# product overview.







# SLVARIO



# jack of all trades.

One system for monitoring up to 30 axes in different operation modes. Fully expandable to up to 15 modules for functional safety applications. And a graphical parameterization software that gives you almost unlimited possibilities.

## **SLVARIO**

#### true magnitude comes from within.

SL VARIO offers so much, yet it is extremely space saving: fives modules need only as little space as other makers require for their central unit alone.

And even the smallest SL VARIO configuration comes with a great variety of logical blocks, predefined safety functions and safe inputs and outputs.









#### our passion for detail.

SL VARIO is mounted and wired without screws: Each individual module snaps into a DIN rail in the switchboard.

The adaptive bus system automatically and intelligently recognizes and addresses the system.

The highly durable single or double spring clips simplify and speed up wiring.

#### mass storage.

Each central unit by default has a built-in storage medium.

An instruction manual and the SL VARIO Designer software are pre-installed.

Just connect the system to the USB port of a laptop or PC and start to configure the system.

Additionally, we offer application development services. This means, your SL VARIO unit comes with a pre-installed and pre-tested safety application. Plug-and-play, literally. New applications and changes can be saved on the storage unit, so nothing gets lost.



Monitor the largest plants with the most complex security applications without programming a single line.

The software application SL VARIO designer is included for free — even with the smallest hardware configuration.

The ease-of-use of the graphical user interface makes configuration, diagnostics, and validation completely intuitive.

Even remote diagnosis is possible with an additional hardware option.

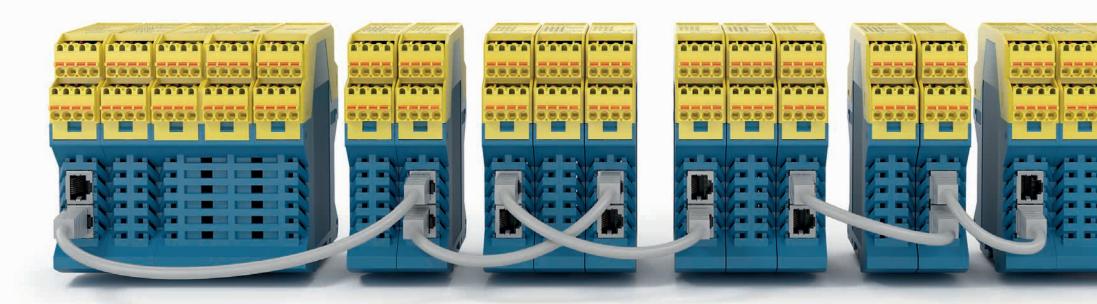
The LED display at the front of SL VARIO informs you about what is happening inside of the system.



### **SLVARIO**

#### cascade and network.

Put an end to complex wiring! SL VARIO systems can be run completely decentralized:
Our network modules and simple patch cables safely connect up to eight independent applications.



Or distribute the modules of one application to up to eight different places with the cascade module.



#### one for all.

The central unit is a fully operational safety system that replaces most I/O modules because of its many inputs and outputs.

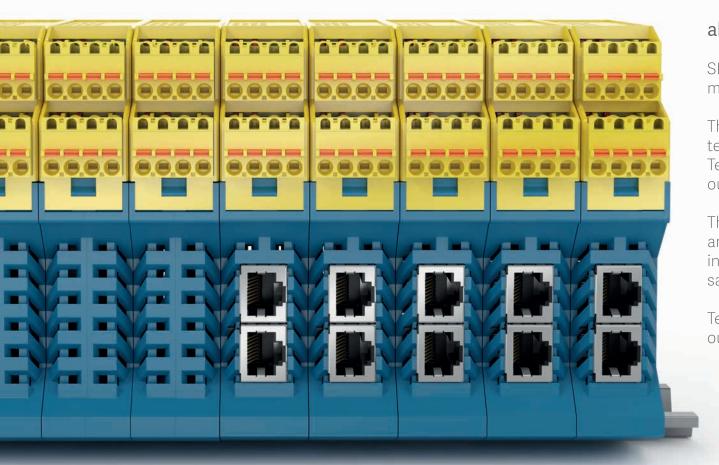
This saves even more space in the switchboard!

