

MOBILE WARNING SYSTEMS
VARIOSIGN LED SYSTEM
2023/2024





Dear customers, partners and prospective customers,

More traffic, a larger number of job sites, increasing challenges in your daily work – we offer you advanced warning and barrier solutions from a single source. Our range covers light arrows, multifunctional warning trailers and LED advanced warning systems as well as special concepts such as Drop & Pick or our mobile crash protection system. Whatever it is you require – benefit from the advantages of one of the leading global manufacturers in mobile traffic management: reliable delivery, well-established quality, innovative features and a uniform operating concept. A further highlight: our TrafficManager software which allows you to switch and manage equipment manually or automatically via your computer, tablet or smartphone. Discover our whole product spectrum now!

Vost

**JAN VOGT** *Managing Director* 

Ja

**KAI FREUND** *Managing Director* 



#### **ISO** certified

Our quality management has been certified since 1995 according to **DIN EN ISO 9001** and our environmental management since 2014 according to **DIN EN ISO 14001**.





## OLUTION

## VARIOSIGN LED SYSTEM

46

Structure	48
Development and manufacturing	50
Traffic signs, direction signals and symbols	52
VarioSign LED trailers	54
Accessories	72
VarioSign LED variable message signs	76
Roof frame for service vehicles WeNiPol II	84
Roof frame for service vehicles Pamir II	86





### SPECIAL CONCEPTS

Mobile crash protection systems

## NISSEN OPERATING CONCEPT

Touch Remote Color96Standard- und Pro-Remote97Eco- und Radio-Remote98

#### **SERVICE**

100

Sales Germany	102
Sales International	104
More information	106
Imprint	107





#### **BAS**<sup>1</sup>

The BASt seal indicates that the product has been tested by the Federal Highway Research Institute in accordance with the applicable regulations and is therefore approved for use on German roads.



#### TL (RSA) geprüft

The technical delivery conditions (TL) specify the requirements for the respective products. They are the basis for the tests, e.g. through the BASt.



#### EN 12352

This standard defines the requirements for warning lights on a European basis.



#### EN 12966

All VarioSign LED traffic signs comply with the requirements set out in European Standard EN 12966. These include dimensions and structural design, colour and luminance, as well as the uniformity of the light intensity and the durability of the optical quality.



#### CE

The CE marking indicates the conformity of the product with the "Basic Requirements" to be met, depending on the applicable harmonization directive. It applies to the European Union and the EFTA States, with the exception of Switzerland.



#### TrafficManager

Products can be monitored and controlled with the Software TrafficManager. Find more information about the TrafficManager at **nissen-telematics.com** 

#### First class lamps

The warning and advanced warning lamps integrated into our solutions correspond to the lamp classes defined in RSA and European standards.

Cla	iss	Light surface in cm <sup>2</sup>	Openin	g angle	Lumir	nosity
D	EN		Horizontal	Vertical	Min. in cd	Max. in cd
WL6	L8M	> 250	+7,5° bis -7,5°	+5° bis -5°	500	1.500
WL6	L8H	> 250	+7,5° bis -7,5°	+5° bis -5°	1.500	1.500
WL5	L9M	> 700	+1,5° bis -1,5°	+1,5° bis -1,5°	2.000	8.000
WL7	L9L	> 700	+1,5° bis -1,5°	+1,5° bis -1,5°	500	2.000
WL7	L9H	> 700	+1,5° bis -1,5°	+1,5° bis -1,5°	20.000	40.000

## SERIAL PRODUCTIONS

Our mobile TL warning boards and our VarioSign LED system are characterised by numerous features. Discover the advantages that will offer you real added value in your everyday work.

#### Mobile Warning Trailers VarioSign LED-System

#### Remote controls with range

Bluetooth is an industry standard for wireless data transmission between devices over short and medium distances. Compared to other standards, Bluetooth is very stable, insensitive to reflections and allows the parallel operation of several systems. This makes it possible to operate several warning trailers with one remote control. Another advantage: Bluetooth modules from Nissen have an extremely long range.

#### **Active monitoring**

A fully functioning mobile warning trailer is essential to safety. This is particularly valid for the correct display and full visibility of the given traffic signal. To guarantee this, the operating information is transmitted to the remote control continuously. This way the staff working in front of the system can react quickly to any problems.

#### Infinitely variable brightness adjustment

By law, lamps must have a sensor to automatically reduce their lighting intensity. This prevents LED traffic signs from blinding drivers in the dark. Nissen warning lamps have continuous brightness adjustment that reacts precisely to the external light conditions, even in bad weather. This technology surpasses the legal requirements and also leads to even greater energy savings.

#### **Efficient energy management**

Nissen warning lamps consume little energy, thanks to their optimal optical design. Twilight switches and automatic brightness adjustment reduce power consumption even further and increase safety. Operating hour metres help to not charge the batteries too early but rather to make optimal use of their capacity. This also extends their life. Important: For maximum battery life it is essential to use the correct charger. We would be happy to advise you.

#### Powerful batteries

Our systems can be optimally equipped with lead gel batteries. They are easy to transport and will not leak, even in a tilted position. They also retain their high capacity for longer and are practically maintenance-free. Thanks to their longer life, gel batteries are also more environmentally friendly than the traditional lead-acid batteries.

# OUR ADVANTAGES

#### Variable drawbar

Thanks to the easily height-adjustable drawbars, you can transport your trailers safely to the deployment location with any vehicle. Whether it is a car, a small truck or a lorry, or if the towing equipment is high or low, the connection is always parallel to the tow bar. This ensures the optimal functioning of the brakes and steering. DIN towing eyes and spherical head couplings can be changed in an instant.

#### **Tested quality**

Nissen develops its products in accordance with CE quality standards and also with the EU Machinery Guidelines. This ensures a uniformly high level of accident prevention across Europe. We are committed to the advancing of these and other guidelines, making an important contribution to improving safety for workplaces in road traffic.

#### VarioSign LED-System

#### **Optical systems**

Two highly developed optical systems are used in the production of our VarioSign LED traffic signs. In the classic version with a four-colour display, there is a reflector-free front panel above the LEDs. In the case of RGB technology, on the other hand, the LEDs are behind special lenses that allow the display of characters and texts in 256 colours. Both systems have been approved and tested comprehensively.

#### **Customisable programming**

VarioSign LED traffic signs come with memory modules that contain libraries with all the official symbols. You can also display custom content, which you design with software that is available from us.

#### LED surface

Our traffic signs are controlled by matrix circuits. This enables the simple, flexible and free programming of the matrix across all sizes, independent of the colour display.



# SAFE INSTALLATION OF WORKPLACES

Traffic areas and volume are increasing and with them the frequency of work in road traffic. We offer you high quality solutions for the management of workplaces in road traffic that conform to regulations.

Our mobile TL warning boards are characterised by their stable and maintenance-friendly structure and their high load-bearing capacities.

# Mobile Warning Systems

Development and manufacturing	
A Series: Warning trailers for roads without	
oncoming traffic	14
B Series: Warning trailers for roads with	
oncoming traffic	26
Accessories	36
Warning boards, upper boards & sliders	40
LED Light Arrow LP 8	45



Nissen is the world's leading supplier of mobile traffic safety solutions. Our name stands for tried-and-tested, advanced technology like no other.

Traffic volume around the world is increasing, which makes safety systems all the more important. This is why quality plays an outstanding role, particularly when it comes to high-speed roads like motorways and expressways. Nissen manufactures barrier and warning devices to the highest standards. Everything comes from our own

production, from the steel profile frames for our trailers, to the precision-calculated lenses for our warning lamps.

We assemble these in our main factory in Tönning and put them through extensive testing. In this way we can offer solutions that guarantee the safety of people and goods.

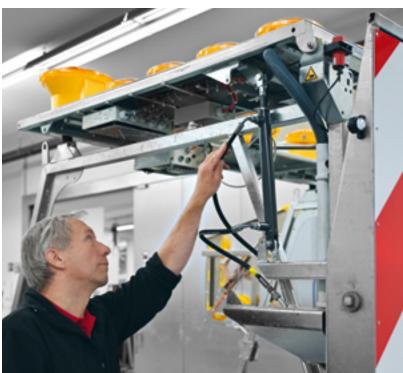


#### ISO certified

Our quality management has been certified since 1995 according to **DIN EN ISO 9001** and our environmental management since 2014 according to **DIN EN ISO 14001**.







Warning trailers for roads without oncoming traffic

## ASERIES

Benefit from our modular and individually configurable trailers with extremely long operating times and load capacities up to 1,7 tons.

Comparison	A1	A2	A31	A41	A51
Perm. total weight	750-1300kg	1300-1500kg	1300-1800kg	2000-2500kg	3500kg
Empty weight	550-790kg	680-910kg	850-1100kg	1100-1300kg	1800-1900kg
Load capacity	200-510kg	590-820kg	450-700kg	900-1400kg	1600-1700kg
Loading area (L x W)	1360 x 1620mm	1870 x 1620mm	2500 x 1820mm	3100 x 1820mm	5400 x 1850mm
Total length	3770-4500mm	4800-5300mm	5300-5990mm	6800-7200mm	8950-9260mm
Track width	2000mm	2000mm	2200mm	2200mm	2200mm
Loading ramp	no	optional	yes	yes	yes









#### **ROBUST MODULAR DESIGN**

Welded chassis and steel frame from our own production facilities

#### **CORROSION PROTECTION**

Chassis, drawbar and frame completely galvanized

#### **OPTIMAL CONSTRUCTION**

High-grade quality components for permanently safe operation, maintenance-friendly design

#### STABLE WARNING TRAILER

With traffic sign 616-30 as per RSA 21 and ZTV-SA with retroreflective foil (3600 x 2200 mm); country-specific traffic signs on request

#### **LIGHT ARROW DEVICE**

With two energy-saving warning lamps as well as 25 energy-saving and individually monitored warning lamps

#### **SIMPLE OPERATION**

Change the direction of the light arrow and the directional arrow with motor revolution with the remote control; uniform operating concept

#### **LONG SERVICE LIFE**

Standard up to 80 hours daily operation – (more as an option)

#### **MOBILE TELEMATICS**

All products in this series are fully compatible with the Software TrafficManager.



- Modular design, separately bolted, galvanized and interchangeable
- Galvanized, height-adjustable drawbar (Al-Ko) with holding brake
- DIN towing eye with a changeable spherical head coupling
- Loading area of 15 mm 7 layered laminated plywood sheets with sealed edges
- Side panels of 15 mm 7 layered laminated plywood covered with aluminium sheet profil at the top
- Height-adjustable support wheel
- Robust plastic fenders
- Battery box of plastic (1660 x 450 x 320 mm)
- Braked rubber spring axle with automatic brake adjustment
- 4 lashing points (straps) with 500 daN
- 2 fully adjustable support legs
- Handle for one-handed opening/closing of battery box

#### **WARNING BOARD**

- Warning board in compliance with RSA 21 and ZTV-SA,  $3600 \times 2200 \text{ mm}$
- Chevron patterned plates and directional arrow with microprismatic retro-reflective foil, type RA2
- Light arrow system with two LED warning lamps (WL5) and 25 separately monitored LED warning lamps (WL6)
- Directional arrow with motor revolution, mechanical emergency and automatic light arrow adjustment
- Motorized lifting and lowering of the top board with mechanical emergency adjustment and emergency-off switch
- Combined manual radio-cable control for activating all functions via touchscreen and one-touch keys

#### **ELECTRICAL SYSTEM**

- Rechargeable battery 12 V, up to 80 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- · Battery charger
- Battery guard for protection of electronics
- · Light arrow LP 8000 approved according to EMC directive

#### **ACCESSORIES AND OPTIONS**

- Cargo securing set
- Central crank supports
- · Acoustic signalling device for manual control
- Control and monitoring system
- Traffic cone holder
- Spare wheel with holder
- Holder for warning threshold





#### **Technical Data**

Total length	3770 - 4500 mm
Total width	2200 mm
Track width	2000 mm
Loading area (LxW)	1360 x 1620 mm
Side boards (H)	300 mm
Total weight	750 - 1300 kg
Empty weight depending on model	550 - 790 kg
Max. load capacity	200 - 510 kg
Track width Loading area (LxW) Side boards (H) Total weight Empty weight depending on model	2000 mm 1360 x 1620 mm 300 mm 750 - 1300 kg 550 - 790 kg

#### Warning Trailer Type A1

Ref. No.

