Triplesign

Low-power VMS

An energy efficient and low cost variable message sign solution is helping to deliver a sustainable revolution in road safety

0.14Wh
The energy consumption of the Triplesign VMS solution

Governments around the world are grappling with common challenges, including trying to reduce the number of fatalities from traffic incidents while seeking the development of sustainable solutions that mitigate CO_2 emissions.

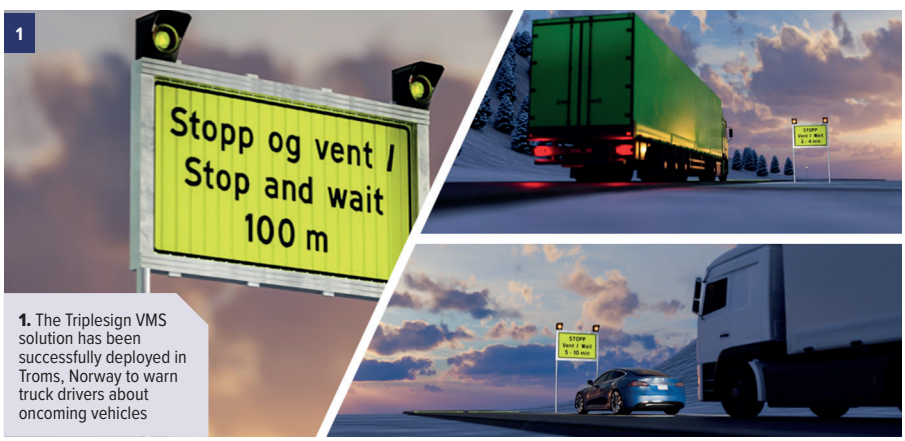
To enhance both traffic flow and safety, numerous countries have implemented intelligent traffic management systems, employing variable message signs (VMS) as integral components. VMS have proven their usefulness, giving real-time information to road users. They can alert road users to specific dangers, facilitate the flexible use of the road or influence driver behaviour.

When considering VMS options, energy-intensive LED VMS may appear to be the default choice. Nevertheless, Triplesign VMS presents itself as a sustainable alternative. With its remarkably low power consumption and wireless operation, it enables cost-effective installation. Its extended lifespan and minimal maintenance requirements further establish it as an eco-friendly substitute, delivering savings of over €60,000 per sign over a period exceeding 20 years. Additionally, Triplesign boasts superior visibility and 100% traffic sign recognition (TSR), effectively tackling the limitations commonly associated with LED VMS.

The Triplesign VMS solution is suitable for recurring situations or when messages need to be displayed for extended periods, as it doesn't rely on continuous power for displaying messages. Consider its application in areas prone to regular flooding, for example, or frequent traffic congestion, recurring events necessitating traffic redirection, school zones, and variable speed zones.

Reduced power consumption

A new, secure communication system has reduced the energy consumption of the Triplesign system even further. The solution consumes just 0.14Wh. With this technology the signs can be installed in remote areas where there is no access to the grid.



1. The Triplesign VMS solution has been successfully deployed in Troms, Norway to warn truck drivers about oncoming vehicles

One of the most recent installations was for a project managed by solution provider and Triplesign partner, Amparo Solutions in Norway. Triplesign VMSs were recently deployed in Troms – a remote area in northern Norway, where the signs must operate year-round. Given that the region experiences polar night for more than a month during the winter, it was imperative for the solution to have an exceptionally low power consumption.

The solution was installed on a road section where two trucks cannot see each other coming and where they cannot pass each other. Warning the truck drivers in time for an oncoming truck prevents them having to reverse their vehicle over a long distance.

Recently, the area experienced an exceptionally strong storm, even by local standards. With wind speeds exceeding 112mph, setting a record, the Triplesign solution needed to be able to withstand such event.

The versatility of the new system extends to various applications, including autonomous flood warning systems, school zone alerts, snow chain mandates, and variable speed zones.

Furthermore, the elimination of the need for cable excavation streamlines and reduces the cost of sign installation. The Triplesign system is therefore not only suitable for national road authorities, but also for smaller communities and regional authorities that have the ability to create and install their own systems at low cost and with minimal effort.

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