- 8 safety circuits
- 3 speed controls
- 8 analog power and voltage inputs allow safety functions for analog signals, pressure sensitive mats, switch panels, bumpers etc.
- safe analog data acquisition for pressure, temperature, weight, current, or voltage
- 2 hand functions
- 2 operating mode selector switches
- great variety of contact and semiconductor outputs

The central unit not only controls, but also remembers exactly what happens inside of the machine. Each malfunction is recorded and stored to be read out even years later. This makes it a breeze to find out what went wrong and why, even remotely (with optional hardware).



### **SLVARIO**



#### all for one.

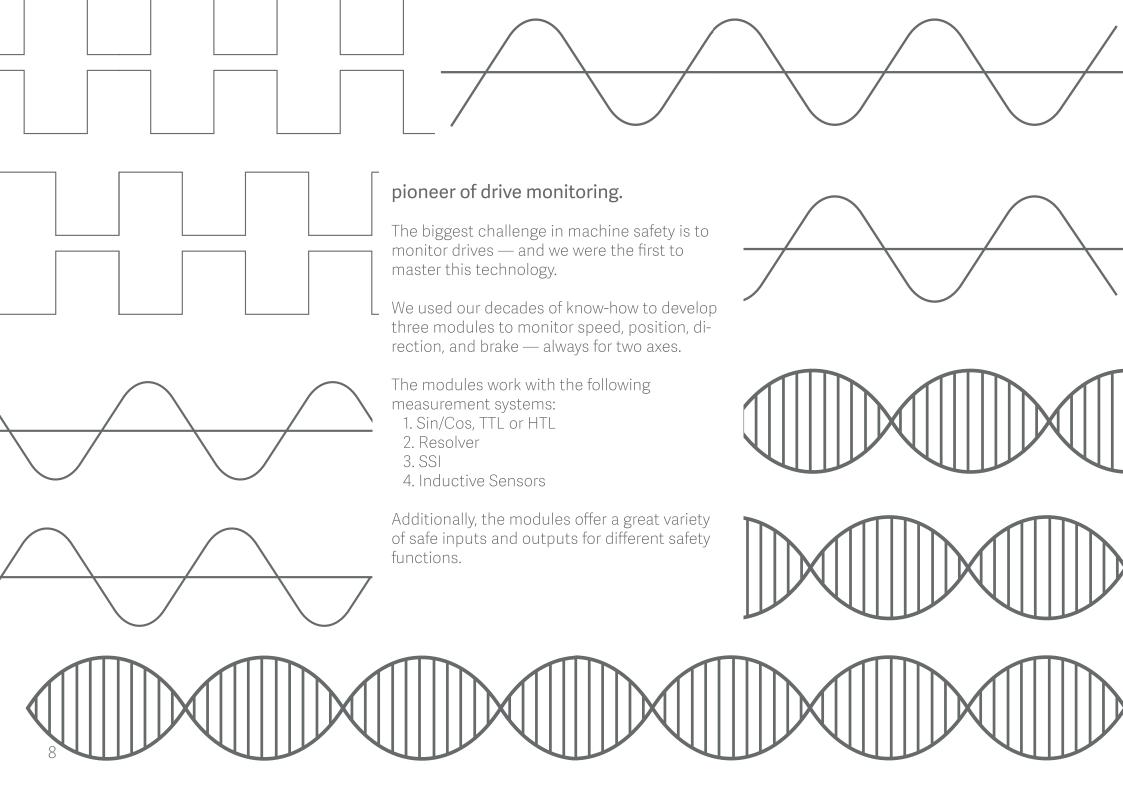
SL VARIO offers the right fieldbus interface to make visualization and diagnosis a breeze.

Three different I/O modules expand each system with a great variety of outputs.

Terminals can be configured either as input or output and always safe.

These can be used multiply in one application, and provide contact outputs, semiconductor inputs and outputs, and inputs for various safety features.

Terminals can even be configured as inputs and outputs.





#### made to fit.

Our legendary cable adapter adapts to various measuring systems.