Warning Trailer Type A1 in modular construction without light arrow combination

129717-001





- · Modular design, separately bolted, galvanized and interchangeable
- Galvanized, height-adjustable drawbar (Al-Ko), with overrun brake, holding brake and parallel adjustment
- DIN towing eye with a changeable spherical head coupling
- Loading area of 15 mm 7 layered laminated plywood sheets with sealed edges
- Side panels of 15 mm 7 layered laminated plywood covered with aluminium sheet profil at the top
- · Height-adjustable semi-automatic support wheel
- Robust plastic fenders
- Battery box of plastic (1660 x 450 x 320 mm)
- Braked rubber spring axle with automatic brake adjustment
- 4 lashing points (straps) with 500 daN
- 2 fully adjustable support legs
- Handle for one-handed opening/closing of battery box

#### **WARNING BOARD**

- Warning board in compliance with RSA 21 and ZTV-SA,  $3600 \times 2200 \text{ mm}$
- Chevron patterned plates and directional arrow with microprismatic retro-reflective foil, type RA2
- Light arrow system with two LED warning lamps (WL5) and 25 separately monitored LED warning lamps (WL6)
- Directional arrow with motor revolution, mechanical emergency and automatic light arrow adjustment
- Motorized lifting/lowering of the top board with mechanical emergency adjustment and emergency-off switch
- Combined manual radio-cable control for activating all functions via touchscreen and one-touch keys

#### **ELECTRICAL SYSTEM**

- Rechargeable battery 12 V, up to 80 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery charger
- Battery guard for protection of electronics
- Light arrow LP 8000 approved according to EMC directive

#### **ACCESSORIES AND OPTIONS**

- Cargo securing set
- Central crank supports
- Acoustic signalling device for manual control
- Control and monitoring system
- · Loading ramp surfaced with aluminium chequered plate
- Traffic cone holder
- Spare wheel with holder
- Holder for warning threshold





#### Technical Data

4800 - 5300 mm
2200 mm
2000 mm
1870 x 1620 mm
300 mm
1300 — 1500 kg
680 - 910 kg
590 - 820 kg

#### Warning Trailer Type A2

Ref. No.

Warning Trailer Type A2 in modular construction without light arrow combination

129717-002



- Modular design, separately bolted, galvanized and interchangeable
- Galvanized, height-adjustable drawbar (Al-Ko), with overrun brake, holding brake and parallel adjustment
- DIN towing eye with a changeable spherical head coupling
- Loading ramp surfaced with aluminium chequered plate
- Loading area of 15 mm 7 layered laminated plywood sheets with sealed edges
- Side panels of 15 mm 7 layered laminated plywood covered with aluminium sheet profil at the top
- · Height-adjustable semi-automatic support wheel
- · Robust plastic fenders
- 2 battery boxes of steel with aluminium chequered plate cover (550 x 380 x 300 mm)
- Support frame for the drawbar of a loaded warning board
- Braked rubber spring axle with automatic brake adjustment
- 6 lashing points (straps) with 500 daN



- Warning board in compliance with RSA 21 and ZTV-SA  $3600 \times 2200 \text{ mm}$
- Chevron patterned plates and directional arrow with microprismatic retro-reflective foil, type RA2
- Light arrow system with two LED warning lamps (WL5) and 25 separately monitored LED warning lamps (WL6)
- Directional arrow with motor revolution, mechanical emergency and automatic light arrow adjustment
- Motorized lifting and lowering of the top board with mechanical emergency adjustment and freely accessible emergency-off switch
- Combined manual radio-cable control for activating all functions via touchscreen and one-touch keys

#### **ELECTRICAL SYSTEM**

- Rechargeable battery 12 V up to 80 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery charger
- Battery guard for protection of electronics
- · Light arrow LP 8000 approved according to EMC directive

#### **ACCESSORIES AND OPTIONS**

- Repeater of the vehicle lighting
- Cargo securing set and central crank support
- · Acoustic signalling device for manual control
- Control and monitoring system and manual or electrical cable winch
- Loading aid incl. hopper opening and firm rear frame
- Traffic cones holder, spare wheel with holder, holder for warning threshold





#### **Technical Data**

Total length	5300 - 5990 mm
Total width	2400 mm
Track width	2200 mm
Loading area (LxW)	2500 x 1820 mm
Clearance width	1830 mm
Clearance height	1878 mm
Side boards (H)	300 mm
Total weight	1300 - 1800 kg
Empty weight depending on model	850 - 1100 kg
Max. load capacity	450 - 700 kg

Warning Trailer Type A31	Ref. No.
Warning Trailer Type A31 in modular construction	129717-031
Warning Trailer Type A31-L in modular construction	129717-031-L









- · Modular design, separately bolted, galvanized and interchangeable
- Galvanized, height-adjustable drawbar (Al-Ko), with overrun brake, holding brake and parallel adjustment
- DIN towing eye with a changeable spherical head coupling
- Loading ramp surfaced with aluminium chequered plate
- Loading area of 15 mm 7 layered laminated plywood sheets with sealed edges
- Side panels of 15 mm 7 layered laminated plywood covered with aluminium sheet profil at the top
- · Height-adjustable semi-automatic support wheel
- Robust plastic fenders
- 2 battery boxes of steel with aluminium chequered plate cover (950 x 630 x 300 mm)
- Support frame for the drawbar of a loaded warning board
- Manual cable winch with a hook and 10 m of cable
- Rubber spring axle with a tandem brake design with automatic brake adjustment
- 6 lashing points (straps) with 500 daN
- 2 fully adjustable support legs
- Loading aid incl. hopper opening

#### **WARNING BOARD**

- Warning board in compliance with RSA 21 and ZTV-SA,  $3600 \times 2200 \text{ mm}$
- Chevron patterned plates and directional arrow with microprismatic retro-reflective foil, type RA2
- Light arrow system with two LED warning lamps (WL5) and 25 separately monitored LED warning lamps (WL6)
- Directional arrow with motor revolution, mechanical emergency and automatic light arrow adjustment
- Motorized lifting/lowering of the top board with mechanical emergency adjustment and emergency-off switch
- Combined manual radio-cable control for activating all functions via touchscreen and one-touch keys

#### **ELECTRICAL SYSTEM**

- Rechargeable battery 12 V up to 80 hours daytime operation (further energy packages on request)
- Trailer lighting 12 V and/or 24 V
- Feed socket 230 V
- Battery charger
- Battery guard for protection of electronics
- LP 8000 approved according to EMC directive

#### **ACCESSORIES AND OPTIONS**

- Repeater of the vehicle lighting
- Cargo securing set and central crank supports
- Acoustic signalling device for manual control
- Control and monitoring system
- Firm rear frame
- Winch, set for lashing straps, traffic cone holder, spare wheel with holder, holder for warning threshold





#### **Technical Data**

Warning Trailer Type A41

Total length	6800 - 7200 mm
Total width	2400 mm
Track width	2200 mm
Loading area (LxW)	3100 x 1820 mm
Clearance width	1830 mm
Clearance height	1878 mm
Side boards (H)	300 mm
Total weight	2000 - 2500 kg
Empty weight depending on model	1100 - 1300 kg
Max. load capacity	900 - 1400 kg

Warning Trailer Type A41 in modular construction 129717-041

Ref. No.



### Warning Trailer

## A51









- Modular design, separately bolted, galvanized and interchangeable
- Galvanized, height-adjustable drawbar (Al-Ko), with overrun brake, holding brake
- DIN towing eye with a changeable spherical head coupling
- Loading ramp surfaced with aluminium chequered plate
- Loading area of 15 mm 7 layered laminated plywood sheets with sealed edges
- Side panels of 15 mm 7 layered laminated plywood covered with aluminium sheet profile at the top
- · The height-adjustable semi-automatic support wheel
- Robust plastic fenders
- 2 battery boxes of steel with aluminium chequered plate cover (950 x 630 x 300)
- 3 support frames for the drawbar of a loaded advance warning trailer
- · Motorized cable winch with a hook and 10 m of cable
- Rubber spring axle with a tandem brake design with automatic brake adjustment
- 6 lashing points (straps) with 500 daN
- 2 fully adjustable support legs
- · Loading aid incl. hopper opening

#### **WARNING BOARD**

- Warning board in compliance with RSA 21 and ZTV-SA incl. traffic sign 616-30 StVO (road traffic regulations), 3600 x 2200 mm
- Chevron patterned plates and directional arrow with microprismatic retro-reflective foil, type RA2
- Light arrow system with two LED-TL advance warning lamps (WL5) and 25 separately monitored LED-TL warning lamps (WL6)
- Directional arrow with motor revolution, mechanical emergency adjustment and automatic light arrow adjustment
- Motorized lifting and lowering of the top board with mechanical emergency adjustment and freely accessible emergency-off switch
- Combined manual radio-cable control for activating all functions via touchscreen and one-touch keys

#### **ELECTRICAL SYSTEM**

- Rechargeable battery 12 V, up to 80 hours daytime operation (further energy packages on request)
- Battery guard for electronic protection
- · Repeater for the vehicle lighting
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery charger
- · Light arrow LP 8000 approved according to EMC directive

#### **ACCESSORIES AND OPTIONS**

- · Cargo securing set
- Central crank supports
- An acoustic signalling device for manual control
- Control and monitoring system
- · LED Light Arrow LP8 with holder
- Spare wheel with holder and warning ramp fixture







#### **Technical Data**

Total length	8950 - 9260 mm
Total width	2430 mm
Track width	2200 mm
Loading area (LxW)	5400 x 1850 mm
Clearance width	1830 mm
Clearance height	1878 mm
Total weight	3500 kg
Empty weight depending on model	1800 - 1900 kg
Max. load capacity	1600 - 1700 kg

Warning Trailer Type A51 in modular construction	Ref. No.
Warning Trailer Type A51 in modular construction	129717-051

## Warning trailers for roads without oncoming traffic

# BSERIES

Take advantage of modular and individually configurable trailers with extremely long operating times and load capacities up to 1,5 tons.

Comparison	B1	B2	В3	B4
Perm. total weight	750kg	750-1000kg	1300 kg-1500kg	2000-2500kg
Empty weight	350-400kg	400-450kg	700-900kg	950-1000kg
Load capacity	-	350-550kg	400-700kg	1000-1550kg
Loading area (L x W)	-	1760 x 1000mm	2610 x 1510mm	3610 x 1510mm
Total length	4200-4700mm	4200-4700mm	5400-5900mm	6480-6630mm
Track width	1400mm	1400mm	1900mm	1900mm
Loading ramp	no	no	yes	yes









#### **ROBUST MODULAR DESIGN**

Welded chassis and steel frame from our own production facilities

#### **CORROSION PROTECTION**

Chassis, drawbar and frame completely galvanized

#### **OPTIMAL CONSTRUCTION**

High-grade quality components for permanently safe operation, maintenance-friendly design

#### STABLE WARNING TRAILER

With traffic sign 616-31 as per RSA 21 and ZTV-SA with retroreflective foil (2500 x 1700 mm); country-specific traffic signs on request

#### **LIGHT ARROW DEVICE**

With two energy-saving warning lamps as well as 15 energy-saving and individually monitored warning lamps

#### **SIMPLE OPERATION**

Change the direction of the light arrow and the directional arrow with motor revolution with the remote control; uniform operating concept

#### **LONG SERVICE LIFE**

Standard up to 80 hours daily operation – (more as an option)

#### LOCATION-INDEPENDENT

Control via simple connection to web-based applications



- · Chassis and body of galvanized steel
- Galvanized, height-adjustable drawbar (Al-Ko), with holding brake and parallel adjustment
- DIN towing eye with a changeable spherical head coupling
- Height-adjustable support wheel
- Robust plastic fenders
- Battery box of plastic (750 x 340 x 320 mm)
- Braked rubber spring axle
- 2 fully adjustable support legs

#### **WARNING BOARD**

- Warning board in compliance with RSA 21 and ZTV-SA incl. traffic sign 616-31 StVO (road traffic regulations), 2500 x 1700 mm
- Chevron patterned plates and directional arrow with microprismatic retro-reflective foil, type RA2
- Light arrow system with 2 LED advance warning lamps (WL5)
- Directional arrow with motor revolution, mechanical emergency adjustment and automatic luminous arrow adjustment
- · Manual lifting and lowering of the top board

#### **ELECTRICAL SYSTEM**

- Rechargeable battery 12 V, up to 55 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery charger
- Battery disconnector

#### **ACCESSORIES AND OPTIONS**

- Battery guard for protection of electronics
- Central crank supports
- Control and monitoring system
- Motorized lifting and lowering of the top board
- Manual cable or radio control for operating all functions via one-touch keys





#### **Technical Data**

Total length	4200 - 4700 mm
Total width	1700 mm
Track width	1400 mm
Total weight	750 kg
Empty weight depending on model	350 - 400 kg

Warning Trailer Type B1	Ref. No.
Warning Trailer Type B 1, without light warning system	129700-001



- Chassis and body of galvanized steel
- Galvanized, height-adjustable drawbar (Al-Ko), with overrun brake, holding brake and parallel adjustment
- DIN towing eye with a changeable spherical head coupling
- Loading area of 15 mm 7 layered laminated plywood sheets with sealed edges
- Side panels of 15 mm 7 layered laminated plywood covered with aluminium sheet profil at the top
- · Height-adjustable semi-automatic support wheel
- · Robust plastic fenders
- Battery box integrated into the side panel design incl. cover of aluminium chequered plate (1000 x 400 x 300 mm)
- · Braked rubber spring axle
- 4 lashing points (straps) with 500 daN
- 2 fully adjustable support legs

#### **WARNING BOARD**

- Warning board in compliance with RSA 21 and ZTV-SA,  $2500 \times 1700 \text{ mm}$
- Chevron patterned plates and directional arrow with microprismatic retro-reflective foil, type RA2
- Light arrow system with two LED warning lamps (WL5) and 15 separately monitored LED warning lamps (WL6)
- Directional arrow with motor revolution, mechanical emergency and automatic light arrow adjustment
- · Manual lifting and lowering of the top board
- Manual cable or radio control for operating all functions via one-touch keys

#### **ELECTRICAL SYSTEM**

- Rechargeable battery 12 V, up to 55 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery charger
- Battery disconnector

#### **ACCESSORIES AND OPTIONS**

- Battery guard for protection of electronics
- Cargo securing set
- Central crank supports
- Control and monitoring system
- · Motorized lifting and lowering of the top board
- Traffic cone holder





Sign 615

#### **Technical Data**

Total length	4200 mm
Total width	1700 mm
Track width	1400 mm 400 - 450 kg
Loading area (LxW)	1760 x 1000 mm
Side boards (H)	300 mm
Total weight	750 - 1000 kg
Empty weight depending on model	350 - 550 kg
Max. load capacity	

#### Warning Trailer Type B2

Ref. No.

