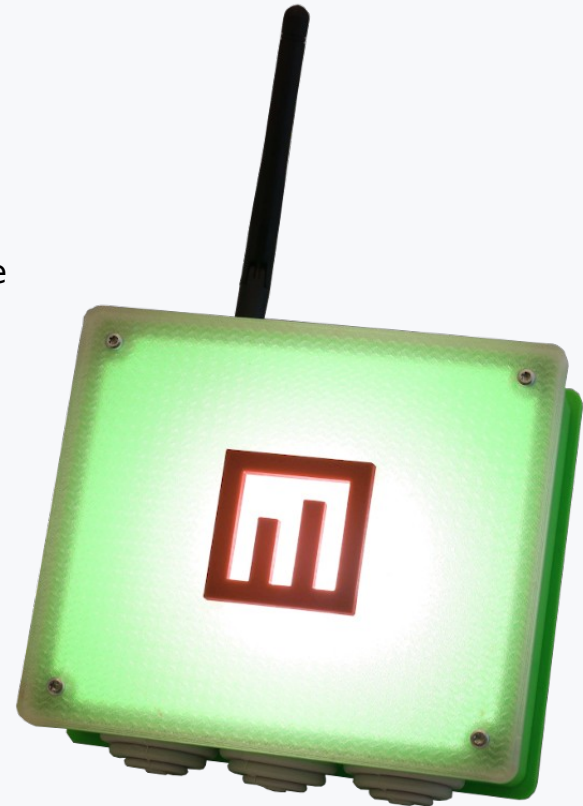
Metrici hardware - Observer Radar

- Radar produced by Metrici, used for speed monitoring in industrial parks, commercial centers, or sensitive points in cities: schools crossings, intersections, busy traffic streets etc.
- Can send trigger to Metrici to start detection, and the event will be recorded even if a vehicle doesn't have a license plate.
- The speed is recorded in database together with the vehicle's photo
- Metrici reports based on speed, traffic load, average speed etc.
- Traffic tempering tool



Metrici hardware - MultiController

- Two digital inputs and two digital outputs, in addition to the Wiegand Protocol & RFID. WiFi and Ethernet connection
- HTTP over TCP/IP, RAW over UDP/IP, Wiegand 26 bits and RFID
- Can command up to 2 barriers
- Cross-link between LPR and Wiegand- different and sections base access
- Check action - Link to Metrici Database and Wiegand Command Center when a LPR detection occurs



Where do you find Metrici

SUN PLAZA MALL BUCHAREST

16 entrances/exits
16 IP cameras for LPR
30,000+ events daily

CONSTANTA PORT

10 entrances/exits
32 IP cameras for LPR
50,000+ events daily

POLITEHNICA UNIVERSITY BUCHAREST

6 entrances/exits
6 IP cameras for LPR
5,000+ events daily

BARLAD PARKING

7 access points
7 IP cameras for LPR
3,000+ events daily



600+ installations in Romania, Hungary, Croatia, Slovenia, Bulgaria, Serbia, Denmark, Lithuania, Saudi Arabia, Norway, Peru, Germany, Switzerland, Belgium, Kuwait, Qatar, Bahrain