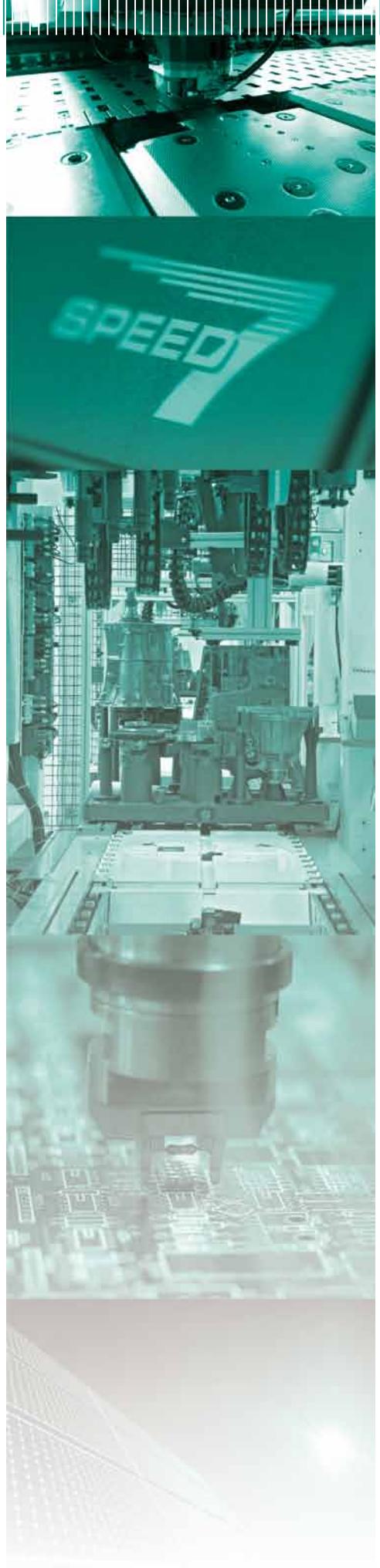




System Summary

2010

**VIPA**<sup>®</sup>  
art of automation





#### Trademarks

MPI<sup>2</sup> = MPI + RS232

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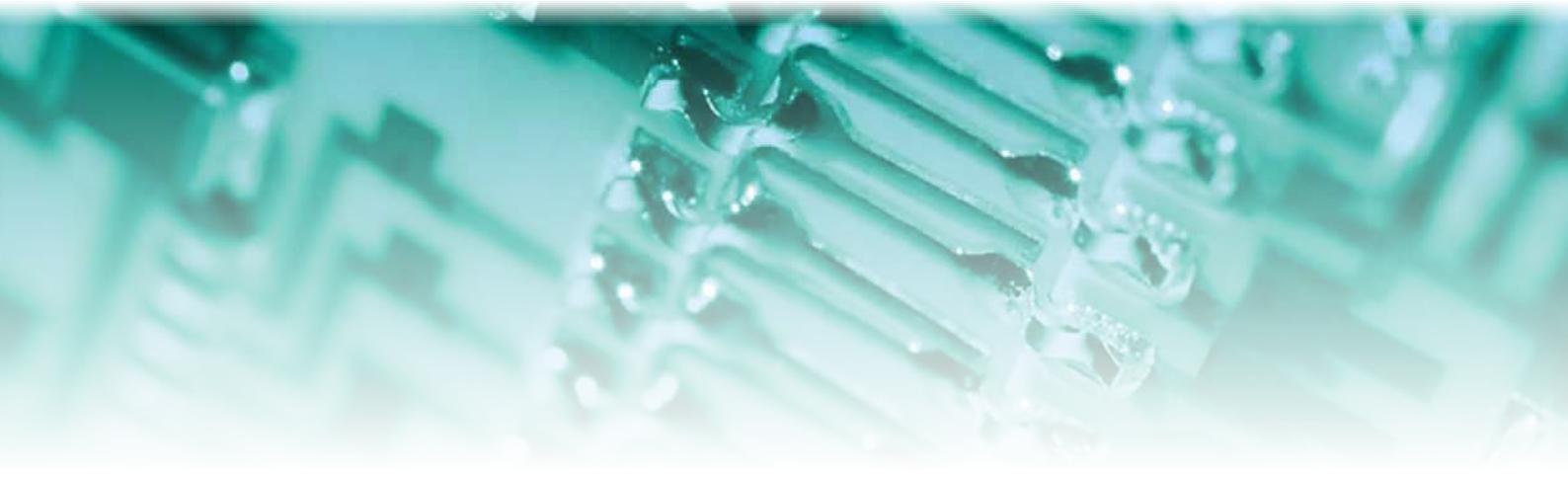
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**VIPA**  
**SYSTEM SUMMARY**  
**2010**