Warning Trailer Type B 2, without light warning system

129700-002

- · Chassis and body of galvanized steel
- Galvanized, height-adjustable drawbar (Al-Ko), with overrun brake, holding brake and parallel adjustment
- DIN towing eye with a changeable spherical head coupling
- Loading ramp surfaced with aluminium chequered plate
- Loading area of 18 mm 7 layered laminated plywood sheets with sealed edges
- Side panels of double-walled aluminium with interior reinforcement bars
- · Height-adjustable semi-automatic support wheel
- Robust plastic fenders
- Battery box integrated into the side panel design incl. cover of aluminium chequered plate (1580 x 450 x 300 mm)
- Braked rubber spring axle
- 6 lashing points (straps) with 500 daN
- 2 fully adjustable support legs



#### **WARNING BOARD**

- Warning board in compliance with RSA 21 and ZTV-SA,  $2500\,x\,1700\,mm$
- Chevron patterned plates and directional arrow with microprismatic retro-reflective foil, type RA2
- Light arrow system with two LED warning lamps(WL5) and 15 separately monitored LED warning lamps(WL6)
- Directional arrow with motor revolution, mechanical emergency and automatic light arrow adjustment
- Manual lifting and lowering of the top board
- Manual cable or radio control for operating all functions via one-touch keys

#### **ELECTRICAL SYSTEM**

- Rechargeable battery 12 V, up to 55 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery charger
- Battery disconnector

#### **ACCESSORIES AND OPTIONS**

- Battery guard for protection of electronics
- Cargo securing set
- central crank supports
- Control and monitoring system
- · Motorized lifting and lowering of the top board
- Traffic cone holder



#### **Technical Data**

Total length	5400 - 5900 mm
Total width	2150 mm
Track width	1900 mm
Loading area (LxW)	2610 x 1510 mm
Clearance width	1510 mm
Clearance height	1262 mm (centred 2212 mm)
Side boards (H)	300 mm
Total weight	1300 - 1500 kg
Empty weight depending on model	700 - 900 kg
Max. load capacity	400 - 700 kg

#### Warning Trailer Type B3

Warning Trailer Type B 3, total weight 1300 kg	129700-003
Warning Trailer Type B 3, total weight 1500 kg	129700-003-01



Ref. No.

- Chassis and body of galvanized steel
- Galvanized, height-adjustable drawbar (Al-Ko), with overrun brake, holding brake and parallel adjustment
- DIN towing eye with a changeable spherical head coupling
- Loading ramp surfaced with aluminium chequered plate
- Loading area of 18 mm 7 layered laminated plywood sheets with sealed edges
- Side panels of double-walled aluminium with interior reinforcement bars
- · Height-adjustable semi-automatic support wheel
- · Robust plastic fenders
- Battery box integrated into the side panel design incl. cover of aluminium chequered plate (1580 x 450 x 300 mm)
- Braked tandem design rubber spring axle
- 6 lashing points (straps) with 500 daN
- · 2 fully adjustable support legs

#### WARNING BOARD

- Warning board in compliance with RSA 21 and ZTV-SA,  $2500 \times 1700 \text{ mm}$
- Chevron patterned plates and directional arrow with microprismatic retro-reflective foil, type RA2
- Light arrow system with two LED warning beacons (WL5) and 15 separately monitored LED warning beacons (WL6)
- Directional arrow with motor revolution, mechanical emergency and automatic light arrow adjustment
- Manual lifting and lowering of the top board
- Manual cable or radio control for operating all functions via one-touch keys

#### **ELECTRICAL SYSTEM**

- Rechargeable battery 12 V, up to 55 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery charger
- Battery disconnector

#### **ACCESSORIES AND OPTIONS**

- Battery guard for protection of electronics
- Cargo securing set and central crank supports
- Control and monitoring system
- · Motorized lifting and lowering of the top board
- Traffic cone holder





#### **Technical Data**

Total length	6480 - 6630 mm
Total width	2104 mm
Track width	1900 mm
Loading area (LxW)	3610 x 1510 mm
Clearance width	1510 mm
Clearance height	1262 mm (centred 2212 mm)
Side boards (H)	300 mm
Total weight	2000 - 2500 kg
Empty weight depending on model	950 - 1000 kg
Max. load capacity	1000 - 1550 kg

#### Warning Trailer Type B4 Warning Trailer Type B 3 Tandem (B 4), without light warning system

**Ref. No.** 129700-004



# SOMETIMES, MOREIS BETTER

Ready for operation, right from the factory: You can start using our warning trailers in road traffic right away. We also offer accessory options so that you can customize your trailers to your needs for one-of-a-kind operating convenience.

#### **ELECTRICAL EQUIPMENT**

#### **Battery monitor**

Ensure the long-term performance of your mobile warning board. The battery monitor protects the batteries from deep discharge and protects the electronics against overloading. Flying sparks are also minimised through load-free connection during battery changes.

#### **Charge Booster**

Our charging boosters ensure that the battery is reliably charged by the towing vehicle, even over short distances. This increases the service life measurably and improves the reliability of your mobile warning board.

#### **OPERATION**

#### **Operating hours meter**

The detailed documentation on the use of your mobile warning trailer let you detect wear and tear in advance and replace parts like bulbs, batteries or mechanical components before they fail. The operating hours meter also provides you with critical information to make your billing easier.

#### Interface package XML

This module enables secure data exchange between several devices. It makes it possible to third-party devices or control equipment using the XML interface package.



#### Electrical peephole VZ 222

Always have the correct information and a critical overview of oncoming traffic. Manual, electrical opening and closing of the peephole in the large round plates is convenient and increases safety.

#### NiBus mobil RSU modem

This digital data interface lets you control and monitor our warning and barrier systems in accordance with safety standards, regardless of your location.

#### **TRANSPORTATION**

#### Secure loading

We offer a variety of accessories for the secure transportation of materials and tools, from airline rails to safety nets and lashing rails on the floor of the loading areas.

#### **SAFETY**

#### **GPS** speed sensor

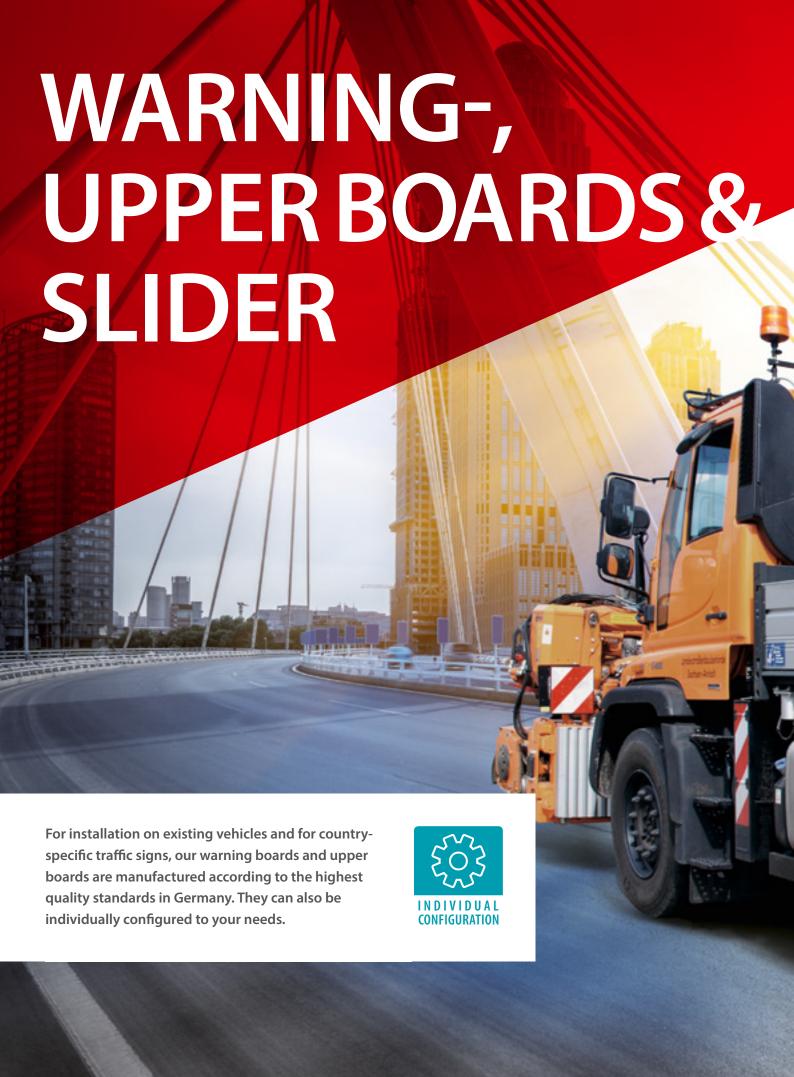
Our warning trailers and boards are designed for specific maximum speeds. The optional GPS speed sensor ensures that the warning board automatically retracts when the maximum speed is exceeded. The system also prevents the warning board from opening during travel.

## INDIVIDUALITY ATAGLANCE

Adapt your mobile barrier with accessories that meet your needs.

	A1	A2	A31	A41	A51	B1	B2	В3	B4
Equipment									
• Spare wheel with holder	•	•	•	•	•	•	•	•	•
Parking light socket	•	•	•	•	•	•	•	•	•
Axis mileage indicator	•	•	•	•	•	•	•	•	•
Anti-theft wheel bolts	•	•	•	•	•	•	•	•	•
Cockpit bracket remote control	•	•	•	•	•	•	•	•	•
Holder and charging tray     Remote controls	•	•	•	•	•	•	•	•	•
• Lighting for loading area	•	•	•	•	•	-	•	•	•
Step above mudguard	•	•	•	•	-	-	-	-	-
• Cable drum	•	•	•	•	•	-	-	•	•
Holder for warning flag	•	•	•	•	•	-	-	•	•
• Light for battery box	•	•	•	•	•	-	•	•	•
Operation									
• XML interface package	•	•	•	•	•	•	•	•	•
Hydraulic lifting / lowering device	•	•	•	•	•	-	-	•	•
• Tool-less emergency operation PV	•	•	•	•	•	•	•	•	•
• Electrical peephole VZ 222	•	•	•	•	•	_	-	-	-
• NiBus modem	•	•	•	•	•	•	•	•	•







 Warning Board according to German Standard RSA and TL-Absperrtafeln 3600 x 2200 mm with traffic sign 616-30 (big)

- Warning Board according to German Standard RSA and TL-Absperrtafeln 2500 x 1700 mm with traffic sign 616-31 (small)
- Optional: battery box, battery guard, charger, vehicle lightning system, manual or electrical arrow adjustment, electrical lifting/lowering, remote control



Warning Board Type A and B

Waring Board Type B according to German standard "RSA" with sign 616–31 (small) Waring Board Type A according to German standard "RSA" with sign 616–30

Ref. No.

329378-001

329379-001



Warning board sign 616-30



Warning board sign 616-31





Upper Boards	Ref. No.
Upper Board with light arrow combination type LP 15	329380-001
Upper Board with light arrow device type LP 25	329380-004







Upper board with light arrow system LP 15



#### Vertically Liftable Warning Board Slider

Ref. No.

Vertically Liftable Warning Board Slider with light arrow device type 8000 and motor operated arrow adjustment 129740-001









**Light colour** yellow



Max. light intensity 2200 cd



**Eff. light intensity** 1500 cd



Av. power consumpt. day



**Operating voltage** 12/24 V



**Dimensions (LxWxH)** 1130 x 900 x 165 mm



Weight 13 kg

#### LED Light Arrow LP 8

Ref. No.

