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traffic light REPORT

Magazine for traffic engineering

TRAFFIC LIGHT FACILITY

RADAR / LASER

PARKING

ELECTRIC MOBILITY

INTERNATIONAL

SPECIAL

EDITORIAL

Dear readers,

Energy distribution and the control of electrical loads are topics that have been part of my life and a source of fascination for me since my days as an undergraduate student. Now, at RTB, I have a great opportunity to put my theoretical knowledge into practice.

I see electromobility as one of the most fascinating and multi-faceted topics in electrical engineering right now. After all, there are so many different factors to be taken into consideration in this context. The interplay between electrical engineering and communications technology deserves particular attention, as do statutory requirements. From calibration regulations to data protection, norms and standards – we stay on top of everything at RTB.

In addition to our activities, there are lots of exciting things happening right now in terms of technical developments and in public discourse on the subject. We all need to work together to ensure that the lack of knowledge and lack of courage to be found among certain sections of our population will soon be a thing of the past. And my goal is to work with RTB to make this a reality!

Sincerely,

Sofia Manciu

The only BASt-certified rental range of traffic census devices

Rent me ...

Increasing numbers of local authorities, administrative districts, state bodies and engineering companies are expressing interest in renting our traffic census devices. For this reason, we've now significantly increased our range of reflector posts and boxes that are available for rental. Another benefit for our customers is that RTB is the only manufacturer to offer BASt-certified rental equipment.

The number of cases where temporary solutions are required to fix an issue fast is rising significantly. As a result, our equipment is being rented with increasing frequency, as the corresponding investment decisions take too long. Rental is fast, preserves financial liquidity and, because we provide the very latest technology and take care of charging and maintenance, is also risk-free. We also provide training in use of the equipment on request.

Our DD.web program can be used for data analysis. Some engineering companies prefer to perform their own data analysis and that's also fine with us. An interesting fact to note is that increasing numbers of permanent census stations are being installed with boxes from RTB. This guarantees permanent recording of traffic flows.

WHAT´S HAPPENING ON GERMANY´S STREETS?

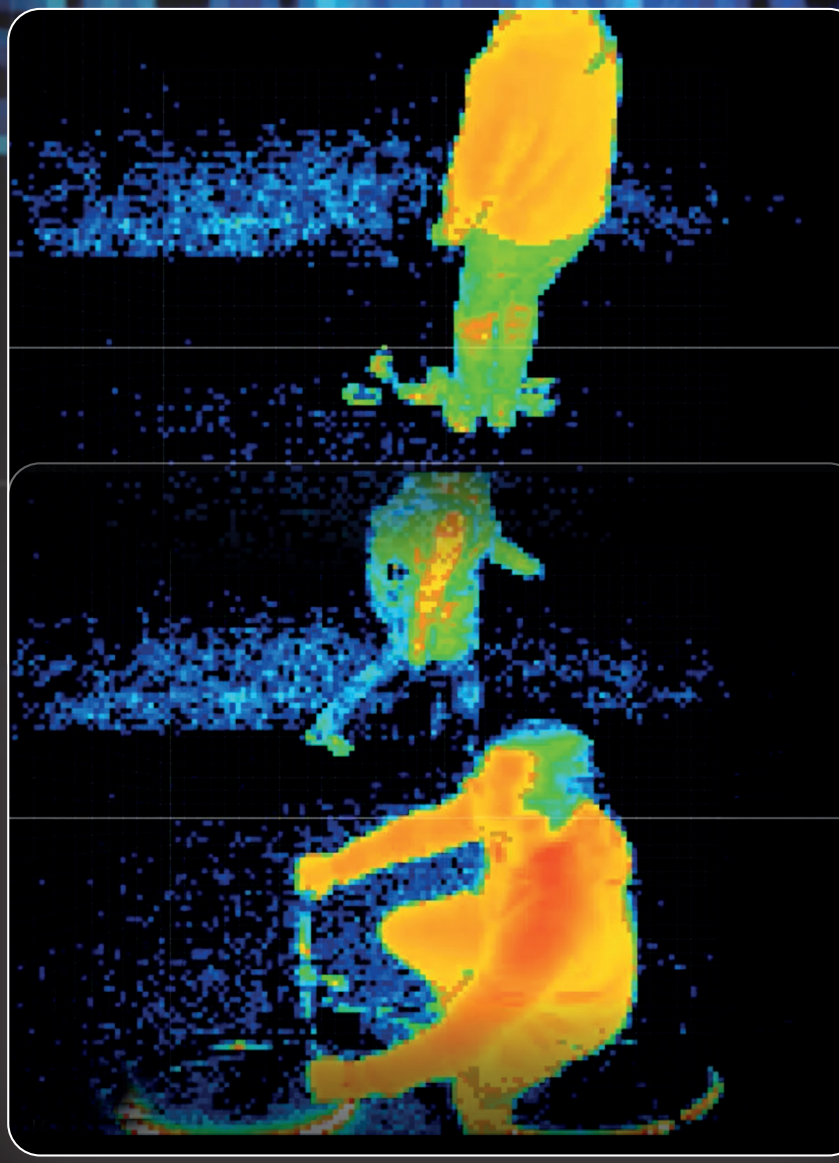
The latest reports on German traffic are alarming. Many city centers are facing total gridlock. In addition, interactions between the various road users are being substantially changed by new mobility patterns. Electric bikes and scooters are proving to be an asset for many segments of the population. However, for more vulnerable road users and especially the blind and vision-impaired, they represent additional hazards.

