IEM

INNOVATIVE PARKING SOLUTIONS FOR SMART CITIES

The urban population currently counts for 54% of the global population with a growing demand for mobility.

Needless to say that Urban Parking is vital in influencing people's mobility preferences and thus reduce energy consumption and pollution.

IEM is a leading provider of intelligent instruments for managing on-street parking. Real time information based on parking meters, street sensors and smartphone apps are at the core of our solutions.

Mobility is not only a matter of developing transport infrastructure and services, mobility is also a matter of dealing with people's preferences. Active management of parking space and parking fees is an efficient and effective way to influence people's selection of transportation means.

Smart pay & display terminals, street sensors, driver apps and backend servers are instruments to collect and process billions of relevant data, disclosing motorist preferences.

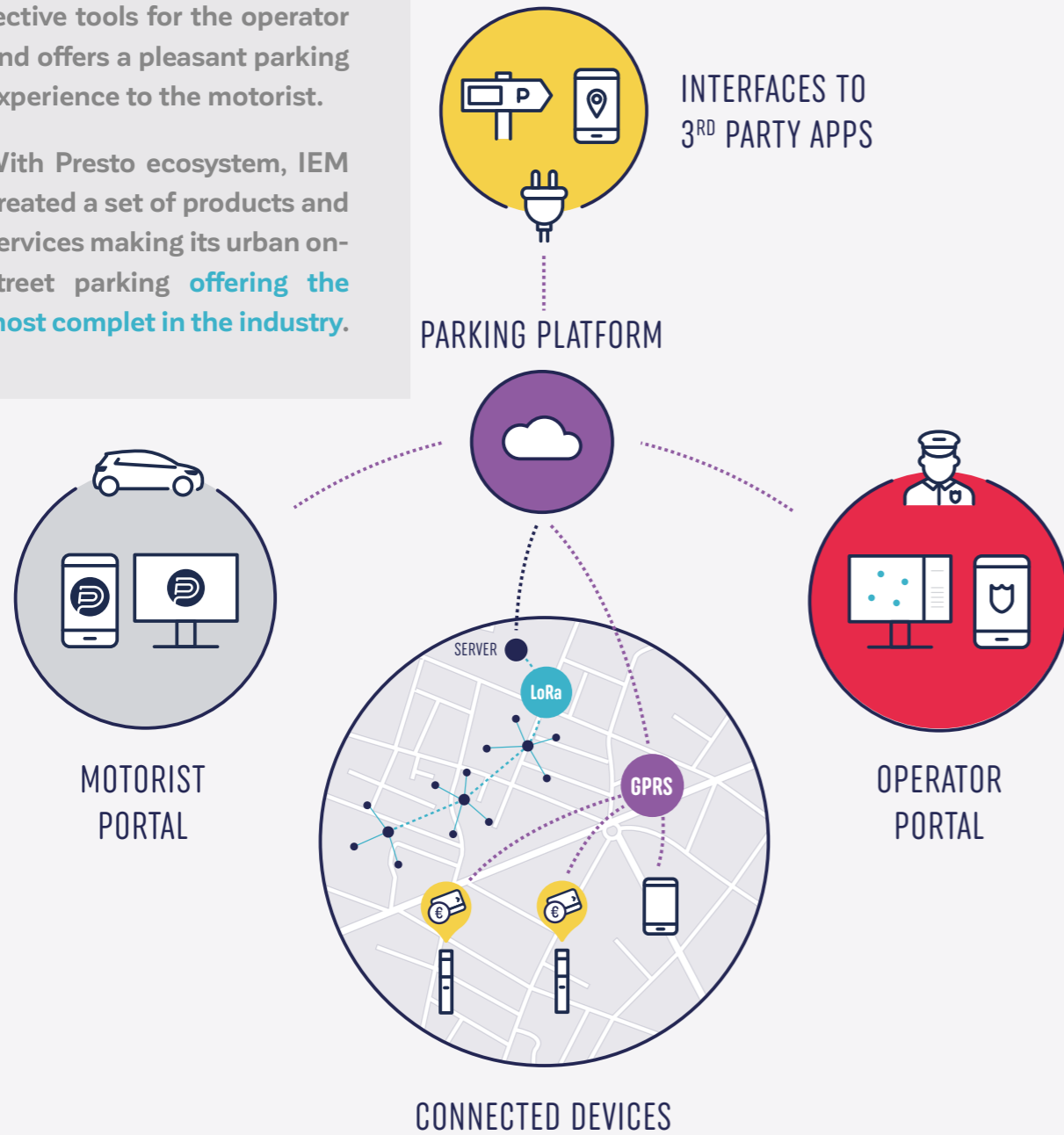IEM is using this data, utilizing Internet of Things technologies, to provide seamless connected solutions from terminals and sensors to mobile apps and analytical software on a cloud platform to understand motorist's behaviour and to deliver cities the information required to shape their parking policy.

The motorist requires an individual view on big data to plan his journey in a smart way as well. He needs real time parking data in combination with alternative travelling information on his preferred device.

IEM brings innovative solutions to cities and parking operators and provides a set of applications to drivers to make their urban mobility experience most convenient.

IEM's state of the art technology provides efficient, effective tools for the operator and offers a pleasant parking experience to the motorist.