**Ref. No.** 329360-1

329365-3

LED Light Arrow Type LP 8 129361–152 consisting of:

8 Multi-Light 200 LED lamps 220 mm, mounted on an aluminium frame with

slip-on device

and 3 m connecting cable with battery clips

Accessories and Spare parts	
Bracket for mounting on tubes with adjustment device, 5 positi	ions

#### Operating time with one battery set

Adapter for mounting on board sides

- 1	
With rechargeable battery 12 V, 56 Ah	50 hrs
With rechargeable battery 12 V, 80 Ah	75 hrs
With rechargeable battery 12 V, 180 Ah	160 hrs
With rechargeable battery 12 V, 230 Ah	200 hrs





Test number V3-24-2013

# ANEW DIMENSION OF SAFETY

LED technology has revolutionised mobile traffic management and control. Actively lighting and dynamic traffic signs can be adjusted in real time to changing situations, to meet the increasing challenges surrounding road traffic and increase use efficiency.

As a leading global manufacturer, we have driven and shaped this development. With the Nissen VarioSign LED system we can offer you custom solutions from a single variable message sign to a fully equipped VarioSign LED trailer. You will also profit from our TrafficManager software, with which you can control and monitor all the devices remotely.

### VarioSign LED System

Structure	
Development and manufacturing	50
Traffic signs, direction signals and symbols	
VarioSign LED trailers	54
LED Trailer Standard	56
LED Trailer Advanced	58
LED Trailer Premium	60
LED Trailer Pharos 2.0	62
LED Trailer Pharos 2.39	64
Pharos XXL	66
LED Trailer Solar	68
LED Trailer Solar Tower	70
Accessories	72
VarioSign LED variable message signs	76
	78
ProLine SMD	80
SpeedSign	82
WeNiPol II	84
Pamir II	86





The VarioSign LED system is based on high-quality SMD boards measuring 360 x 360mm and 420 x 420mm. With these boards, we can configure LED traffic signs in all common sizes, even for country-specific specifications. The traffic signs are securely framed in a stable aluminium profile, which makes them ideal for mobile use. Each LED interchange symbol has a library stored on a medium and can be freely programmed.

#### Developed and perfected by pioneers

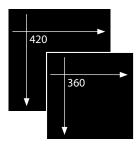
Our mobile LED traffic signs can be easily mounted on vehicles, guard rails or trusses. The WeNiPol II version is suitable for rooftop installation on vehicles.

We also offer complete mobile warning systems with different types of chassis.

#### VarioSign Classic and VarioSign RGB

Choose from two LED technologies: VarioSign Classic with up to four colours and VarioSign RGB to display 256 colours. VarioSign Classic has a special, anti-reflective glass to ensure optimal visibility, even in daylight. The VarioSign RGB version uses our patented lens technology, which enables 100% colour display – ideal for use at events.

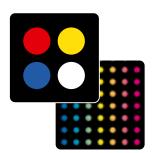




Aluminium profiles



LED Classic or RGB



Programming





You need a custom LED solution?
Contact us: verkauf@nissen-germany.com

## HGHTEC ROMA NGLE SOURCE

All components of our VarioSign LED system come from our own production facilities – from the technical layout, the assembly of the circuit boards to the reflow soldering process, and the application of a protective lacquer. Before the production goes any further, we test the circuit boards to make sure they function perfectly. Next, our expert teams assemble the traffic signs, install them on a chassis if required, and equip them with pre-programmed software.

#### VarioSign LED - Your benefits at a glance

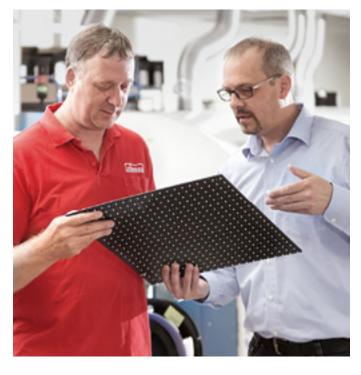
- Better visibility through active light
- Reduction of dangers and accidents
- Variable potential for use
- Diverse range of display options
- Compatible with intelligent control systems
- Low energy consumption



#### **ISO** certified

Our quality management has been certified since 1995 according to **DIN EN ISO 9001** and our environmental management since 2014 according to **DIN EN ISO 14001**.



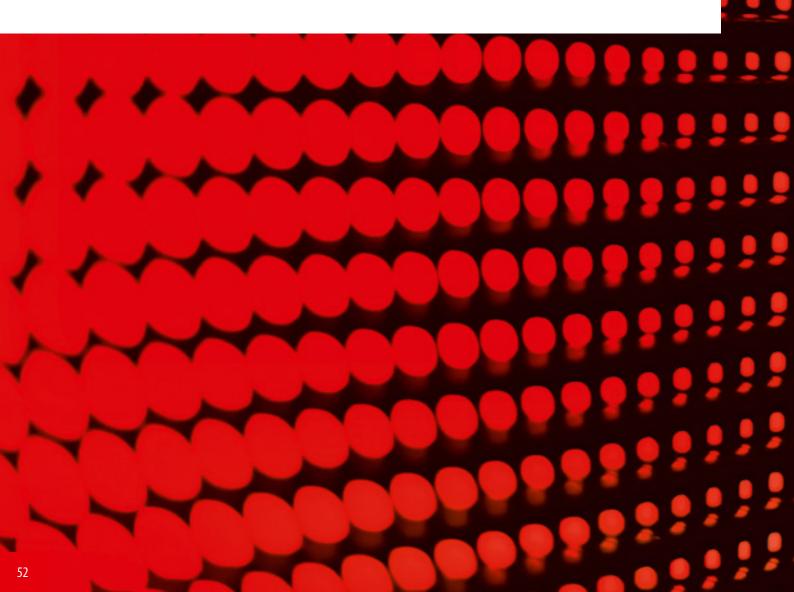




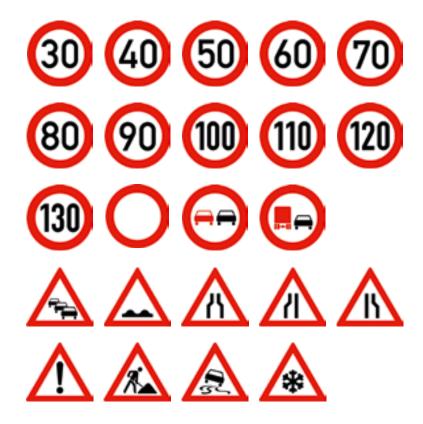


Whether animated or static, VarioSign LED traffic signs can display all traffic and direction signals, as well as almost every kind of symbol or text.

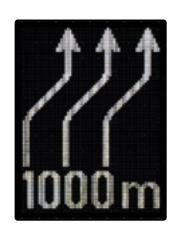
Our VarioSign LED traffic signs have comprehensive libraries available to help you find the characters that you need. These are stored on a medium and enable easy operation without any risk of confusion. You can also create your own texts and symbols.

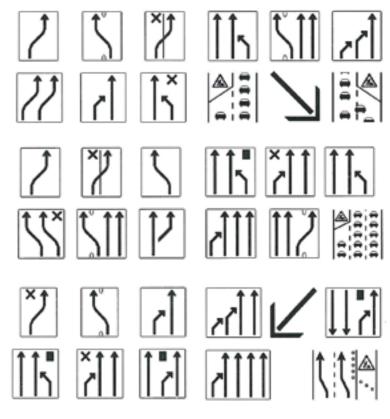






... and many more characters







## VarioSign LED TRAILER

Comparison	Standard	Advanced	Premium	Pharos 2.0	Pharos 2.39
Perm. total weight	750-1000kg	750-1000kg	1000-1500kg	2500kg	2500kg
Empty weight depending on model	620-720kg	640-900kg	810-940kg	2260kg	2050kg
Load capacity	30-380kg	240-360kg	190-490kg	240kg	450kg
Total length	4450-5800mm	4450-5800mm	3770-5300mm	5950-5990mm	5950-5990mm
Overall width	1810mm	1810mm	2200mm	2200mm	2200mm
Top LED sign	2 x 2/420	3 x 3/360	3 x 3/420	7 x 3/360	5 x 3/360
Middle LED sign	-	-	-	3 x 3/360	3 x 3/360
Lower LED sign	3 x 4/420	3 x 4/420	4 x 4/420	3 x 4/420	3 x 4/420
LED colours	rt/ws/ge/bl-RGB	rt/ws/ge/bl-RGB	rt/ws/ge/bl-RGB	rt/ws/ge/bl-RGB	rt/ws/ge/bl-RGB
Pitch	20mm	20mm	20mm	20mm	20mm



Thanks to powerful LED modules, a wide range of display options and compatibility with intelligent control systems, our mobile LED warning lights are suitable for a wide range of applications, from blocking off hazardous locations to traffic management at events.

#### **LED VARIABLE MESSAGE SIGNS**

From our own development and production facilities

#### STRONG LUMINOSITY

2,500 LED / m<sup>2</sup> – tested and approved

#### **DYNAMIC DISPLAY**

Software for custom programming

#### INFINITELY VARIABLE BRIGHTNESS ADJUSTMENT

Automatic or manual

#### **POWERFUL ELECTRONICS**

For extremely long operating times

#### **ROBUST MODULAR DESIGN**

With individually interchangeable elements

#### **INDIVIDUAL DESIGN**

Chassis and LED traffic signs can be configured

#### **MOBILE TELEMATICS**

All products in this series are fully compatible with the Software TrafficManager



- · Chassis and body of hot-galvanized steel
- Hot-galvanized, height-adjustable drawbar with holding brake
- DIN towing eye and spherical head coupling changeable
- Height-adjustable support wheel
- 4 fully adjustable support legs
- Battery box of acid-proof plastic (1660 x 450 x 320 mm)
- Plastic fenders
- Warning marking in accordance with DIN 30710 at the rear and additional warning markings at the sides
- Handle for one-handed opening/closing of battery box

#### **ADVANCE WARNING BOARD**

- 2 LED advance warning lamps inspected in compliance with TL warning lamps WL 5
- 2 LED variable message signs with an automatic and manual brightness adjustment for the static and dynamic representation of texts, symbols and road signs

#### Upper LED variable traffic sign

Housing size: 970 x 970 mm
LED display surface: 840 x 840 mm
Pixels: 42 x 42
Grid dimension: 20 mm
LED/m²: 2500

#### Lower variable traffic sign

Housing size: 1390 x 1810 mm LED display surface: 1260 x 1680 mm

Pixels: 63 x 84
Grid dimension: 20 mm
LED/m²: 2500

- Separately programmable text line
- · Libraries on a separate memory module
- Motorized lifting and lowering of the top board with mechanical emergency adjustment and freely accessible emergency-off switch
- Electromotive locking in lowered state
- Combined manual radio-cable remote control for operating all functions via touchscreen and one-touch keys
- Free programming software

#### **ELECTRICAL SYSTEM**

- Rechargeable battery, 24 V with up to 50 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery guard for protection of electronics
- · Battery charger



Side view



Lowered

#### **ACCESSORIES AND OPTIONS**

- Central crank supports
- Control and monitoring system
- Operating hours counter
- · Interface package
- Fuel cell

#### **Technical Data**

Total length	4450 - 5800 mm
Total width	1810 mm
Track width	1600 mm
Height lowered	750 - 1000 kg
Height lifted	620 - 720 kg
Total weight	30 - 380 kg
Empty weight depending on model	3596 mm
Max. load capacity	1475 mm

#### VarioSign LED Trailer STANDARD

**Ref. No.** 129265-011

Advance Warning Trailer VarioSign STANDARD with LED variable message signs total weight 750 – 1000 kg, with parking brake





- Chassis and body of hot-galvanized steel
- Hot-galvanized, height-adjustable drawbar with holding brake
- DIN towing eye and spherical head coupling changeable
- Height-adjustable support wheel
- 4 fully adjustable support legs
- Battery box of acid-proof plastic (1660 x 450 x 320 mm)
- Plastic fenders
- Warning marking in accordance with DIN 30710 at the rear and additional warning markings at the sides
- Handle for one-handed opening/closing of battery box

#### **ADVANCE WARNING BOARD**

- 2 LED advance warning lamps tested according to TL warning lamps WL 5
- 2 LED variable message signs with an automatic and manual brightness adjustment for the static and dynamic representation of texts, symbols and road signs

#### Upper LED variable traffic sign

Housing size: 1210 x 1210 mm LED display surface: 1080 x 1080 mm

 Pixels:
 54 x 54

 Grid dimension:
 20 mm

 LED/m²:
 2500

#### Lower variable traffic sign

Housing size: 1390 x 1810 mm LED display surface: 1260 x 1680 mm

Pixels: 63 x 84
Grid dimension: 20 mm
LED/m<sup>2</sup>: 2500

- Separately programmable text line
- Libraries on a separate memory module
- Motorized lifting and lowering of the top board with mechanical emergency adjustment and freely accessible emergency-off switch
- Electromotive locking in lowered state
- Combined manual radio-cable remote control for operating all functions via touchscreen and one-touch keys
- Free programming software

