

SENSOR SOLUTIONS ARE REVOLUTIONIZING TRAFFIC

## The future of mobility is smart





Miles and miles of traffic jams, unattractive public transport and critical environmental pollution – traffic in Germany is threatened with collapse! There are many reasons for this: Public transport is too inflexible for many commuters, and their own car – partly due to Covid – is still the (transport) mode of choice. So is the traffic situation completely messed up?





## Intelligent, networked, digital: The smart mobility concept

"No," said Fritz Lembke, Head of Sales at HELLA Aglaia. "Our mobility will change in the future. The concept of smart mobility in particular has great potential to provide important impetus." Smart transportation concepts focus primarily on the needs of road users — which have changed markedly in recent years. "It's no longer just about getting from point A to point B. Comfort, cost efficiency and sustainability are playing an increasingly important role," said Fritz Lembke.

Public transport users want to be shown available connections, information on the load on the means of transport and possible alternatives in real time. Drivers also want to reach their destination quickly and be warned in good time

of traffic jams or gridlocked traffic. This is made possible by smart mobility technologies such as intelligent sensors.



## Tapping the potential of sensor solutions

Sensors are already being used today in public transport buses and trains for passenger counting – but without tapping the full potential of the technology. "Currently, most transport companies focus on a demand-responsive approach: the mere registration of persons documents transport performance for revenue sharing purposes," Fritz Lembke explained. But sensors can do much more: provide information about the availability of the means of transport, record the passenger load or transmit arrivals in real time. As a result, user convenience increases significantly. But transport operators also benefit. The data obtained helps them to use their fleet capacity as efficiently as possible.

But why haven't fleet operators been using smart sensor solutions in their vehicles for a long time to drive smart mobility forward? The reason is the cost. "In smart mobility applications, cameras must be installed in each wagon to reliably measure the current load, for example. Of course, this is cost-intensive," said Fritz Lembke. However, there are solutions that can help to significantly reduce capital expenditure: the use of artificial intelligence.





## PS.Load enables smart mobility applications

For smart mobility applications, it is useful to capture the area in real time and take a measurement in space. People Sensing, a division of HELLA Aglaia, the software expert for mobile applications, has recently launched this type of solution: PS.Load. "The software ends up on buses and trains on a small computer that was developed specifically for the AI application. The special feature of the device is the combination of high performance and compactness,

coupled with very low power consumption," explained Fritz Lembke. The AI is trained and thus learns to reliably determine passenger density on its own. This enables transport companies to communicate in real time what capacity is still available on the next bus, for example.