With Presto ecosystem, IEM created a set of products and services making its urban on-street parking **offering the most complet in the industry.**

INTERFACES TO
3RD PARTY APPS

PARKING PLATFORM

MOTORIST
PORTAL

SERVER

LoRa

GPRS

OPERATOR
PORTAL

CONNECTED DEVICES

When it comes to daily on-street parking, efficient and effective operations is what it is all about. But there is also convenience which influences a motorist's preferences.

IEM created a full set of products and services ranging from parking meters, sensors, e-payment applications, driver apps, backend applications and hosting services to meet operator's and motorist's requirements.

User-Centered-Design principles formed IEM's guidelines for all engineering processes for parking meters. In focus was not only cash collection and meter maintenance. IEM paid careful attention to every detail in product and interface design, having drivers expectations and convenience in mind.

IEM's software applications are carefully grouped into an operator and driver portal, each providing a different view on big data.

Presto1000 IEM's operator portal serves as support tool for daily operations like cash collection, maintenance and enforcement. It is also the tool of choice when it comes to deliver KPI's and statistical data for decision making and parking policy definition.

All software based driver orientated services are concentrated in PrestoPark, the driver centric portal. Each user group, commuters, residents or tourists will find a helpful set of customized information. IEM's use and combination of a complete set of data collection devices will cultivate the motorists use of intermodal transportation means.

Parking meters are the pinnacles of on-street parking applications; they are at exposed locations, in daily use, must be available around the clock and the operator expects a service life of at least 10 years.

It seems to be like squaring the circle, doesn't it?

Presto machines are designed and manufactured with the user's and operator's requirements in focus. Result are stylish, modular machines built for a rugged environment.

Parking meters are the most visible components of a city's parking policy. Elegant design for public, convenience through alternative payment means and simple user guidance are keywords from a motorist's perspective. The operator requires cost effective, solar powered machines, adaptable to any configuration. The machines must be connected to a centralised management system which provides smart applications for efficient maintenance and enforcement. Additonally it must generate statistics and performance indicators for policy setting.

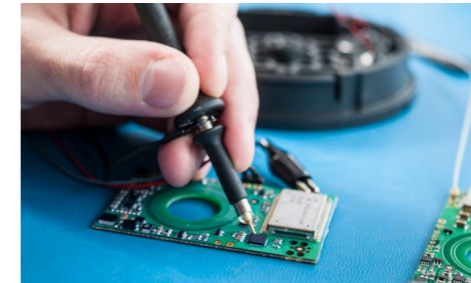Design for public requires special attention to robustness, vandalism and protection of cash. Presto machines are tamper proof. Security is bolstered by electronic locks and a patented stainless, tempered steel vault.

One of IEM's core competences is payment. 25 years ago, IEM developed its first coin verifier which was used in newspaper vending machines. Today, IEM is the leading provider of e-payment systems optimized for ultra low power consumption.

All IEM parking meters are tested from the design- to the delivery phase of a project with flawless reliable operation in mind. Additionally, IEM offers customizable maintenance plans based on effective and efficient allocation of ressources and spare parts.

IEM is utilizing Internet of Things technologies to provide seamless connected solutions from parking meters to sensors to analytical software.

The systems are built to understand motorist's behaviour and to deliver cities the informations required to operate and plan their on-street parking.

Enhancing excellent hardware with the right software and services fosters operator's satisfaction and motorist's awareness to use the most efficient transportation means.

A powerful operator portal is prerequisite for mastering big data, provide decision making fundamentals and managing daily operations. With Presto1000, IEM has developed a user friendly, web-based system for management and control of a city's on-street parking infrastructure. Additionally, the software provides all required information for decision making and parking policy setting.

PrestoPark is a software portal intended to make a motorist urban parking experience as convenient as possible. PrestoPark offers a set of apps intended to support the driver in buying virtual tickets, subscriptions, finding the nearest parking spot and inform him about alternative transportation means.

IEM has developed a sensing platform, communicating through a LoRaWAN-network capturing on-street vehicle presence data. Presto Sense, the modular sensor platform, that integrates sensors, communication hardware, backend server and software applications enables cities to optimize enforcement, flexible pricing and improve parking policy definitions. Around the sensor network, IEM has developed a full set of additional applications using the sensors occupancy data to support operator and motorists in law enforcement, signaling and way guiding.

What started as family business in electronic engineering more than 25 years ago, has turned into a European innovator in on-street parking.

More than just a manufacturer, IEM designs and develops solutions for efficient and smart on-street parking and thus making urban city life easier.

Our R&D team strives to continually improve products and services and to provide innovations in smart urban on-street parking. Exceeding customer expectations is our satisfaction.

Shaping the future smart urban parking world does not prevent us from dealing with daily down to earth issues of our customers. We work closely with parking operators in the french part of Switzerland simply to keep the finger on the pulse of every aspect of on-street parking management.

IEM's franco-swiss team, working in the Geneva region is involved in every detail of its products and services. All IEM parking meters are assembled, tested and quality checked in IEM's own facilities in Geneva.

IEM invested significant ressources in sustainable development of its equipment: minimal power consumption, solar power, recyclable non-hazardous raw materials and eco-friendly transportation of the equipment to the enduser are important cornerstones in reducing our ecological footprint.

Being a family business with traditional values and beliefs helped us establish strong relationships to our business partners and employees. Some of our suppliers and customers accompany us on our way since the company's incorporation. Our personnel is part of the family. Over half of the team has been with IEM for 10 to 20 years.

All IEM activities are 100% self-financed. This strong commitment to the company forms the foundation for new exciting projects.

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