# **WELCOME TO VIPA**

GESELLSCHAFT FÜR VISUALISIERUNG UND PROZESSAUTOMATISIERUNG MBH



VIPA has traditionally been amongst the most innovative suppliers of memory-programmable controllers (PLCs) in the market and is growing worldwide, with double-digit growth rates. Therefore, VIPA belongs to the still young, but also exceptionally successful companies in the Automation market.

#### **Our success is based on five pillars:**

- High rate of innovation and quick decision making
- Various unique features
- A convincing cost-performance ratio
- Commitment and competence of our employees
- Cooperation with powerful partners.

#### **Our aspiration:**

- Constantly continue to improve existing technologies, but also to introduce new and innovative trends in the market
- Continuous flexible adaptation of our products to current market needs and to further increase our market acceptance
- Continue to develop our personnel resources in sales, development, quality assurance and service in accordance with our revenue growth
- Enter into cooperation agreements with powerful partners and to increase our market share through joint market cultivation.

To meet this aspiration, we consider it as our aim, also in the future to improve what is established, to question, revise or develop completely from new.

Furthermore we want to make available to our partners and customers also in the future through continuous innovation and smart system maintenance unique technological features with which together we can gain new and satisfied system users.

With our highly motivated employees, we're working hard on improving our quality, service and the satisfaction of our customers and partners. Convince yourself of the possibilities that our automation solutions and systems offer, and discover how with us you can sustainably increase your competitiveness.

Strengthened by above-average growth, we are determined to continue our successful path in the future.

We look forward to cooperating with you!

