

## **INNOVATIVE VMS-TRAILER DEVELOPED FOR SUBURBAN AREAS**

SOLAR POWERED, COMPACT IN SIZE AND MANAGED WITH SMART MOBILTY APPS



# AN ENVIRONMENTAL FRIENDLY VMS-TRAILER WITHOUT EMISSIONS

ALL COMPONENTS ARE SELECTED TO GET THE BEST RESULTS IN ENERGY MANAGEMENT

## CO<sub>2</sub>-NEUTRAL, MANOEUVRABLE IN NARROW AREAS AND BEING CONTROLLED SMARTLY VIA THE WEB.

This is what us challenged to develop the VW 1350. A reliable VMS-trailer which has been provided with the latest technologies regarding energy management and fleet management. Our innovative full colour LED-display and Traffic Fleet are one of those important features.

#### WHY WE DEVELOPED THIS VMS-TRAILER

In addition to our twin-axle model VW 1700 S, we developed a simplified VMS-trailer, called the VW 1350. According to the increasing need of traffic information in suburban areas, we challenged ourselves to develop a VMS-trailer which would comply to the following specifications:  $CO_2$ -neutral, manoeuvrable in narrow areas and being controlled easily via the web.

### **ENVIRONMENTAL FRIENDLY - CO<sub>2</sub> NEUTRAL**

A well balanced energy management has enabled us to develop an environmental friendly VMS-trailer without emissions. Especially suburban areas are sensitive for pollution. By means of the power of solar energy and an energy efficient full colour LED-display, a solution is provided.

### SIMPLICITY AS THE CORE OF THE PRODUCT

Due to the fact it has a single axle and a weight of 1.050 kg, an individual is able to move the VMS-trailer with ease. Thanks to the hydraulic extendable LED-display the VMS-trailer will be operational in a jiffy. At the same time the LED-display is able to rotate 360 degrees, what benefits the visibility of the display and improves it's manoeuvrability.

#### **ONLINE MANAGEMENT VIA TRAFFIC FLEET**

An user friendly application to manage all your traffic systems via your desktop, tablet and smartphone. Monitoring your fleet assisted by many innovative features.

### ABOUT EBO VAN WEEL

EBO van Weel was established in 1963 and first started with the manufacturing of trailers. At a later stage EBO van Weel specialized also in custom made truck bodies. In 1978 the first mobile traffic systems were developed in cooperation with the Dutch Ministry of Transport. From that moment a new industry was born.

#### **Mission statement:**

"EBO van Weel believes in a future whereby the demand of traffic solutions will grow inherently to the increasing mobilisation of society. EBO van Weel will contribute by means of an enhanced cooperation between sustainable hardware and innovative software intended for mobile traffic systems."



Production facility in the Netherlands

THIS TRAILER IS CERTIFIED WITH **CE + NEN12966** 

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### A COLLECTION OF INNOVATIVE TECHNOLOGIES AND SUSTAINABLE HARDWARE MAKE THE VW 1350 DISTINCTIVE IN IT'S KIND.

## INNOVATIVE LED-DISPLAY - THE HEART OF THE SYSTEM EQUIPPED WITH INNOVATIVE FEATURES

Together with the Austrian company Swarco we developed an 80\*80 pixels full colour LED-display, which makes use of the latest technologies and compliance with **NEN12966**.

At first, the LED-display has been carried out with a unique lens technology by directing the light beam only where needed. Moreover, pixels which display the colour black are shut off. Lastly, the LED-display is equipped with less hardware.

As a result, the maximum power of the LED-display is 195 Watt, which is a reduction of 87% compared to conventional LED-displays.



Innovative 80\*80 pixels full colour LED-display (16.000 colours)

The patented technologies result in a maximum power of 195 Watt, which is a reduction of 87% compared to conventional LED-displays.

