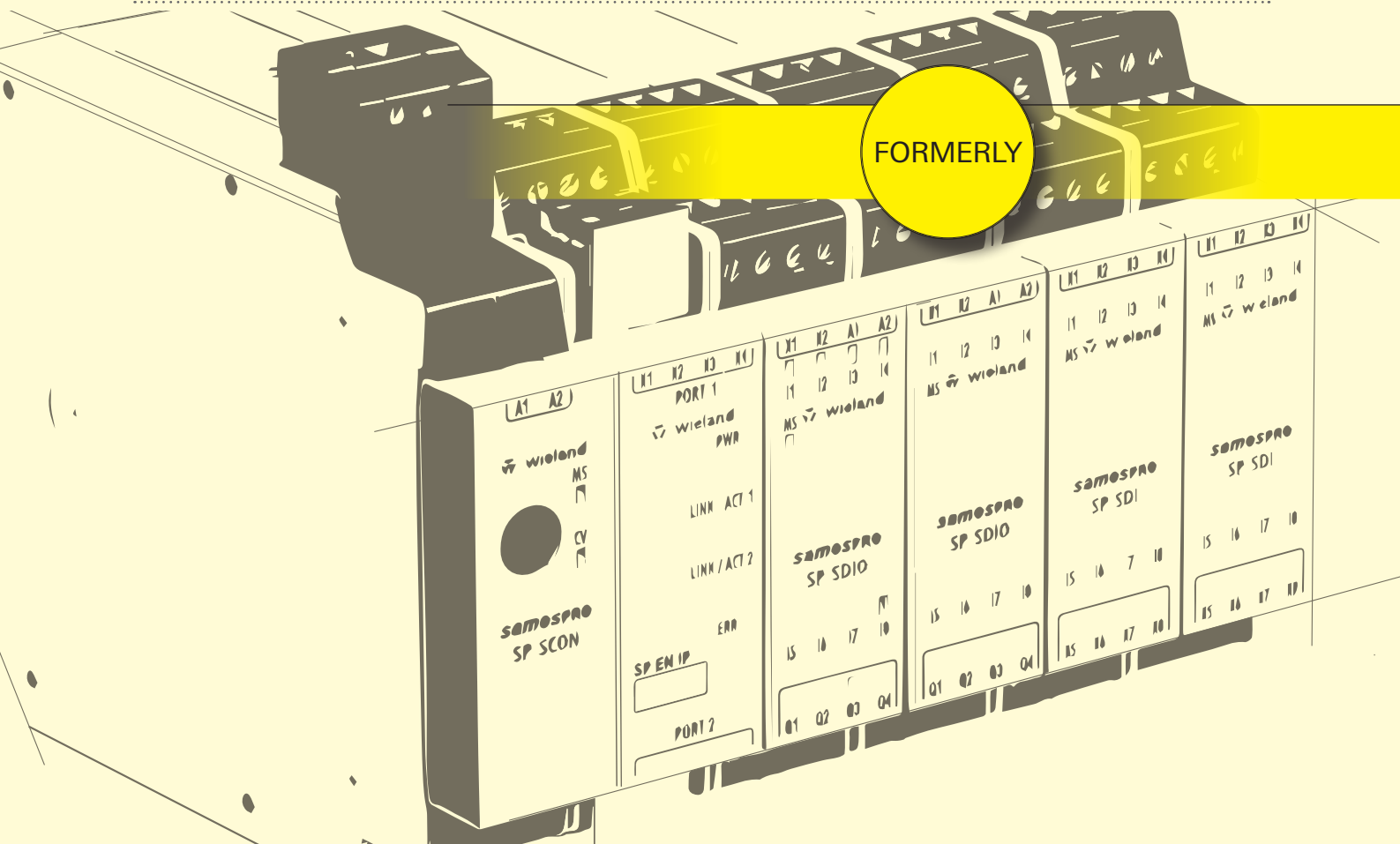
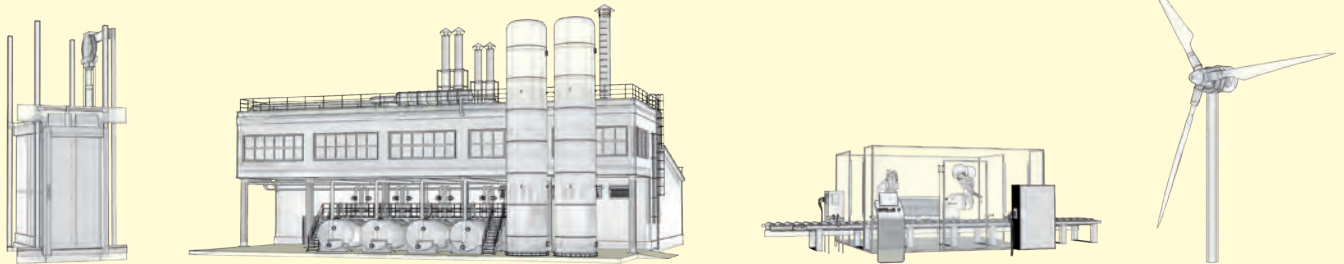