#### **ELECTRICAL SYSTEM**

- Rechargeable battery, 24 V with up to 50 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V und/or 24 V
- Feed socket 230 V
- Battery guard for protection of electronics
- Battery charger



Lowered

#### **ACCESSORIES AND OPTIONS**

- · Central crank supports
- Control and monitoring system
- Operating hours counter
- Interface package
- Fuel cells

#### Technical Data

Total length	4450 - 5800 mm
Total width	1810 mm
Track width	1600 mm
Height lowered	1455 mm
Height lifted	750 - 1000 kg
Total weight	640 - 900 kg
Empty weight depending on model	100 - 360 kg
Max. load capacity	3970 mm

#### VarioSign LED Trailer ADVANCED

**Ref. No.** 129265-012

Advance Warning Trailer VarioSign ADVANCED with LED variable message signs total weight 1000 kg, with parking brake





- · Chassis and body of hot-galvanized steel
- Hot-galvanized, height-adjustable drawbar with holding brake
- DIN towing eye and spherical head coupling changeable
- Loading area of 15 mm 7 layered laminated plywood sheets with sealed edges
- Side panels of 15 mm 7 layered laminated plywood covered with aluminium sheet profil at the top
- Loading area (1600 x 530 x 300 mm)
- Height-adjustable support wheel an 4 fully adjustable support legs
- Battery box of acid-proof plastic (1660 x 450 x 320 mm)
- Plastic fenders
- · Handle for one-handed opening/closing of battery box

#### **ADVANCE WARNING BOARD**

- 2 LED advance warning lamps tested according to TL warning lamps WL 5
- 2 LED variable message signs with an automatic and manual brightness adjustment for the static and dynamic representation of texts, symbols and road signs

#### Upper LED variable traffic sign

Housing size: 1390 x 1390 mm LED display surface: 1260 x 1260 mm

 Pixels:
 63 x 63

 Grid dimension:
 20 mm

 LED/m²:
 2500

#### Lower variable traffic sign

Housing size: 1810 x 1810 mm LED display surface: 1680 x 1680 mm

Pixels: 84 x 84
Grid dimension: 20 mm
LED/m²: 2500

- Separately programmable text line
- Libraries on a separate memory module
- Motorized lifting and lowering of the top board with mechanical emergency adjustment and freely accessible emergency-off switch
- Electromotive locking in lowered state
- Combined manual radio-cable remote control for operating all functions via touchscreen and one-touch keys
- Free programming software

#### **ELECTRICAL SYSTEM**

- Rechargeable battery, 24 V with up to 50 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery guard for protection of electronics
- · Battery charger







#### **ACCESSORIES AND OPTIONS**

- Central crank supports
- Control and monitoring system
- · Operating hours counter
- Interface package
- Spare wheel
- Traffic cone holder

#### Technical Data

Total length	A1: 3770 - 4500 mm, A2: 4800 - 5300 mm
Total width	2200 mm
Track width	2000 mm
Loading area (LxW)	A1:1360 x 1620 mm, A2:1870 x 1620 mm
Height lowered	A1: 1000 - 1300 kg, A2: 1300 - 1500 kg
Height lifted	A1: 810 kg, A2: 940 kg
Total weight	A1: 190 - 490 kg, A2: 220 - 420 kg
Empty weight depending on model	3930 mm
Max. load capacity	2460 mm

#### VarioSign LED Trailer PREMIUM

**Ref. No.** 129265-025

Advance Warning Trailer VarioSign ADVANCED with LED variable message signs (A1), total weight 1300 - 1500 kg, with parking brake

Advance Warning Trailer VarioSign ADVANCED with LED variable message signs (A2) 129265-026

total weight 1300 - 1500 kg, with parking brake



- · Chassis and body of hot-galvanized steel
- Hot-galvanized, height-adjustable drawbar with overrun brake and holding brake
- DIN towing eye and spherical-head coupling changeable
- · Height-adjustable support wheel
- 4 fully ajustable and individually controllable electrical supports
- 2 battery boxes of acid-proof plastic (1660 x 450 x 320 mm)

#### **ADVANCE WARNING BOARD**

- 4 LED advance warning lamps tested according to TL warning lamps WL 5
- 3 LED variable message signs with an automatic and manual brightness adjustment for the static and dynamic representation of texts, symbols and road signs

#### Upper LED variable traffic sign

Housing size: 2650 x 1210 mm
LED display surface: 2520 x 1080 mm
Pixels: 126 x 54
Grid dimension: 20 mm
LED/m²: 2500

#### Medium-sized variable traffic-sign (optional)

 $\begin{array}{ll} \mbox{Housing size:} & \mbox{1210 x 1210 mm} \\ \mbox{LED display surface:} & \mbox{1080 x 1080 mm} \end{array}$ 

Pixels: 54 x 54 Grid dimension: 20 mm LED/m<sup>2</sup>: 2500

#### Lower variable traffic sign

Housing size: 1390 x 1810 mm LED display surface: 1260 x 1680 mm

Pixels: 63 x 84
Grid dimension: 20 mm
I FD/m<sup>2</sup>: 2500

- Automatic adjustment
- Upper LED variable traffic sign swings above the road
- Libraries on a separate memory module
- Hydraulic lifting and lowering of the upper board, including a mechanism for mechanical emergency adjustment
- Combined manual radio-cable remote control for operating all functions via touchscreen and one-touch keys
- Free programming software

#### **ELECTRICAL SYSTEM**

- Rechargeable battery, 24 V with up to 50 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery guard for protection of electronics
- Battery charger





State for transport



Side view

#### **ACCESSORIES AND OPTIONS**

- · Control and monitoring system
- Operating hours counter
- · Interface package
- Wind sensor
- Up to 4 rechargeable batteries
- Warning marking in accordance with DIN 30710

#### **Technical Data**

Total length	5950 - 5990 mm
Total width	(side part lowered / lifted) 2200 / 5500 mm
Track width	2000 mm
Height lowered	3700 mm
Height lifted	4800 mm
Clearance height	2500 kg
Total weight	2260 kg
Empty weight depending on model	240 kg
Max. load capacity	6720 mm

#### VarioSign LED Warning Trailer PHAROS 2.0 Ref. No.

Advance LED Overhead Warning Trailer Pharos 2.0 129265-052



- · Chassis and body of hot-galvanized steel
- Hot-galvanized, height-adjustable drawbar with overrun brake and holding brake
- DIN towing eye and spherical-head coupling changeable
- · Height-adjustable support wheel
- 4 fully ajustable and individually controllable electrical supports
- 2 battery boxes of acid-proof plastic (1660 x 450 x 320 mm)

#### **ADVANCE WARNING BOARD**

- 4 LED advance warning lamps tested according to TL warning lamps WL 5
- 3 LED variable message signs with an automatic and manual brightness adjustment for the static and dynamic representation of texts, symbols and road signs

#### Upper LED variable traffic sign

Housing size: 1930 x 1210 mm LED display surface: 1800 x 1080 mm

Pixels: 90 x 54
Grid dimension: 20 mm
LED/m<sup>2</sup>: 2500

#### Medium-sized variable traffic-sign (optional)

Housing size: 1210 x 1210 mm LED display surface: 1080 x 1080 mm

Pixels: 54 x 54
Grid dimension: 20 mm
LED/m<sup>2</sup>: 2500

#### Lower variable traffic sign

Housing size: 1390 x 1810 mm LED display surface: 1260 x 1680 mm

Pixels: 63 x 84
Grid dimension: 20 mm
LED/m<sup>2</sup>: 2500

- Automatic adjustment
- Libraries on a separate memory module
- Hydraulic lifting and lowering of the upper board, including a mechanism for mechanical emergency adjustment
- Combined manual radio-cable remote control for operating all functions via touchscreen and one-touch keys
- Free programming software

#### **ELECTRICAL SYSTEM**

- Rechargeable battery, 24 V with up to 50 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery guard for protection of electronics
- Battery charger



Side view lowered



Side view lowered

#### **ACCESSORIES AND OPTIONS**

- Control and monitoring system
- Operating hours counter
- · Interface package
- Wind sensor
- Up to 4 rechargeable batteries

#### **Technical Data**

Total length	5950 - 5990 mm
Total width	2200 mm
Track width	2000 mm
Height lowered	3700 mm
Height lifted	2500 kg
Total weight	2050 kg
Empty weight depending on model	450 kg
Max. load capacity	6850 mm

VarioSign LED Warning Trailer PHAROS 2.39	Ref. No.
Advance LED Overhead Warning Trailer Pharos 2 39	129265-053



### Mobile sign gantry Vario Sign

## **Pharos XXL**













- · Rockinger drawbar (foldable), tensile load: 24 tons
- Two braked axles (compressed air), carrying capacity per axle 9000 kg
- Wheels with heavy duty wheel rims, wheel size: 235 /75R17.5
- Slewing ring with a diameter of 1100 mm (Euronorm)
- 4 hydraulic supports
- Warning markings with foil (RA3 / class III)
- Chassis and frame completely painted, RAL 9005
- Aluminium and sheet metal parts completely painted, RAL 9005
- · Crash protection system at the back

#### **ELECTRONICS**

#### · System control:

Automatic build up and dismantling program via touchscreen

- Manual build up and dismantling via manual operation (two-button operation) in the control box
- LED variable message sign control via Touch Remote Colour

#### **LED variable message signs:**

Housing size: 1390 x 1390 mm LED display surface: 1260 x 1260 mm

Pixels: 63 x 63 Grid dimension: 20 mm LED/m<sup>2</sup>: 2500

#### **ELECTRICAL SYSTEM**

- Power supply 24 V
- 8 batteries
- Battery charger
- · Power unit
- Trailer lighting: 24 V LED with 15-pole connector

#### **ACCESSORIES AND OPTIONS**

- 12 V electrical system
- Control and monitoring system TrafficManager
- Interface package
- LED advanced warning lamps (WL5 / L9H) according to German standards
- Version with roll-off frame with hook holder according to DIN 30722
- Energy package hybrid (with 8 solar panels, additionally to the existing generator)
- Extension by another track version (4 tracks)





#### **Technical Data**

Total length	(transport) 10675 mm (work) 13765 mm
Total width	(transport) 2497 mm (work) 18620 mm
Height lowered	3370 mm
Height lifted	6433 mm
Total weight	15000 kg

## Mobile sign gantry Vario Sign Pharos XXLRef. No.Mobile sign gantry VarioSign Pharos XXL with variable message sign<br/>trailer version129724-001Mobile sign gantry VarioSign Pharos XXL with variable message sign<br/>version roll-off frame129725-001





- Chassis and body of hot-galvanized steel
- DIN towing eye and spherical head coupling changeable
- Height-adjustable support wheel
- 4 fully adjustable hot-galvanized support legs
- Aluminium battery box for two batteries up to 210 Ah in size
- Hot-galvanized, height-adjustable drawbar with holding brake
- Two solar modules which can charge the system batteries in every position

#### ADVANCE WARNING BOARD

- 2 LED advance warning lamps tested according to L9H according to EN12352
- 2 LED variable message signs with an automatic and manual brightness adjustment for the static and dynamic representation of texts, symbols and road signs



Housing size: 970 x 970 mm LED display surface: 840 x 840 mm Pixels: 42 x 42 Grid dimension: 20 mm LED/m<sup>2</sup>: 2500

#### Lower LED variable message sign

1390 x 1810 mm Housing size: LED display surface: 1260 x 1680 mm

Pixels: 63 x 84 Grid dimension: 20 mm LED/m<sup>2</sup>: 2500

- Separately programmable text line
- Libraries on a separate memory module
- Accessories and options
- Motorized lifting and lowering of the top board with mechanical emergency adjustment and freely accessible emergency-off switch
- Electromotive locking of the upper board
- Certified in compliance with EN 12966:2005+A1:2009
- Combined manual radio-cable remote control for operating all functions via touchscreen and one-touch keys

#### **ELECTRICAL SYSTEM**

- Rechargeable battery, 24 V, up to 50 hours daytime operation
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery guard for protection of electronics
- Battery charger



Side view



Lowered

#### **ACCESSORIES AND OPTIONS**

- · Control and monitoring system
- Interface package
- Operating hours counter
- Programming device

#### **Technical Data**

VarioSign LED Trailer SOLAR	Ref. No.
Total weight	1000 kg
Height lifted	3650 mm
Height lowered	1600 mm
Track width	1600 mm
Total width	1810 mm
Total length	5450 mm