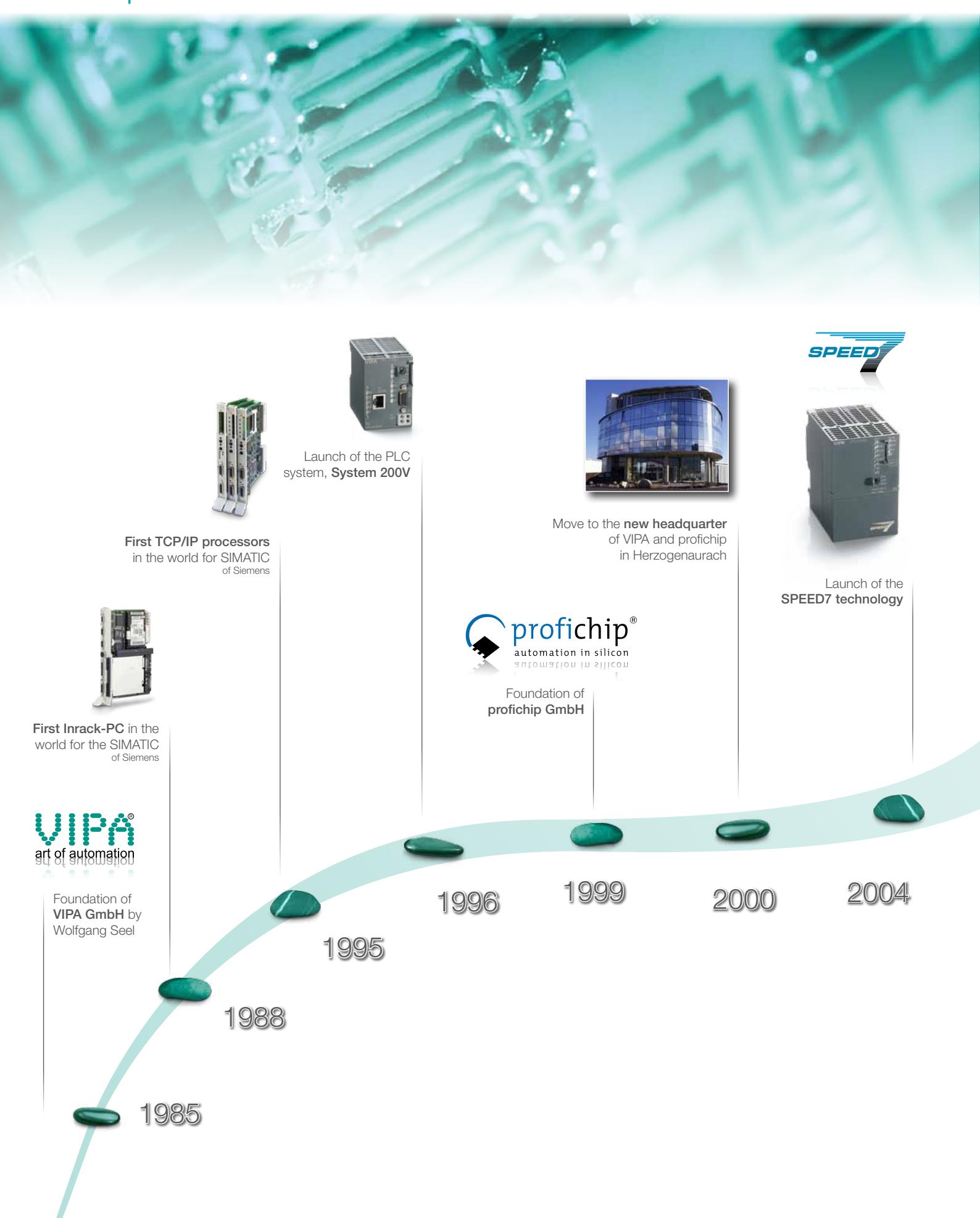
Wolfgang Seel  
CEO



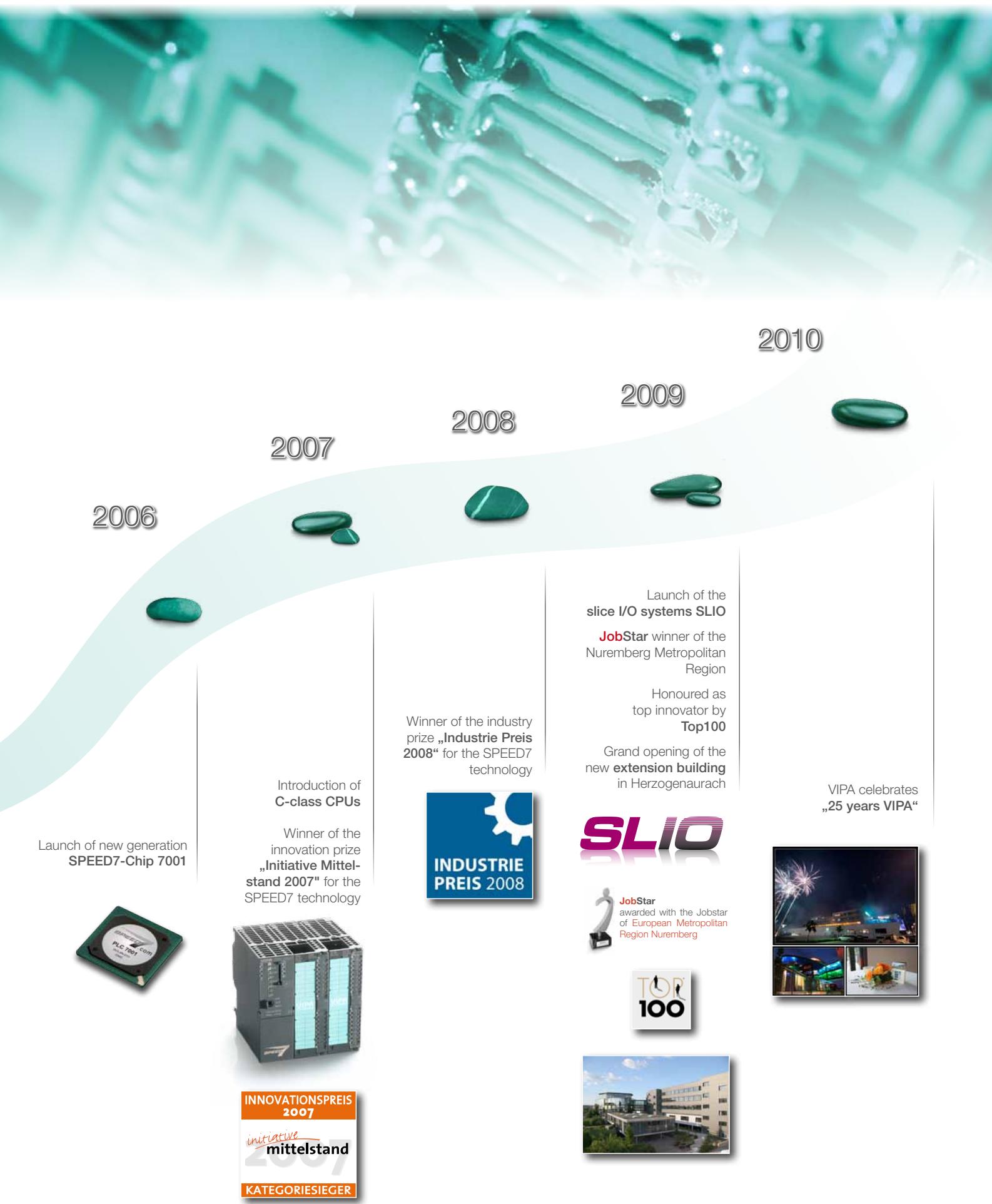
**Wolfgang Seel** | CEO/CTO



# VIPA | Milestones



„If you don't know the destination, then you have no route.“ (Christian Morgenstern)