Current statistics indicate that the risk of accidents is three times as high with electric bikes as with regular bikes. This is another reason why it's important to know how many and which types of vehicles are using which city streets. With our NOSCO hybrid camera system based on a neural network, we'll soon be able to distinguish between bikes and scooters. This solution will be available from December 2019.

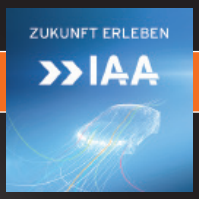
By using Artificial Intelligence methods, NOSCO guarantees a very high degree of detection accuracy – and not only in parking garages, where the first applications are already proving successful. This innovative system, which comprises a sensor unit and a signal processing unit, can now be used on bike paths and foot paths also and will therefore provide additional valuable information.

A little background – the NOSCO sensor unit has a camera and a radar sensor, so that the data detected by both sensors is merged. The data collected can also be used to directly determine speed and direction of travel. That makes NOSCO idea for helping to control traffic flow on bicycle highways, for example.

It's also really interesting to note that the NOSCO system achieves a detection accuracy of more than 99.8%, thanks to its innovative combination of various sensor principles. As a result, the latest traffic problems can be managed by means of precise data detection.



Visit us at the IAA!



NOSCO.hybridcamera

LOC.ID PROTECTS RESI

The best orientation aid for blind pedestrians wit

The response to the LOC.id system has been almost overwhelmingly positive. This system is revolutionary in the way it enables local residents to co-exist harmoniously with blind and vision impaired pedestrians. The city of Schweinfurt got the ball rolling and more and more cities are now getting on board and enhancing their existing acoustic traffic signals. And with good reason – LOC.id offers the best orientation aid for blind and vision-impaired pedestrians, while simultaneously reducing background noise for residents.

In a traffic system that is growing ever more complex, it is becoming increasingly difficult for blind and vision-impaired pedestrians to find

DENTS

thout loud noises

their way around unhindered. At the same time, a conflict of interest with residents living close to traffic signals is increasingly coming into play. Particularly busy intersections present a major challenge to individuals with limited mobility. Heavy traffic and the extremely high levels of background noise associated with it make it difficult for blind and vision impaired pedestrians to navigate their way around public places.

The LOC.id solves these problems. It provides an additional orientation aid that draws on the communication between the traffic control system and road users. Bearing in mind the growing number of electric vehicles of all types on our streets, acoustic signaling for blind and vision-impaired pedestrians must be clear and unambiguous. As a user approaches a set of traffic signals that is equipped with a receiver, he or she is recognized and an orientation signal with enhanced volume is emitted. Once the user is right next to the traffic signals, the acoustic signal reverts to the original volume.

Many cities, including Saale, Karlsruhe and – just recently – Berlin have already started using LOC.id. In Halle (Saale), the system is even used as a “talking stop” in the local public transport network. LOC.id is also enjoying great popularity internationally, especially in Canada, the United States, Switzerland and Austria. Our goal is clear – nationwide use of this new technology!