#### ENERGY MANAGEMENT - THE FIT OF SPECIALLY SELEC-TED COMPONENTS EXTEND THE STAND-ALONE TIME

Besides, the above described LED-display, the affection of other components are very important regarding endurance. The setup as a whole is responsible for the efficiency of the VMS-trailer. The contribution of an energy efficient LED-display, effective solar panels (600 Watt), the right solar charger and corresponding type of batteries (4x 230Ah), have resulted in a excellent fit regarding efficient energy management.

Via this setup the VMS-trailer is enabled to function standalone from April till September, according to Dutch weather conditions, with 50% active LED's.

Effiecient energy management is a result of the right components setup

The energy efficient LED-display, effective solar panels, the right solar charger and corresponding batteries result in an excellent fit regarding energy management.

#### TOTAL COST OF OWNERSHIP - IT IS NOT JUST THE PRICE OF PURCHASE

The investment is usually made for 10 years. Therefore, we designed the product aiming a long term reliability. We only build sustainable products by means of the usage of high quality materials and semi-finished products. All product elements of the VMS-trailer are fabricated within Europe to ensure the highest quality and reliability.

In addition, we designed the VMS-trailer in a way we have eliminated failure points as much as possible. This results in a low-maintenance and subsequently sustainable product.



Total Cost of Ownership

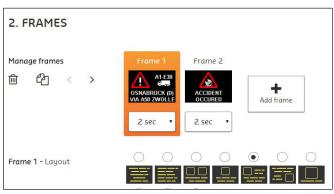
All elements of the VMS-trailer are fabricated within Europe to ensure the highest quality en reliability.



## THE ONLINE APPLICATION TO MANAGE ALL YOUR TRAFFIC SYSTEMS

USER FRIENDLY, INTUITIVE AND CONNECTED AT ANY MOMENT, AT ANY PLACE

### OUR VMS-TRAILERS ARE READY FOR THE NEW INNO-VATIONS TO COME. TRAFFIC FLEET IS CONTINUOUSLY DEVELOPING NEW ITS FEATURES ACCORDINGLY.



Traffic Fleet connects your units at any moment, at any location.

Manage your fleet online with many underlying functions: such as travel journey time, Floating Car Data and a connection with Traffic Management Center.

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Floating Car Data - execute travel journey time flexibly and accurately

Become flexible by executing travel journey time instantly without hardware solutions. Especially in suburban areas.

#### TRAFFIC FLEET - THE ONLINE MANAGEMENT APPLICATION TO CONTROL YOUR TRAFFIC SYSTEMS

Traffic Fleet enables you to create animations in just a few easy steps, upload them within seconds to the VMS-trailer from a library and provides you a lot of innovative features, such as rental module, travel journey time, Floating Car Data and a connection with the Traffic Management Center.

Via a Google map overview you are able to instantly watch over your fleet and quickly respond on push-notifications about warning, errors and service.

## FLOATING CAR DATA - EXECUTE TRAVEL JOURNEY TIME FLEXIBLY AND ACCURATELY

Floating Car Data (FCD) is an innovative method to measure speed and travel time on the road networks. By collecting measurements of vehicles moving around, the anonymous data is much more accurate in order to get a better view of the situation on roads, especially traffic jams.

FCD comes along with the advantage of being more flexible (because no Bluetooth or other hardware solutions are required). The collected data covers all roads and enables you to execute travel journey time instantly in a very flexible way, especially in suburban areas.



Travel Jam Detection on VMS-trailers with Floating Car Data

Avoid noise-trail accidents through dynamic Traffic Jam Detection.

#### TRAFFIC JAM DETECTION - AVOID NOISE-TAIL ACCIDENTS

The use of Dynamic Traffic Jam detection on vVMS-trailers based on Floating Car Data (FCD) is a new and innovative technique with many advantages. It is more accurate than traditional systems, has a wider range and is also cost effective because peripheral equipment is not required along the route.

The system is therefore able to measure a Traffic Jam more accurately, which means that approaching traffic can be warned sooner. Ultimately, this all increases the safety of motorists.

## VISIT OUR WEBSITE EBOVANWEEL.COM