**wieland**

Because it really does come down to size ...

In the control cabinet in all industries **so far**.



The project planning tool **samos**®PLAN6 for **samos**® PRO COMPACT now offers users still more support, directly extending through all life phases of a machine.

- Comprehensive library of reliable, certified function blocks
- Configurable project documentation at the press of a button
- Integrated simulation and logic analysis of the safety functions
- Convenient integration in the fieldbus and Ethernet networks
- Online diagnosis and remote maintenance for more transparency





## **samos**® PRO COMPACT

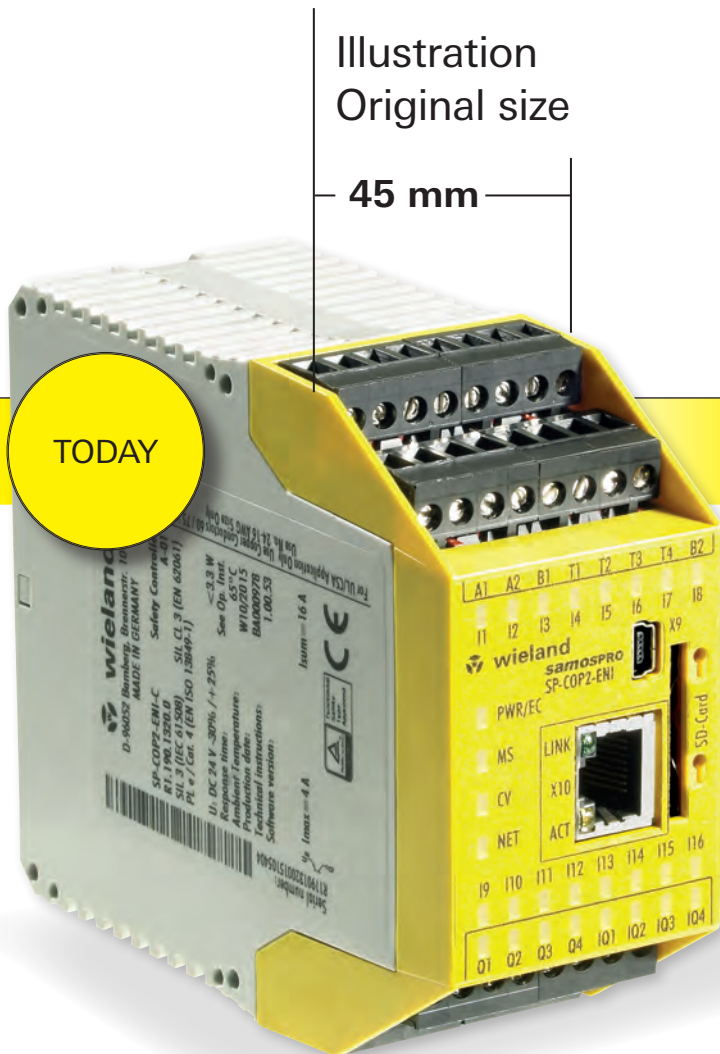
# The safety control of the next generation

From **today** on and in the **future**!