#### VarioSign LED Trailer SOLAR

129265-032

Mobile Info board " Solar" with LED variable message signs

total weight 1000 kg, with holding brake









- · Chassis and body of hot-galvanized steel
- DIN-towing eye and with a changeable spherical head coupling
- · Height-adjustable support wheel
- 4 hot-galvanized support legs
- Battery installation for 2 to 8 rechargeable batteries integrated in the chassis
- · Hydraulic extendable and 359° rotating mast
- Forklift access and eyelets for loading are integrated in the Chassis
- Two solar modules with 300 W power each

#### LED VARIABLE MESSAGE SIGN

 LED variable traffic signs with an automatic and manual brightness adjustment for the static and dynamic representation of texts, symbols and road signs

#### Upper LED variable traffic sign

Housing size:  $1810 \times 1390 \text{ mm } [\text{w x h}]$ LED display surface:  $1680 \times 1260 \text{ mm } [\text{w x h}]$ 

Pixels: 84 x 63 Grid dimension: 20 mm LED/m<sup>2</sup>: 2500

- Full matrix for displaying freely programmable static or dynamic texts and symbols
- Certified in compliance with EN 12966:2005+A1:2009
- Optionally 1 256 colours
- Combined manual radio-cable control for operating all functions via touchscreen and one-touch keys

#### **ELECTRICAL SYSTEM**

- Rechargeable battery, 24 V with up to 50 hours daytime operation (further energy packages on request)
- Trailer lighting optionally 12 V and/or 24 V
- Feed socket 230 V
- Battery guard for protection of electronics
- Battery charger

#### **ACCESSORIES AND OPTIONS**

- Hot-galvanized, height-adjustable drawbar with holding brake
- Different sizes of LED variable message signs are possible (on request)
- Control and monitoring system



Side view



#### Retracted

#### Technical Data

Total length	3450 mm
Total width	1650 mm
Track width	1390 mm
Height lowered	750 - 1500 kg
Height lifted	3900 mm
Total weight	2700 mm

#### VarioSign LED Trailer SOLAR TOWER

**Ref. No.** 129265-041

Mobile information board "Solar Tower" with LED variable message signs

total weight 750 - 1500 kg, with parking brake



# EXTRA FEATURES FOR YOUR BENEFIT

Ready for operation, right from the factory: You can put our LED warning systems to use in traffic right away. We also offer accessory options so that you can customize your trailers to your needs for one-of-a-kind operating convenience.

#### **ELECTRICAL EQUIPMENT**

#### **Battery monitor**

Ensure the long-term performance of your mobile warning board. The battery monitor protects the batteries from deep discharge and protects the electronics against overloading. Flying sparks are also minimised through load-free connection during battery changes.

#### **Charge Booster**

Our charging boosters ensure that the rechargeable battery is reliably charged by the towing vehicle, even over short distances. This increases the service life measurably and improves the reliability of your mobile warning board.

#### **OPERATION**

#### Operating hours meter

The detailed documentation on the use of your mobile warning trailer let you detect wear and tear in advance and replace parts like bulbs, batteries or mechanical components before they fail. The operating hours meter also provides you with critical information to make your billing easier.

#### Interface package XML

This module enables secure data exchange between several devices. It makes it possible to third-party devices or control equipment using the XML interface package.

#### Electrical peephole VZ 222

Always have the correct information and a critical overview of oncoming traffic. Manual, electrical opening and closing of the peephole in the large round plates is convenient and increases safety.



This digital data interface lets you control and monitor our warning and barrier systems in accordance with safety standards, regardless of your location.

#### **TRANSPORTATION**

#### **Secure loading**

We offer a variety of accessories for the secure transportation of materials and tools, from airline rails to safety nets and lashing rails on the floor of the loading areas.

#### **SAFETY**

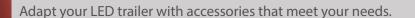
#### **GPS** speed sensor

Our warning trailers and boards are designed for specific maximum speeds. The optional GPS speed sensor ensures that the warning board automatically retracts when the maximum speed is exceeded. The system also prevents the warning board from opening during travel.

#### Monitoring device

Mobile VarioSign LED traffic signs are equipped with an acoustic and visual warning signal. This adds additional security in case of a system malfunction.

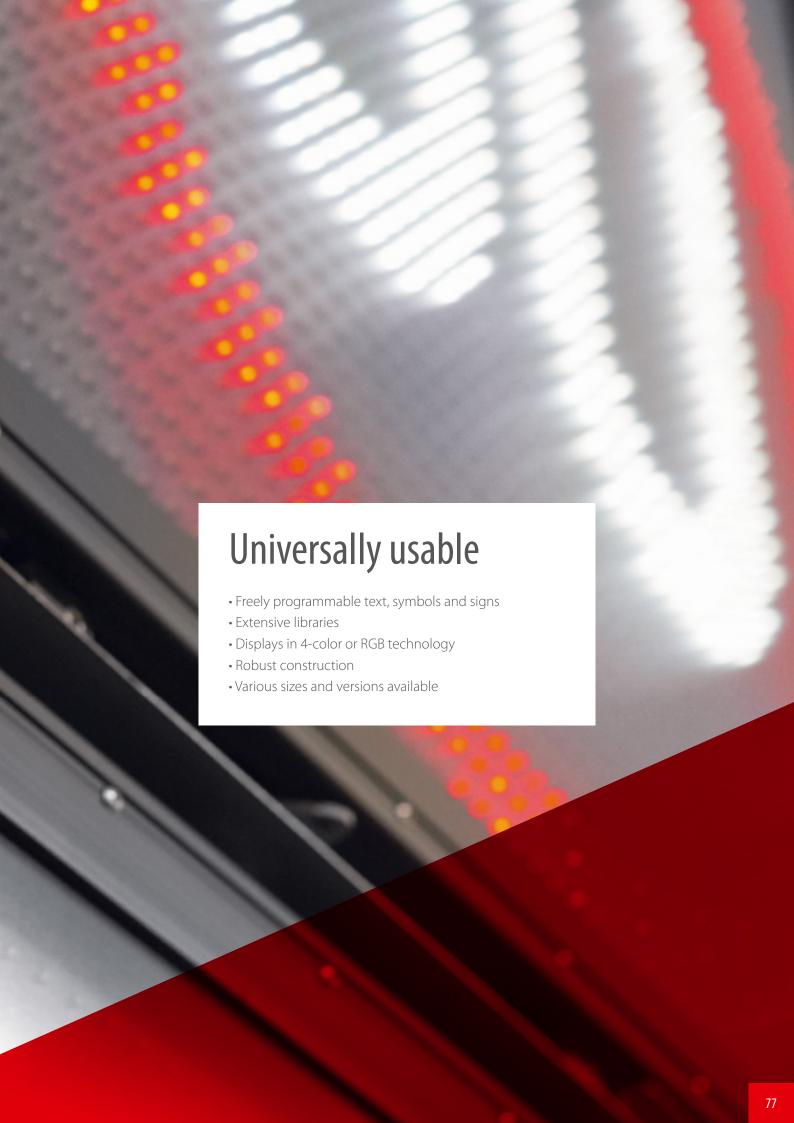
# INDIVIDUALITY AT A GLANCE



	Standard	Advanced	Premium	Pharos II	Pharos 2.39	-
Equipment						١
Spare wheel with holder	•	•	•	•	•	
<ul> <li>Loading area with side walls</li> </ul>	•	•	Standard	-	-	
Parking light socket	•	•	•	•	•	Į
Axis mileage indicator	•	•	•	•	•	
Anti-theft wheel bolts	•	•	•	•	•	
Cockpit bracket remote control	•	•	•	•	•	
Holder and tray	•	•	•	•	•	
Lighting for loading area	-	-	•	-	-	
• Cable drum	•	•	•	•	•	
Battery light	•	•	•	•	•	

	Standard	Advanced	Premium	Pharos II	Pharos 2.39
Operation					
Electric lock hinged	•	•	-	-	-
XML interface package	•	•	•	•	•
Programming device	•	•	•	•	•
Hydraulic lifting/lowering device	•	•	•	Standard	Standard
Acoustic signal transmitter manual control	•	•	•	•	•
NiBus modem	•	•	•	•	•
Electrical systems					
• Power supply 230 V	•	•	•	•	•
Charging plug connection 12/24 V	•	•	•	•	•
Operating hours meter	•	•	•	•	•
Preparation for power generators	•	•	•	-	-
Chassis					
Central crank support	•	•	•	-	-
Drawbar brace	•	•	-	Standard	Standard
• Upgrade 100 km/h	•	•	•	-	-
Height adapter for support wheel	•	•	•	-	-
Charge booster	•	•	•	-	-
Safety					
Additional warning mark at the bottom	•	•	-	_	-
GPS speed sensor	•	•	•	•	•
Monitoring equipment	•	•	•	•	•
Fault signal via alarm siren	•	•	•	•	•
• Front and side warning markings	•	•	•	•	•
• CB warning system	•	•	•	•	•
Transportation					
Traffic cone holder	•	•	•	•	•
Airline rail on the side walls	-	-	•	-	-
Net for securing loads	-	-	•	-	-





## LED Variable Message Sign

# VarioSign















#### **PROFILE FRAME**

- A perfect solution for mobile applications
- Powder-coated aluminium profile housing (AlMg3)
- Universal mounting by C-profiles on the rear side
- Impact-resistant anti-reflective polycarbonate front pane (classic)
- Patented lens technology (RGB)
- Separate control housing on the rear side to provide easy maintenance access

#### **LED DISPLAY**

- Full matrix for displaying freely programmable static or dynamic texts, symbols and signs to animations
- Good recognizability of the signs from almost every perspective and even from long distances
- Certified in compliance with EN 12966:2005+A1:2009
- Complies with data sheet MTI 2015
- Grid dimension 20 mm
- Optionally 1-256 colours
- Premium quality light-emitting diodes with a long service life
- Continuous brightness adjustment, automatic or manual
- Available in different display sizes

#### **CONTROL & ELECTRICAL SYSTEM**

- Manual cable control for operating all functions via one-touch keys
- 12/24 V operating voltage
- Optimized power supply for long operating times

#### Possible LED variable message signs

Туре	LED surface (mm)	housing size (mm)
2x2-420	840 x 840	970 x 970
3x3-360	1080 x 1080	1210 x 1210
3x4-420	1260 x 1680	1390 x 1810
4x4-360	1440 x 1440	1570 x 1570
4x4-420	1680 x 1680	1810 x 1810
5x3-420	2100 x 1260	2230 x 1390
5x4-420	2100 x 1680	2230 x 1810
7x3-420	2940 x 1260	3070 x 1390
7x4-420	2940 x 1680	3070 x 1810

#### **Typical applications**

- Mobile traffic jam warning system
- Risk signalling
- Changing traffic routing
- Traffic management
- Signposting for events
- Height control
- · Warning systems for the prevention of accidents involving deer
- Information display





#### **ACCESSORIES AND OPTIONS**

- Combined manual radio-cable control for operating all functions via touchscreen and one-touch keys
- Control and monitoring system
- · Open interface
- advanced warning lamps
- 230 V voltage supply

#### **Technical Data**

Operating voltage	12/24 Volt
Light source	LED
LED/m <sup>2</sup>	2500
Material housing	Aluminium. seawater-resistant

VarioSign LED Variable Message Sign	Ref. No.
VarioSignSMD Type 2x2–420, 12/24 V, red/white fully assembled with external control box, weight ca. 40 kg	229291-22-103
VarioSignSMD Type 3x3-360, 12/24 V, red/white fully assembled	229290-33-103
with external control box, weight ca. 55 kg	
VarioSignSMD Type 3x4-420, 12/24 V, red/white fully assembled	229291-34-103
with external control box, weight ca. 85 kg	



LED-Variable Message Sign **ProLine SMD** 

- Robust plastic housing resists heavy use
- High visibility even in bright daylight thanks to the anti-reflective lens
- Good recognizability of the signs from almost every angle
- Variable message signs in LED technology in up to 4 colours (red, white, blue, yellow)
- Automatic brightness adjustment (continually 5-100%)
- Lighting design according to EN 12966
- Mounting by threaded bushes on the back





Operating voltage



Light source



LED/m<sup>2</sup> 2.500 pieces



**Dimensions housing** 840 x 840 mm



Weight about 20 kg





LED-grid 20 mm



Ref. No.

295500-1

LED-grid 20 mm



LED-grid 20 mm

#### LED-Variable Message Sign version VarioSign ProLine SMD

LED-VMS VarioSign ProLine SMD 229290-22-213

2x2K-360, red/white, black plastic housing, width 840 x 840 mm (Other sizes/ versions on request)

Accessories and Spare parts	Ref. No.