It is available for all common drives. And if the right adapter is not available, we will tailor one for you.



# perfectly reliable and tailor-made.

Years of industrial use, versatile adjustability, and highest operational availability. SAFELINE is your go-to safety monitoring system for any area in mechanical engineering.

#### **SAFELINE**

#### safe-safe.

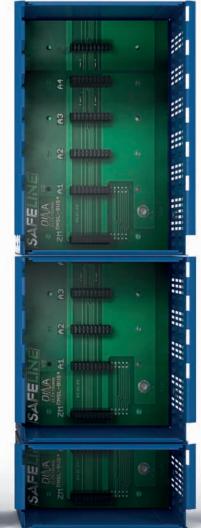
The sturdy metal housing of SAFELINE is ultra durable, has an extraordinary heat dissipation, and an outstanding electromagnetic compatibility.

Each system is customized and delivered in its own rack: A self-contained and 200%\* pre-tested unit.

This makes it not just safe, but "safe-safe".

\*double testing: function test, and multiple endurance tests.









#### mix & match.

SAFELINE offers the perfect solution for any application: Choose the right central unit out of 6 different variations, either with COM or USB port.

Combine it with a matching field bus connection and visualize the different switching states via one of the major fieldbus protocols.

Combine up to 14 additional modules in one housing: Choose from an extensive range of different 3 I/O modules and 3 different speed controls the safety features you really need.

#### **SAFELINE**







#### simply reliable.

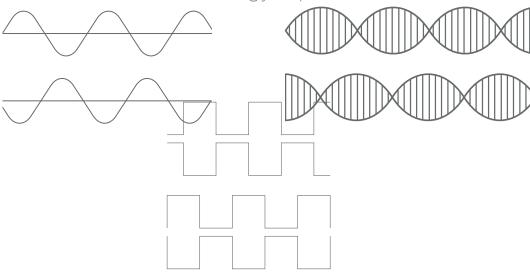
SAFELINE has proven itself for almost a decade: The frontal wiring makes it user-friendly. Older machines can easily be upgraded. And it offers the highest safety category PL e.

#### master of drive monitoring.

SAFELINE monitors standstill, position, direction, and speed brake in three different hardware versions for different measuring systems: Sin/Cos, TTL, HTL, or SSI, or resolver.

Each module has two monitors for two axes, and in addition it has eight inputs and two or four outputs for different safety functions.

This gives you safe drive monitoring and I/O in one module, saving you space and cost.





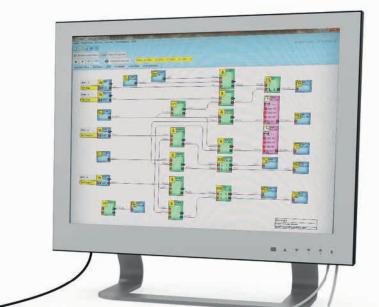
#### **SAFELINE**

#### safe-safe with click-click and blink-blink.

The PC software application SAFELINE Designer comes free of charge with any hardware configuration, optionally with a completely developed and pre-tested application.

The easy-to-use graphical user interface makes configuration, diagnostics, and validation simple and efficient.

With an optional hardware upgrade even remote diagnostics are possible.



The handy LED display on top of the unit shows the current switching states. That means you can always monitor what is happening inside.



# **DNDS**modular

# up and running since 1996.

No other safety monitoring system has been used more often. For nearly two decades, our success hit provides safety for men and machines. Worldwide, every day, and absolutely reliable. Say hello to the legend.

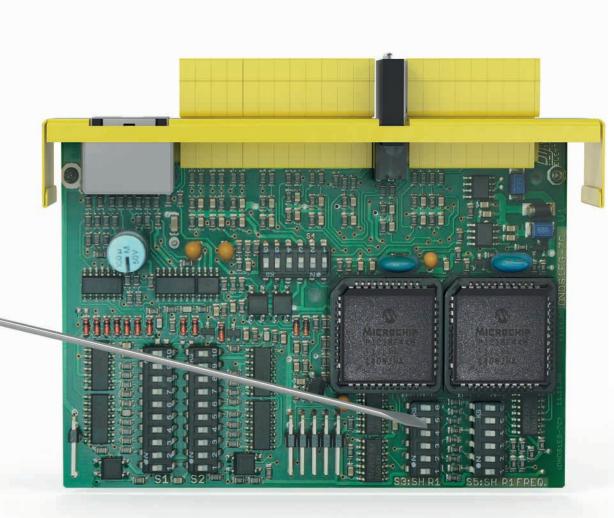
#### less is more.