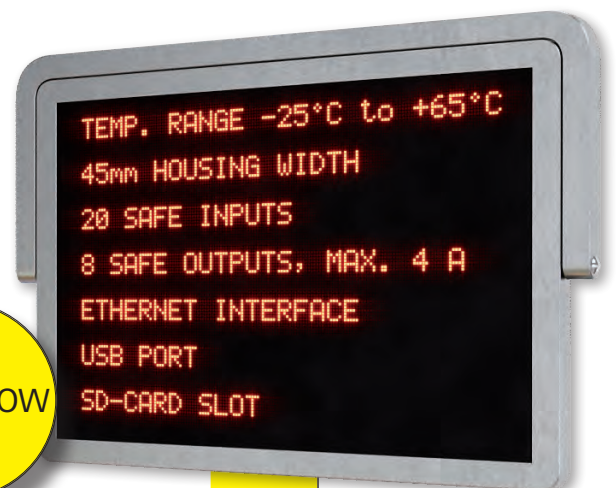
Illustration  
Original size

45 mm

TODAY



TOMORROW

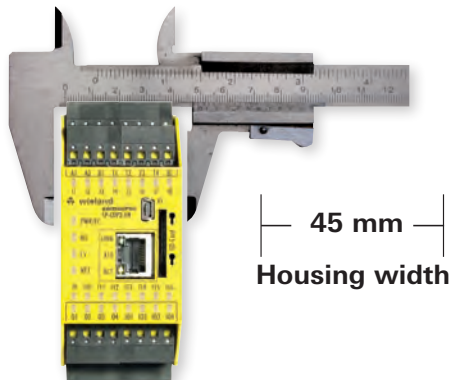


**samos**® PRO COMPACT innovativ - compact - safe

## **samos**® PRO COMPACT PLUS

The new PLUS variants of **samos**® PRO offer enhanced functionality, such as certified function blocks for the safe automation of mechanical or hydraulic presses.

## Universal and future-proof



### Compact power pack

16 safe inputs, 4 safe outputs and 4 switchable safe in-/outputs on a construction width of 45 mm solve many safety tasks – a safety control of the new generation for universal automation tasks today and in the future.



### Well networked

Industrial Ethernet protocols are available right from the start and fieldbus gateways can be extended as needed – integrated connection in the most widely varying industrial networks is a decisive advantage of the system.



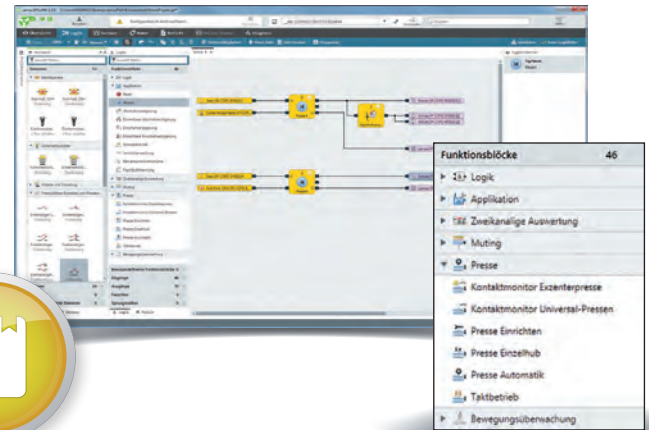
### Modular extendability

For comprehensive applications, the system can be extended with additional modules to as many as 116 secure inputs and 56 secure outputs – ideal precondition for flexible, secure automation, even for larger machines and systems.