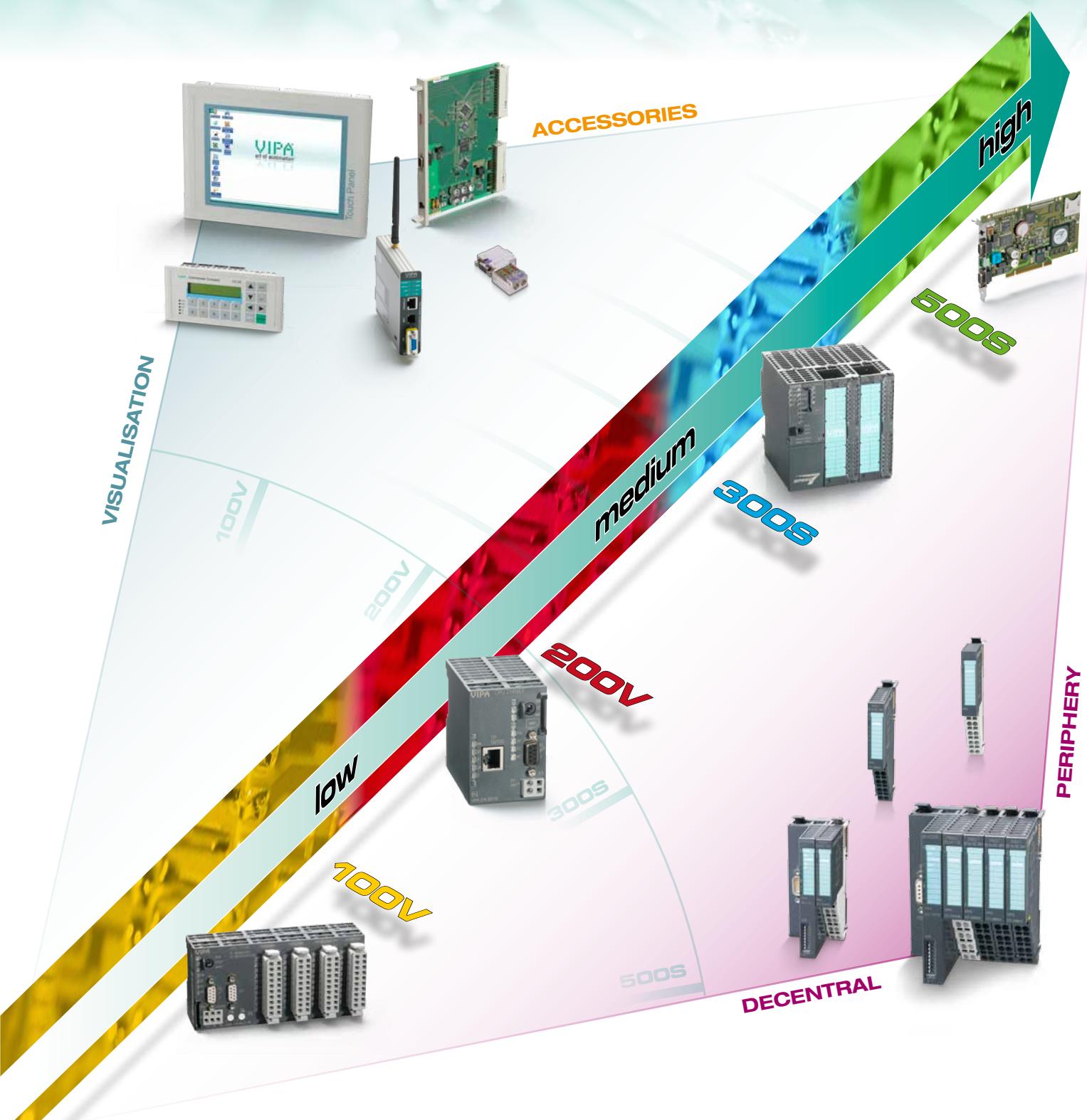


# VIPA | Overview PLC

Features / VIPA Systems	100V	200V	300S	500S
VIPA SPEED7 technology (High-speed-CPU)			✓	✓
VIPA SPEED-Bus (for High-Speed modules/applications)			✓	
Type	compact / upgradable	compact / modular-wise expandable	like S7-300 from Siemens	PC PCI card
Programable with STEP7 from Siemens	✓	✓	✓	✓
Integrated work memory (from/up to) (depends on CPU variant)	8 - 32kByte	32 - 128kByte	32kByte - 2MByte	1MByte - 2MByte
Upgradable work memory up to max.			8192kByte <sup>2</sup>	8192kByte <sup>2</sup>
Integrated Flash memory (for durable storage of programm and data in the CPU)	✓	✓		
Integrated accu-buffered RAM memory (for durable storage of programm and data in the CPU)	✓	✓	✓	✓
MMC card slot (for storage of programm and data on a commercial MMC card)	✓	✓	✓	✓
Operation without additional memory card (the work-/load memory is already integrated in the CPUs from VIPA)	✓	✓	✓	✓
MPI-interface	✓	✓	✓	✓
Profibus-DP master interface <sup>1</sup>		✓	✓	✓
Profibus-DP slave interface <sup>1</sup>	✓	✓	✓	✓
PtP interface <sup>1</sup>	✓	✓	✓	✓
CANopen master interface <sup>1</sup>		✓	✓	
CANopen slave interface <sup>1</sup>	✓	✓		
INTERBUS master interface <sup>1</sup>			✓	
INTERBUS slave interface <sup>1</sup>		✓		
DeviceNet slave interface <sup>1</sup>		✓		
Integrated Ethernet interface (RJ45) (for programming via network - OP-/PU-communication - 2 connections)			✓	✓
Integrated Ethernet communication processor <sup>1</sup>		✓	✓	✓
Integrated real time clock	✓	✓	✓	✓
Integrated digital IOs (at 300S - CPU 312SC/313SC/314SC/314ST)	✓		✓	
Integrated analog IOs (at 300S - CPU 313SC/314SC/314ST)			✓	
Number of pluggable modules (central - with and without additional line allocation - depends on available space)	4 100V and 200V modules	32	32	
Inclusive front plugs	✓	✓		
Inclusive programming software (VIPA WinPLC7.lite)	✓			
Inclusive OPC server				✓
Inclusive backplane bus	✓		✓	
Installation	35mm profile rail	35mm profile rail	profile rail (like Siemens)	PCI plug-in place
UL certificated	✓	✓	✓	✓

<sup>1</sup> depends on CPU-/System type - integrated interface or separate Interface module

<sup>2</sup> upgradable via VIPA MCC (MicroConfigurationCard)





# Contents

## System SLIO

Page 12

The System SLIO is a highly compact control system for decentralized applications.

## System 100V

Page 20

The System 100V is a Micro-PLC system programmable with WinPLC7, a programming tool from VIPA, or with STEP7 from Siemens.

## System 200V

Page 28

The System 200V is a highly compact and modular control system for centralized and decentralized applications.

## System 300S

Page 40

With the SPEED7 technology, System 300S is the fastest control system in the world programmable with STEP7 from Siemens.

## System 500S

Page 52

With the SPEED7 technology, System 500S is the fastest control system, programmable with STEP7 from Siemens, in the world.

## System HMI

Page 58

With display sizes of 5,7“ to 12,1“, Windows® CE 5.0 operating system and visualization software, the Touch Panels provide universally desirable solutions.

## Software

Page 68

The software options offer effective and comfortable tools for programming and parameterization of VIPA systems and other automation concepts.