GUIDING . PARKING . CHARGING

GUIDING

- Dynamic display
- Full-matrix feature for complete text display

PARKING

- Single parking space detection
- Hybrid camera for balanced parking

CHARGING

- Testing for compliance with calibration regulations is underway
- Accepts almost any payment and billing method

IAA and New Mobility World

GUIDING PARKING CHARGING

New Mobility World
Stand B15 . Hall 5.0
September 10-15, 2019

Rarely has an exhibition within an exhibition been so successful – New Mobility World represents a major addition to Germany's International Motor Show (IAA) and has been receiving increasing attention. The who's who of the automotive industry will be gathering in Frankfurt/Main once again from 10 to 15 September 2019. And RTB will be there too!

The New Mobility World expo is attracting a lot of interest because cars are playing an increasingly important role in shaping urban infrastructures. As traffic signal communication is increasingly being connected to vehicles, a higher level of road safety can be achieved. It comes as no surprise, then, that increasing numbers of infrastructure companies are visiting the IAA.

The hot topics are clear – charging, parking and ensuring fast-flowing traffic in city centers are the main challenges facing road transport today. RTB offers attractive and highly innovative solutions to these challenges, including our solutions for individual parking space detection, charging and traffic census.

Another reason to attend IAA 2019 is that it will have a brand-new exhibition area where you can experience the magic and flair of vintage vehicles and the fascinating history of mobility. Given the importance of the automotive industry to Germany's economy, RTB also believes that the car needs to be regarded once again as an object of desire – rather than one of loathing.

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WHEN THE DEVELOPER DOESN´T MIND GETTING HIS HANDS DIRTY ...

It‘s a beautiful day in a stunning vacation spot, and our development engineer Thomas Eisenbach is up a ladder installing the NOSCO hybrid camera system himself – an indication that something very special is happening here. In fact, it’s the very first time that our new product is being used outdoors as part of a joint project with Siemens AG.

In Scharbeutz, NOSCO has recently begun counting the vehicles coming and going in an open-air parking area with several hundred spaces. And we’re pleased to report that the system, which was designed for parking blocks and has been enhanced due to high demand, is proving to be an outstanding outdoor solution.

The use of Artificial Intelligence methods gives the system a clear advantage. NOSCO is a self-learning system, which means that it is automatically improving all the time.

Visit us at the IAA!

50 NEW HOUSINGS FOR PARKING TICKET MACHINES

RTB also implemented another large project in Scharbeutz in collaboration with Siemens AG. The housings of 50 parking ticket machines were replaced with new housings incorporating cutting-edge electronics. This swift and smooth improvement was possible thanks to the modular structure of RTB’s parking ticket machines. Always a good idea!

GREATLY IMPROVED PUSH-BUTTON VIBRATION

For users of traffic signal push buttons, it is essential that the vibration can be felt as clearly as possible. At the request of users and in close consultation with them, RTB has now significantly improved the vibration of our successful push buttons without changing the proven technical principles on which they are based.

The three key benefits of the RTB solution at a glance:

1. The vibration is not activated until a finger is placed on the push button.
2. This allows local authorities and cities to save on costs down the line because the magnet won't wear out.
3. The RTB product excludes the possibility of a horizontal oscillation, which was identified by the Frauenhofer Institute as an issue in other vibrating push buttons.

DIALOGUE-DISPLAY in North Vancouver

TOPO IN THE FAROE ISLANDS

50,000 inhabitants, countless sheep, a national football team – and now two TOPO devices! You will find all of these on the Faroe Islands. Yet another good example of how RTB's international expansion is gaining ground. We currently export our devices to almost 50 countries!

DIALOGUE-DISPLAY IMITATIONS

Apparently, RTB has several competitors who are keen to jump on the coattails of our success. And, unbelievably, some other companies have even given their products RTB's brand name "Dialog Display". But we're not worried – none of these would-be free-riders come in any way close to reaching our high quality standards ...

OTTO TRAFFIC SIGNALS IN EMDEN

It started as a humorous marketing gag by the City of Emden but it can certainly also be viewed as scientific progress in light of research into pedestrians running red lights. A number of pedestrian traffic signals in Emden now display a figure representing the city's native comedian Otto Waalkes when the signal turns green. What's interesting is that a greater portion of the display is lit up on these lights than on lights that show the standard "walking man". This makes it easier for vision-impaired pedestrians to see the optical signal. Meanwhile, those with normal vision are more likely to wait for the green signal if they feel that they are being considered or entertained.

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