# NEW press function

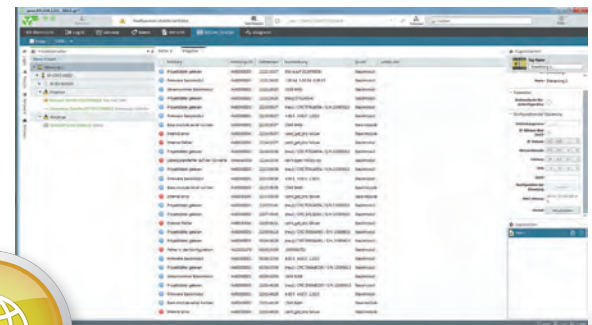
## Certified expertise

The comprehensive library of certified, tried and tested function blocks makes it easier to realize all safety functions – over 40 different functions are available at any time and with no additional programming effort.



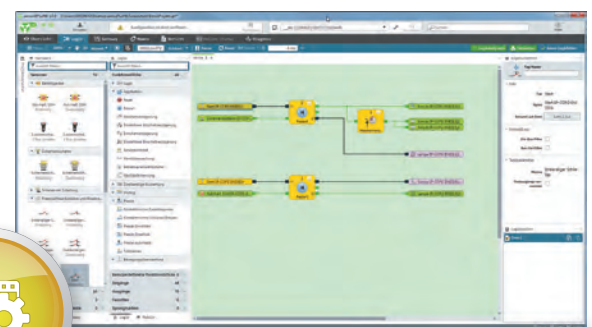
## Globally accessible

Remote maintenance can be easily realized in the system without the additional effort that is typical with other systems – with the integrated online diagnosis and the system log book, problems in global operation are quickly localized and expensive maintenance calls are avoided.



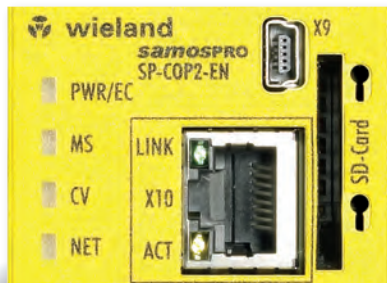
## Individually adaptable

Even user-specific sensors and function blocks can be defined and managed in libraries as needed – no other system offers greater multi-functionality.



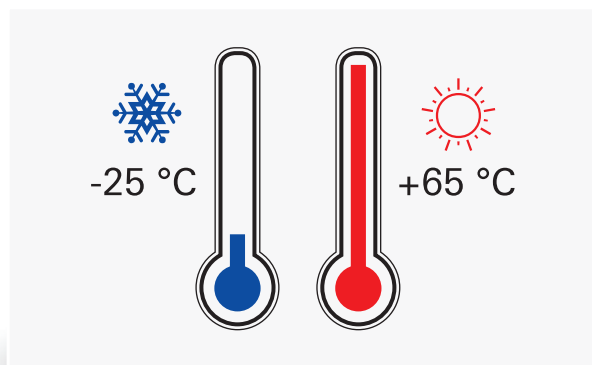
For a safe press operation  
**samos®PLAN6** provides 6 efficient  
function blocks.

## Communicative and powerful



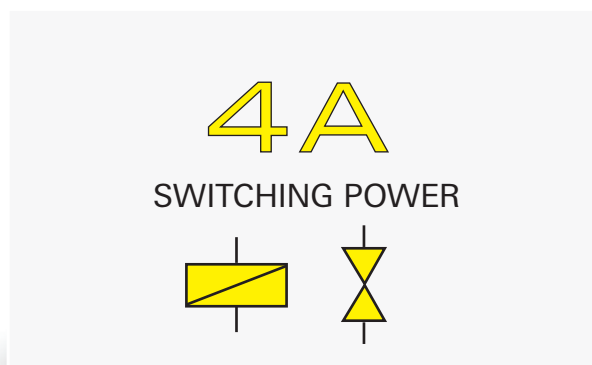
### Integrated interfaces

Integrated USB and Ethernet interfaces enable custom-tuned access to the system – this means more transparency for the user during the project planning phase and in operation.



### Conceived for the toughest requirements

The exceptionally wide ambient temperature range from -25 °C to +65 °C provides security for all applications – use even under extreme ambient conditions is now made possible for the first time.