## Accessories

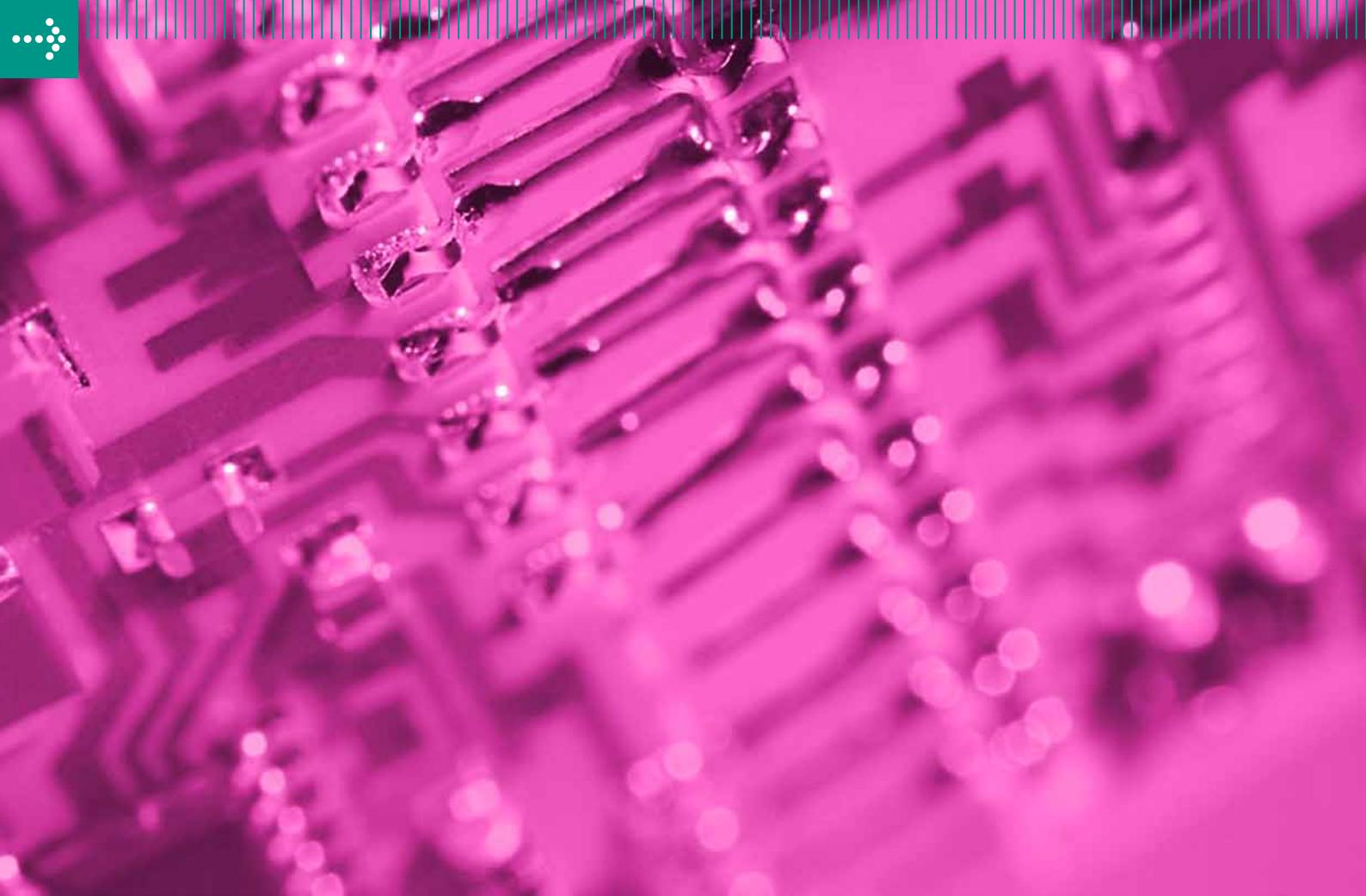
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VIPA offers a wide range of accessories like teleservice solutions, programming cable, download cable, or PROFIBUS-DP cable as well as PROFIBUS-DP connectors with diagnosis function.

## Appendix

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List of our worldwide distributors and branch offices as well as terms and conditions of sale and delivery.



## At a glance

System description System SLIO  
System SLIO

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# SYSTEM SLIO

the fine-granular I/O system



# System description SLIO

## Structure and Concept

SLIO stands for Slice I/O. The system is very compact and will be adapted piecemeal exactly to the requirements of the application.

The system is designed for decentralized automation tasks.