Remote Control Touch Remote Colour, radio/cable with charging tray, 129286-51 14 m connection cable Eco Remote II cable remote control 129266-53 with 14 m cable and LP 13 holder Remote Control Pro Remote II 129266-51

(Touch) radio/cable, illuminated keypad Software for free programming







# Portable LED Variable Message

# SpeedSign









#### **PROFILE FRAME**

- For mobile use to display speeds limits of 5 to 130 km/h
- Powder-coated aluminium profile housing (AlMg3)
- With two carrying handles and pipe clamps (60 mm Ø)
- Impact-resistant anti-reflective polycarbonate front pane
- Rubber corners for protection

#### **LED DISPLAY**

- · Submatrix for displaying static speed limits
- High visibility even in bright daylight through anti-reflection lens
- Good recognizability of the signs from almost every perspective and even from long distances
- Certified in compliance with EN 12966:2005+A1:2009
- · Premium quality light-emitting diodes with a long service life
- Continuous brightness adjustment, automatic or manual

#### SpeedSign

Housing size:  $870 \times 870 \text{ mm}$ LED display surface:  $760 \times 760 \text{ mm}$ Ronde Ø: 750 mmLED/m²: 2770

#### **CONTROL & ELECTRICAL SYSTEM**

- Manual cable control for operating all functions via one-touch keys
- 12/24 V operating voltage
- Optimized power supply for long operating times



LED Variable Message Sign Speed Sign

#### **ACCESSORIES AND OPTIONS**

- Eco-Remote II cable remote control with 14 m cable (Ref-No. 129 266-29)
- Eco-Remote II cable remote control without cable (Ref-No. 329 233-3)
- Available with a shortened cable of 1,5 m (Ref-No. 400 235-2-02)
- Optional control of three speeds via a rotary switch

#### **Technical Data**

Operating voltage	12 V
Light source	LED
LED/m <sup>2</sup>	2500
Material housing	aluminium. seawater-resistant
Dimensions housing	870 x 870 x 70 mm
Weight	16 kg

#### Portable LED Variable Message Sign SpeedSign Ref. No.

Portable LED Variable Message Sign SpeedSignSMD 750 red/ white (5-130), 12 V 229282-1



## LED Variable Message Sign

# WeNiPol II



#### **PROFILE FRAME**

- A perfect solution for emergency vehicles
- Stainless steel base frame
- · Powder-coated aluminium housing
- Universal mounting on commercially available roof racks
- Impact-resistant anti-reflective polycarbonate front pane
- Maximum speed: in lifted position up to 80 km/h, in lowered position up to 160 km/h
- · Electromotive lifting and lowering

#### **LED DISPLAY**

- Full matrix for displaying freely programmable static and dynamic texts and symbols to animations
- Good recognizability of the signs from almost every perspective and even from long distances
- Quick selection of the symbols
- Ready-to-use system
- With regard to photometric requirements, certified in compliance with EN 12966:2005+A1:2009
- Grid dimension 20 mm
- Up to four colours can be used
- · Premium quality light-emitting diodes with a long service life
- Continuous brightness adjustment, automatic or manual

#### **CONTROL & ELECTRICAL SYSTEM**

- · Manual cable control for operating all functions via one-touch keys
- 12 V operating voltage

#### **ACCESSORIES AND OPTIONS**

- Combined manual radio-cable control for operating all functions via touchscreen and one-touch keys
- Open interface
- Caution lights
- Integrated yellow or blue LED advance warning beacons
- GPS speed sensor
- Holder for revolving beacons
- Software for free programming
- Battery guard for protection of electronics
- Programming device
- Interference suppression

#### **Typical applications**

- Police
- Fire brigade
- Technical assistance organisation
- Road and freeway administration
- Breakdown service





#### **Technical Data**

Total length	ST:1000 mm ST+/FE+: 1060 mm
Total width	920 mm
Height lowered	205 mm
Height lifted	ST:1020 mm ST+/FE+: 1080 mm
Weight	50 kg

LED Variable Message Sign WeNiPol II	Ref. No.
WeNiPol II ProLine ST 12 V, amber fully assembled	129503-001-01
WeNiPol II ProLine ST 12 V, red/white fully assembled	129503-002-01
WeNiPol II ProLine ST+ 12 V, red/white fully assembled	129503-002-02
WeNiPol II ProLine ST+ 12 V, red/white/amber fully assembled	129503-003-02
WeNiPol II ProLine FE+ 12 V, red/white/amber fully assembled	129503-003-03
WeNiPol II ProLine FE+ 12 V, red/white/amber/blue fully assembled	129503-004-03



#### **DESIGN**

- Housing made of glass-fibre reinforced plastic (GRP)
- Folding frame and round frame of aluminium or hot-galvanized steel
- Profile housing of the text matrix of aluminium (AlMg3)
- Profile bars for mounting on any vehicles

#### LIGHT ARROW / TEXT MATRIX

- Light arrow system either with 15 or 23 LED light arrow lamps certified in compliance with EN 12352
- Motor-driven lifting and lowering of the upper board, including a mechanism for mechanical emergency adjustment
- Manual cable control or combined manual radio-cable control for operating all functions via touchscreen and one-touch keys
- Freely programmable VarioSign text matrix with continuous brightness adjustment, automatic or manual to display static or dynamic texts and symbols

Housing size: 1750 x 370 mm LED surface: 1620 x 240 mm

Number of characters: 9
Grid dimension: 15 mm
Pixels: 108 x 16
Character height: 200 mm

#### **ELECTRICAL SYSTEM**

12/24 V operating voltage

#### **ACCESSORIES AND OPTIONS**

- 2-fold 340 mm warning lights
- Work lights
- Revolving beacons
- Battery guard for protection of electronics





#### Technical Data

 Total length
 LP 15: 2150 mm / LP 23: 2600 mm

 Total width
 LP 15/23: 1760 mm

 Height lowered
 LP 15/23: 370 mm

 Height lifted
 100 kg

 Weight
 LP 15: 1521 mm / LP 23: 1751 mm

Roof Frame for Service Vehicles Pamir II Ref. No.

Roof Frame for Service Vehicles, 9 segments

129493-001

with light arrow LP 23-H/S

with cable remote control Standard-Remote

Dimensions: 2450 x 1710 x 390 mm

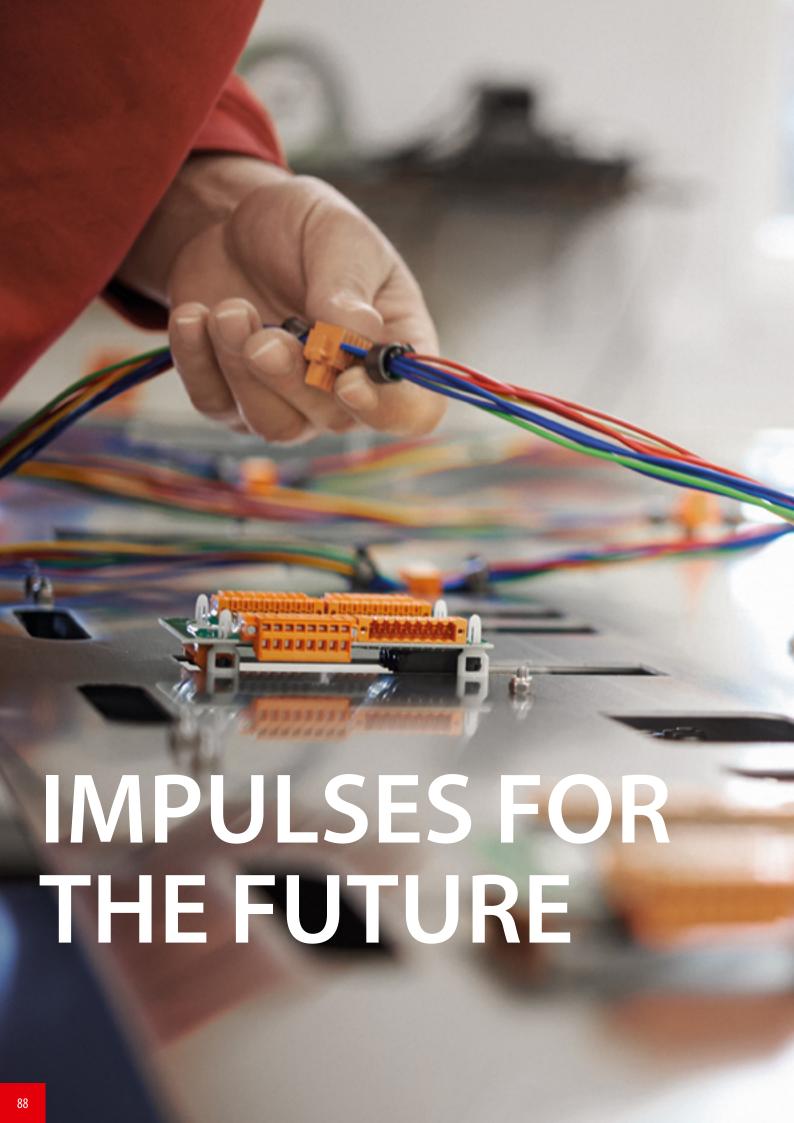
Roof Frame for Service Vehicles, 9 segments 129493–101

with light arrow LP 23-H/S

with radio/cable remote control Pro-Remote/Touch Remote

Dimensions: 2450 x 1710 x 390 mm Further versions on request





From the first electrical warning lamp through to web-based software for mobile traffic management – Nissen is driving mobile traffic management technology forwards to a greater extent than practically any other company. Always with the objective of increasing safety and efficiency in parallel.

See for yourself the future-oriented solutions that are already offering you real advantages today.

# Mobile crash protection systems

Defender 92

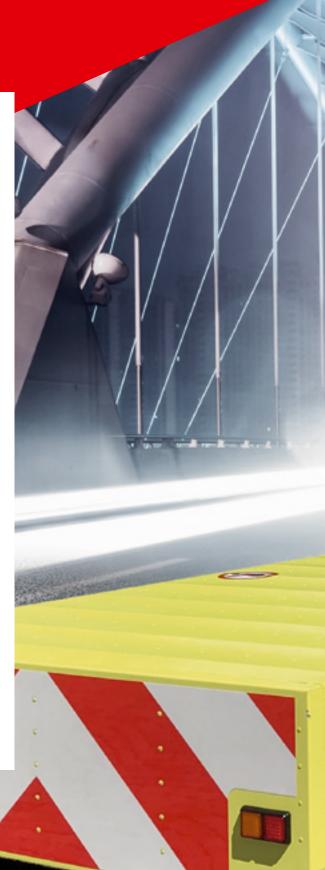
# DOUBLE PROTECTI

### Ideal addition

- Advanced warning and/or barrier plus additional protection for personnel and traffic in one
- Can be used without great effort
- Numerous possible combinations
- Tested and standard-compliant
- Proven in many countries











Mobile crash protection systems

# DEFENDER









#### **CRASH ABSORBER**

- · Lightweight aluminum cushion with flexible honeycomb structure
- · Corrosion-free and waterproof
- Vehicle lighting
- Tested according to CENTS 16786
- Different paintwork in RAL colours possible
- Dimensions: 2310 x 3314 x 707 mm (W x L x H)

#### **DOCKING STATION**

- Robust steel construction
- Easy assembly with safety bolts
- 24 V hydraulic unit
- Dimensions: 2363 x 1225 x 686 mm (W x D x H)
- Forklift holder for simplified assembly

#### **WARNING BOARD**

- Warning board according to German standards, 3600 x 2200 mm
- Chevron pattered plate and directional arrow with microprismatic retroreflective foil
- Light arrow system with 2 LED advance warning lights 340 mm Ø (L9H/M according to EN12352) and 25 individually monitored LED warning lights 220 mm Ø (L8H according to EN12352) with automatic brightness adjustment.
- Directional arrow with motor revolution, mechanical emergency adjustment and automatic light arrow adjustment
- Battery guard to protect the electronics

#### **ACCESSORIES AND OPTIONS**

- Optional LED variable message signs instead of the light arrow system and / or the motorized directional arrow
- Combined cable / radio remote control with touchscreen
- Transport trolley to replace the system
- Rockinger coupling
- XXL rechargeable battery box for holding two rechargable batteries and other accessories
- Acoustic signal transmitter for the remote control
- Control and monitoring system



Standard Remote ColourDefender in application

Mobile crash protection system DEFENDER

#### **Technical Data**

Total length	4466 mm
Total width	2366 mm
Height lowered	(Work position): 3664 mm
Height lifted	(Transport position): 3719 mm
Weight	(cushion) 350 kg (docking station) 765
	kg (warning board) 300 - 400 kg

129741-XXX-YYY
073201-XXX-YYY
073002-002
073002-001



Ref. No.



# SINGLE SOURCE CONTROL

The uniform Nissen operating concept makes the handling of our mobile barrier and warning systems as simple as it is safe. The robust and weatherproof Touch Remote Color, for example, can be operated wired or wirelessly with Bluetooth® and is compatible with all Nissen systems.

You can operate all the functions via the large colour touchscreen and illuminated symbol keys. This makes its use intuitive and thus safe at all times. The relevant workplace can be installed in an instant.