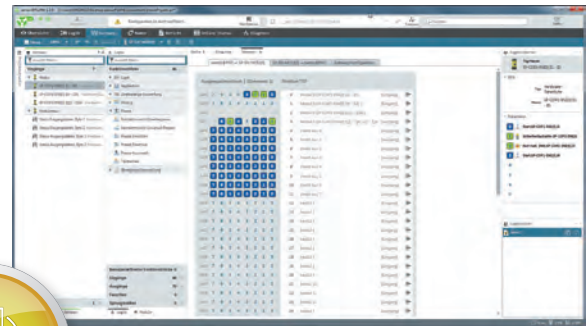
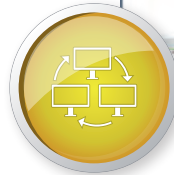
### High switching power

4 A non-wearing switching power at each individual output of the system – no other safety control offers this kind of switching performance. High performance alternative to contactors and relays.



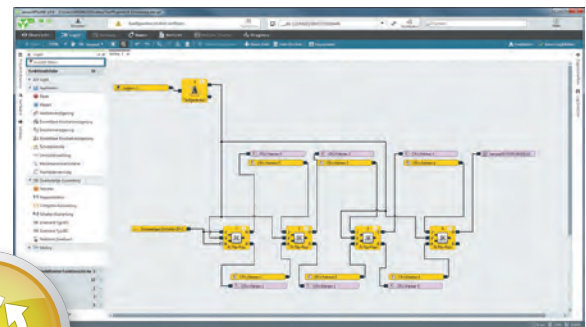
## Simple communication

Thanks to convenient support in the tool, all industrial Ethernet or fieldbus protocols can be easily used – never before has industrial communication been so easily realized.



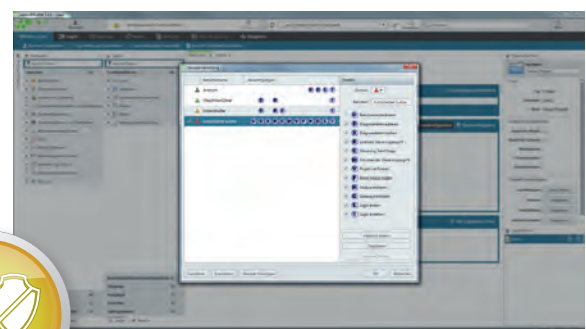
## Unrestricted use

All in- and outputs and up to 300 function blocks can be applied in each project with complete freedom – ideal precondition for the solution of simple, but nonetheless complex, safety tasks.



## Protection of expertise

In addition, the tool offers the possibility of individual generation of user-specific function blocks and an integrated expertise protection for projects – performance features sought for in vain in other systems.



## Simple and reliable



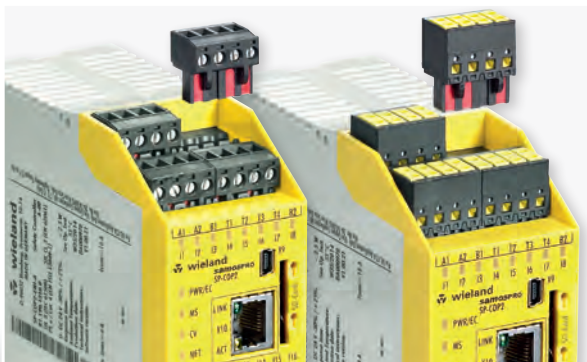
## Exchangeable program memory

The exchangeable SP-COP-CARD in SD card format offers 512 MB memory space for application programs and is easily accessible – the simple handling of projects saves much time during commissioning, reproduction and when serviced is required.



## Optical function display via LED

All in- and outputs of the system have an optical display to which the connections are explicitly assigned – visualization of the operating status of a machine could not be quicker and more understandable.