Still stand and speed monitoring has never been easier: You don't need software to configure DNDS modular. Just use the onboard dipswitches.

Or you order it preconfigured—with accompanying documentation and completely free of charge. Less is more, and we mean it.



The system even upgrades older machines up to performance level e.



#### safety powerhouse.

Simple, yet powerful: One housing holds up to 8 motion monitoring modules for measuring systems with Sin/Cos, HTL, TTL, resolver or proximity switches.

DNDS modular has inputs for selecting the different operating modes of the machine.

The outputs provide the ability to lock the protective device during operation and shut down the machine safely in an emergency.



#### **DNDS**modular

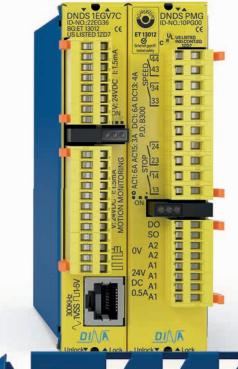
#### tough guy.

DNDS modular comes as a compact assembly unit in a proprietary metal housing:

The material is extremely durable and is particularly electromagnetic compatible.

Thanks to the frontal wiring it is very easy to integrate it in the switchboard and it is especially suitable for upgrading older machines.

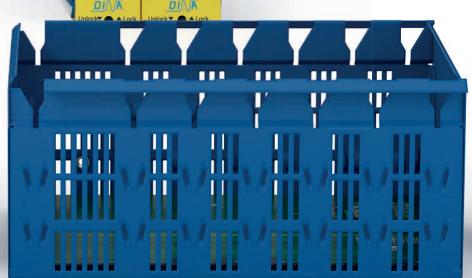




#### versatile and easy.

The simple configuration and onboard tools like muting have your system up and running in no time.

Even sophisticated diagnosis is done only with the device: The smart LED display and dedicated diagnostic outlets of the input and output modules make troubleshooting a walk in the park.





# STANDALONE



high-end, low-cost und hassle-free.

The STANDALONE products offer state-of-theart safety features at an unbeatable price tag.

The compact housing with its industry-standard design even fits in the smallest switchboard.

Choose from screw clamp or spring clip configurations for quick and easy wiring.

lone wolf.

Are you looking for just a single safety function? A standstill monitor without sensors, an application-optimized emergency stop relay, or a quick-response phase monitor? Our STANDALONE products work independently. This makes them easy to use and always optimized for your application.

#### **STANDALONE**

#### emergency stop relay.

The emergency stop relay comes customized for your application needs and is available with un-delayed, off-delayed, or on-delayed contact outputs.

Alternatively, there is a variant with a programmable time delay.

#### standstill monitor.

The sensor less standstill monitor works without a measurement system and transforms into a motion monitor if needed. It safely monitors 1-phase motors to up to 300V AC and 3-phase motors to up to 600V AC with performance level e.

Configuration and diagnosis is done with the push of a button and the two-color LED display on the housing's front.





#### phase monitor.

The compact phase monitor reacts in light speed in case of phase failure (less than 10 ms). It comes with semiconductor outputs and contact outputs and is suitable for phase voltages up to 600V AC.





For more than 25 years DINA Elektronik GmbH has catered successfully the needs of safety monitioring for machines and plants.

In 1987, we pioneered the market with our first products for safe drive monitoring. Today, we offer a wide array of safety technology. Starting with simple safe stillstand monitoring to multifunctional, fully configurable, modular safety systems. DINA products fulfill all safety requirements for machines and plants.

Costum-built technologies and solutions is one of our competences. Thorughout the many years we have acquired great knowledge and expertise for various industry branches.



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