# Nissen operating concept

Touch Remote Colour	
Standard- and Pro-Remote Colour	97
Eco- and Radio-Remote	98

### **Touch Remote Colour**

- Large 5.7" full colour touch screen display with Automatic day/night adaptation
- multicolour LED-status indication (to show up e.g. radio operation, charging status and error signal)
- Combined cable/radio remote control
- · Operation of the most important features via keypad
- Favourite combinations freely programmable via touch screen
- Functions keys freely programmable
- Useable for all Nissen systems
- max. 12 radio connections storable





**Dimensions (LxWxH)** 211 x 141 x 39 mm



**Weight** 680 g

Touch Remote Colour	Ref. No.
Touch Remote Colour	329236-1
radio/cable remote control (bluetooth) with touch screen	
and illuminated keypad (without cable)	

Accessories and Spare parts	Ref. No.
Charging tray for remote control Touch Remote Colour without cable function,	329238-1
2 m connection cable	
Charging tray for remote control Touch Remote Colour with cable function,	329238-11
2 m connection cable with 6 pole sleeve plug	
Charging tray for remote control Touch Remote Colour without cable function,	329238-2
2 m connection cable with vehicle plug	
Dashboard bracket	329238-21

#### Operating time with one battery set

Lithium-Ferro-Akku. 6000 mAh Operation time: approx. 12 hrs.

Charging time batteries:

- on charging cradle: approx. 4 hrs.

- with active cable connection: approx. 8 hrs.



Connector dashboard holder



Touch Remote in the charging tray



Charging tray with vehicle plug



6 pole sleeve plug and vehicle plug



Standard and Pro Remote Colour

- Universal remote control for secure and easy operating also of complex devices via radio and cable connection
- Large operating keys with large control buttons
- 5,7" Full colour touchscreen display with automatic brightness adjustment
- Multicoloured LED status display for clear representation of the radio connection, state of charge or function monitoring





**Dimensions (LxWxH)** 215 x 130 x 45 mm



**Weight** Standard Remote Colour: 520 g Pro Remote Colour: 650 g

Standard and Pro Remote Colour	Ref. No.
Standard and Pro Remote Colour	329239-1
Standard Remote cable remote control touchscreen (without accessories)	329232-3
Connecting cable remote control Pro Remote and type7000,	052032-2
length approx 14 m. for WLA type A. VIT-LED and LED-VMS	

Accessories and Spare parts	Ref. No.
Holder and charging cradle for radio remote control Pro Remote	329230-1
Holder and charging cradle for radio remote control Pro Remote	329230-12
with 2 pin vehicle plug	
Dashboard holder with ball joint arm for remote controls for mouting at holders	329230-21
Holder for cable remote control Standard Remote	329230-2
Holder and charging cradle for radio remote control Pro Remote	329230-11
90 –: 264 V AC version including adapter useable for FU. US, UK and AU	



Standard Remote Colour



Pro Remote Colour



Holder and charging cradle



Holder and charging cradle with dashboard



### **Eco and Radio Remote**

- Compact remote control for secure and easy operating of devices via cable or radio connection
- Large operating keys
- Illuminated keypad
- · Low weight
- LCD-Display for indication of the most important functions





**Dimensions (LxWxH)** 175 x 80 x 31 mm



**Weight** Eco Remote: 170 g Radio Remote: 250 g

Eco and Radio Remote	Ref. No.	
Eco Remote II cable remote control (without cable)	329233-3	
Radio Remote II - Radio remote control	329235-2	
Accessories and Spare parts	Ref. No.	
Bracket plate for Eco Remote	070816-1	
Bracket for mounting at the dashboard	070816-2	







Remote Control Radio Remote

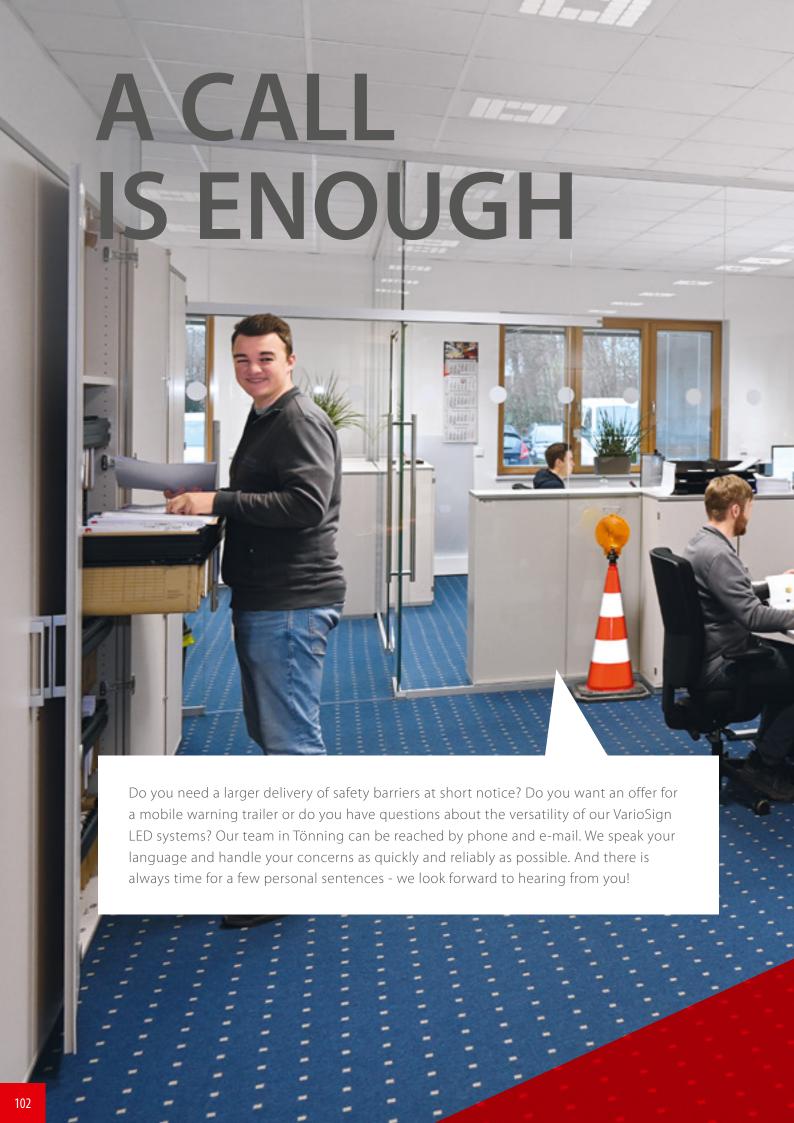




Just as our developments convince you through their quality and functionality in use, we consequently ensure that you always feel well advised by Nissen. Our team of experienced and competent specialists will find a solution for all of your concerns.

Whether you ask for help from your contacts in Tönning or on-site through our internationally organized sales department - we are a team and are always there for you. What can we do next for you?







#### **GERMANY**



Petra Katryniak Customer Consultant/ Key Account T +49 4861 612-111 F +49 4861 612-144

verkauf@nissen-germany.com



Michèle Block Customer Consultant South/West, Centre/South, Bavaria T +49 4861 612-156 F +49 4861 612-144

verkauf@nissen-germany.com



Jorve Friedrich Customer Consultant North, Centre/West T +49 4861 612-153 F +49 4861 612-144 verkauf@nissen-germany.com



Vanessa Hohn Customer Consultant T +49 4861 612-155 F +49 4861 612-144 verkauf@nissen-germany.com



Silke Langholdt Customer Consultant T +49 4861 612-119 F +49 4861 612-144 verkauf@nissen-germany.com



Customer Cotnsultant North/East T +49 4861 612-154 F +49 4861 612-144 verkauf@nissen-germany.com



Torge Batzlaff-Nicolaysen Customer Consultant North, Centre/West T +49 4861 612-212 F +49 4861 612-144 angebote@nissen-germany.com



Luca von Dohlen
Customer Consultant Quotation
and Project Management
T +49 4861 612-115
F +49 4861 612-144
angebote@nissen-germany.com



Quotation and project management T +49 4861 612-141 F +49 4861 612-144 angebote@nissen-germany.com

**Customer Consultant** 

#### **INTERNATIONAL**



Maike Bieber Customer Consultant Export T +49 4861 612-135 F +49 4861 612-169 export@nissen-germany.com



Katja Lütt Customer Consultant Export T +49 4861 612-158 F +49 4861 612-169 export@nissen-germany.com

#### **FOR YOU LOCALLY**

Wherever you need us - the sales specialists in our team will visit you personally at almost every location. Benefit from our tailor-made solutions for individual problems and conditions.



Nancy Töpper Sales Director national/international T +49 4861 612-113 ntoepper@nissen-germany.com



Rainer Göttsche Sales Director national T +49 4861 612-155 rgoettsche@nissen-germany.com



Ronny Günther Regional Sales Director East T +49 4861 612-645 rguenther@nissen-germany.com



Michael Henseler Regional Sales Director Centre/West T+49 4861 612-640 mhenseler@nissen-germany.com

37



Alexander Seelig Regional Sales Director South/West T+49 4861 612-636 aseelig@nissen-germany.com



Patrick Stern
Regional Sales Director
Centre/South
T +49 4861 612-670
pstern@nissen-germany.com



Alexander Klein
Regional Sales Director Southern
Bavaria/Export Director
T +49 4861 612-639
aklein@nissen-germany.com



Sascha Düspohl Export Director T +49 4861 612-197 sduespohl@nissen-germany.com



Dennis Petersen Export Sales Manager T +494861 612-143 dpetersen@nissen-germany.com



Nikolaus Fuchs Export Sales Manager T +494861 612-643 nfuchs@nissen-germany.com



David Kakowski Nissen Poland T +48 914261157 dkakowski@nissen-germany.com



Jean-Marc Sciboz Nissen Switzerland T +41 848 333 110 jsciboz@nissen-germany.com



Ilyas Sharif Nissen UK T +44 207 237 75 74 isharif@nissen-germany.com

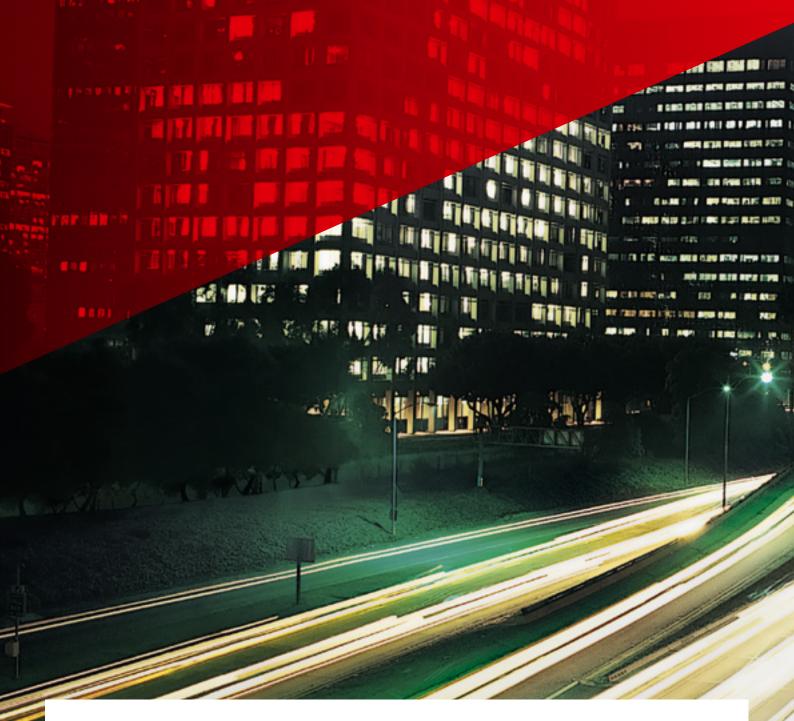


Ibon González de Audícana Nissen Ibérica T +34 650 69 51 85 iaudicana@nissen-germany.com



Stefan De Craecker Nissen Benelux T +32 476961517 scraecker@nissen-germany.com





## Discover our spectrum



As a leading developer and manufacturer in the mobile traffic management sector we can offer you the right solution for almost any application – from a folding sign to a mobile crash protection system, from equipment for emergency personnel to rapid securing. Find out more about our products and services.

Contact us – we are happy to help!

For more information: **nissen-germany.com** 



### **Imprint**

**Edition** June 2023

#### **Publisher**

Adolf Nissen Elektrobau GmbH + Co. KG, Friedrichstädter Chaussee 4, 25832 Tönning

#### Concept and design

mlv werbung GmbH, Hamburg

### Disclaimer

This information is subject to technical changes and errors. Pictures can differ from the original product or accessories. All details are approximate. We supply all products without batteries or rechargeable batteries.

#### Important:

All products may only be installed and operated by trained personnel. Instructions for use, installation instructions and the relevant regulations must be observed strictly.

© Adolf Nissen Elektrobau GmbH + Co. KG 2023