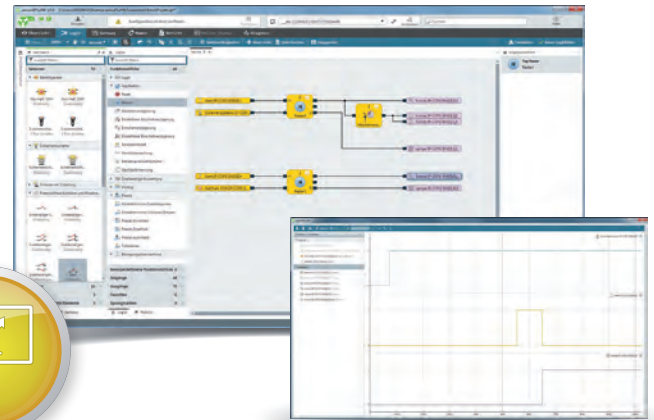
## Flexible connection technology

All modules of the system are available with either screw or push-in terminal blocks – this means even more flexibility for the user, also for the connection technology.



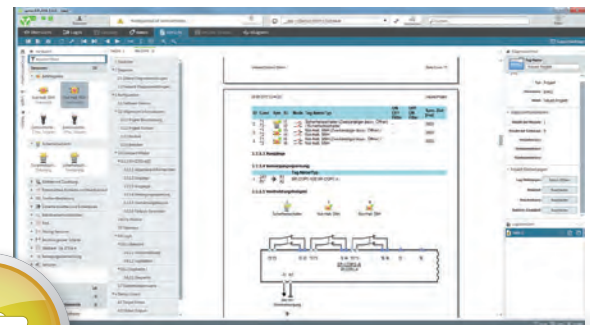
### Perfect process simulation

The simulation function with integrated logic analyzer enables a check of the programmed safety functions already on the PC – this helps in problem solving, spares valuable time during commissioning on the machine and raises functional security overall.



### Integrated documentation

The documentation function generates a customized report of the project at the press of a button – essential part of machine documentation in compliance with regulations.



### Compatible and convenient

The modern programming tool **samos®** PLAN 6 offers open interfaces at many places and of course is suitable for all Windows operating systems – a more productive and reliable workflow is also guaranteed for the future.



# samos® PRO COMPACT | Ordering overview

## COMPACT modules

SP-COP1-x  
SP-COP2-x



Name/type	Description	Art.No.	Std. Pack
<b>samos® PRO COMPACT</b>			
SP-COP1-A	USB connection, 20 inputs / 4 outputs, screw terminal block, pluggable	R1.190.1110.0	1
SP-COP1-P-A	PLUS version including press function	R1.190.1130.0	1
SP-COP2-EN-A	USB and Ethernet connection, 16 inputs / 4 outputs, 4 configurable I/O, screw terminal block, pluggable	R1.190.1210.0	1
SP-COP2-EN-P-A	PLUS version including press function	R1.190.1230.0	1
SP-COP2-ENI-A	USB and industrial Ethernet connection, 16 inputs / 4 outputs, 4 configurable I/O, screw terminal block, pluggable	R1.190.1310.0	1
SP-COP2-ENI-P-A	PLUS version including press function	R1.190.1330.0	1
SP-COP1-C	USB connection, 20 inputs / 4 outputs, push-in terminal block, pluggable	R1.190.1120.0	1
SP-COP1-P-C	PLUS version including press function	R1.190.1140.0	1
SP-COP2-EN-C	USB and Ethernet connection, 16 inputs / 4 outputs, 4 configurable I/O, push-in terminal block, pluggable	R1.190.1220.0	1
SP-COP2-EN-P-C	PLUS version including press function	R1.190.1240.0	1
SP-COP2-ENI-C	USB and industrial Ethernet connection, 16 inputs / 4 outputs, 4 configurable I/O, push-in terminal block, pluggable	R1.190.1320.0	1
SP-COP2-ENI-P-C	PLUS version including press function	R1.190.1340.0	1

### Technical data

Function	Safety control
Function display	24 LED green (in-/outputs) 4 LED green/red/yellow (module status)

### Supply circuit

Operating voltage range	16.8 V DC to 30 V DC
Rated power	3.5 W
Galvanic isolation	No

### Secure input circuit I<sub>n</sub>

Quantity / type	20 (16)* / digital
Primary voltage range	15 V DC to 30 V DC
Nominal current	2 mA

### Secure output circuit Q<sub>n</sub>

Quantity / type	4 (8)* / digital
Nominal output voltage	24 V DC
Output voltage I <sub>n</sub> per output	4 A
Short-circuit protective device	Yes

### Interfaces

USB Mini interface	Yes
Ethernet interface	Yes*
Industrial Ethernet protocol*	Modbus TCP, Profinet IO, Ethernet/IP
Program memory	External

### General data

Protection class as per DIN 60529	IP20
Air and creepage distances	EN 60664-1
Operating ambient temperature	-25 °C to +65 °C
Standards	EN 61508, EN 62061, EN ISO 13849-1, EN 50156-1, EN 81-1
Certificates / Approvals	TÜV, cULus

\* Dependent on device type



You will find accessories and additional information in our eShop under <https://eshop.wieland-electric.com>

We will be happy to help you with selection and commissioning. You can reach our Technical Support under the telephone number **+49 951 9324-999**

# samos® PRO COMPACT | Ordering overview . Accessories

## Extension modules

<b>SP-SDIO84-x</b> <b>SP-SDI8-x</b> <b>SP-DIO84-x</b>	Name/type	Description	Art.No.	Std. Pack
	SP-SDIO84-P1-K-A	In-/output extension with output test pulses, 8 inputs / 4 outputs, screw terminal block, pluggable	R1.190.0030.0	1
	SP-SDIO84-P1-K-C	In-/output extension with output test pulses, 8 inputs / 4 outputs, push-in terminal block, pluggable	R1.190.0040.0	1
	SP-SDI8-P1-K-A	Input extension, 8 inputs, screw terminal block, pluggable	R1.190.0050.0	1
	SP-SDI8-P1-K-C	Input extension, 8 inputs, push-in terminal block, pluggable	R1.190.0060.0	1
	SP-DIO84-K-A	Standard E/A module, 4 inputs/4 outputs, screw terminal block, pluggable	R1.190.1050.0	1
	SP-DIO84-K-C	Standard E/A module, 4 inputs/4 outputs, push-in terminal block, pluggable	R1.190.1060.0	1

## Gateways

<b>SP-CANopen</b> <b>SP-PROFIBUS-DP</b> <b>SP-EN-ETC</b>	Name/type	Description	Art.No.	Std. Pack
	SP-CANopen	CANopen gateway	R1.190.0210.0	1
	SP-PROFIBUS-DP	PROFIBUS-DP gateway	R1.190.0190.0	1
	SP-EN-ETC	Ethercat gateway	R1.190.0160.0	1

## Accessories

<b>SP-COP-CARD1</b>  <b>SP-CABLE-USB1</b> <b>SP-CABLE-ETH1</b>  <b>SP-VISUAL-SET</b>	Name/type	Description	Art.No.	Std. Pack
	SP-COP-CARD1	Memory-card for SP-COP	R1.190.1000.0	1
	SP-CABLE-USB1	USB cable for SP-COP, 1.8 m	R1.190.1010.0	1
	SP-CABLE-ETH1	Ethernet cable for SP-COP, 2 m	R1.190.1020.0	1
	SP-COP-STARTER-SET	Content: SP-COP2-EN-A, SP-COP-CARD1, SP-PLAN6, SP-CABLE-USB1, SP-CABLE-ETH1	R1.190.1100.0	1
	SP-VISUAL-SET	Visualization set (touch panel 3.5" color, SP-CABLE4, software driver)	R1.190.0280.0	1
	SP-COVER	SD card slot cover for SP-COP modules	R1.190.1040.0	10
	WKFN 2,5 E/35 GO-URL	<b>fasis</b> multi-tier terminal with diode	56.703.8755.9	100
	APFN 2,5 E/35	End plate	07.312.7355.0	10

You will find additional information to all products in the safety technology range in our catalog "Safe System Solutions for Automation Technology"

Order no. 0860.1







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# safety



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