With the help of the power module (PM), color contrasted from the signal modules (SM) and functional modules (FM), these are supplied with power and separate potential groups can be defined as required. The terminal module (TM) combines clamp, seating for the electronic module (EM) and mechanical bus connector. The electronic modules are connected to the terminal module in a secure sliding mechanism. In the case of service, only the electronic module is replaced by simply pulling out of the terminal module – wiring and mounting remain on the 35 mm profile rail. The step-formed spring-type terminals on the terminal module enable a quick, clear and secure wiring. Through integrated status LEDs and the label strip on the front a channel-specific, unambiguous allocation, and readability of the channel conditions of the electronic module is ensured.

All interface modules (IM) for PROFIBUS-DP, CANopen, PROFINET, EtherCAT and Modbus support up to 64 electronic modules.

The space-saving assembly size allows use in any automation environment.

Assembly is very easy: First the terminal modules are connected, then the electronic modules are inserted into the slot designated for the terminal module until the connection between both module parts is established by an audible click.

The System SLIO is one of the most highly efficient decentral systems worldwide and is evolving daily.



## Performance and Application

The System SLIO is designed for large decentralized automation tasks in the manufacturing and process industries. The system expands SLIO key solutions and is integrated with the help of the device master files into existing fieldbus infrastructure. Through the new backplane bus concept the interface modules (fieldbus slave) in the System SLIO enable very short response times for signal processing.

## Functions

A variety of signal modules are available for the connection of sensors and actuators for acquiring digital and analog signals to and from the process.

For positioning, path measurement, counting tasks and other functions further functional modules are continuously being developed

## Communication

The System SLIO includes interface modules (fieldbus slave modules) with different fieldbus protocols by which the system, manufacturer-independent, can be integrated into most automation concepts.



# System SLIO

Order no.	Name/Description
Clamp modules	
001-1BA00	<b>CM 001 - Potential distributor module</b> 8xDC24V clamps
001-1BA10	<b>CM 001 - Potential distributor module</b> 8xDC0V clamps
001-1BA20	<b>CM 001 - Potential distributor module</b> 4xDC24V, 4xDC0V clamps
Power modules	
007-1AB00	<b>PM 007 - Power module</b> DC 24V, 10A, single supply
007-1AB10	<b>PM 007 - Power module</b> DC 24V, 2nd DC 24V +5V/2A, double supply (available 3rd quarter 2010)
Digital input modules	
021-1BB00	<b>SM 021 - Digital input</b> DI 2xDC 24V
021-1BB10	<b>SM 021 - Digital input</b> DI 2xDC 24V, parameterizable 2µs...4ms (available 3rd quarter 2010)
021-1BB50	<b>SM 021 - Digital input</b> DI 2xDC 24V, NPN
021-1BD00	<b>SM 021 - Digital input</b> DI 4xDC 24V
021-1BD10	<b>SM 021 - Digital input</b> DI 4xDC 24V, parameterizable 2µs...4ms (available 3rd quarter 2010)
021-1BD40	<b>SM 021 - Digital input</b> DI 4xDC 24V, triple
021-1BD50	<b>SM 021 - Digital input</b> DI 4xDC 24V, NPN
021-1BF00	<b>SM 021 - Digital input</b> DI 8xDC 24V
021-1BF50	<b>SM 021 - Digital input</b> DI 8xDC 24V, NPN
Digital output modules	
022-1BB00	<b>SM 022 - Digital output</b> DO 2xDC 24V, 0.5A
022-1BB20	<b>SM 022 - Digital output</b> DO 2xDC 24V, 2A
022-1BB50	<b>SM 022 - Digital output</b> DO 2xDC 24V, 0.5A, NPN
022-1BB90	<b>SM 022 - Digital output</b> SM 022, DO2xDC24V 0.5A PWM
022-1BD00	<b>SM 022 - Digital output</b> DO 4xDC 24V, 0.5A
022-1BD20	<b>SM 022 - Digital output</b> DO 4xDC 24V, 2A
022-1BD50	<b>SM 022 - Digital output</b> DO 4xDC 24V, 0.5A, NPN
022-1BF00	<b>SM 022 - Digital output</b> DO 8xDC 24V, 0.5A
022-1BF50	<b>SM 022 - Digital output</b> DO 8xDC 24V, 0.5A, NPN
022-1HB10	<b>SM 022 - Digital output</b> DO 2xDC 30V/AC 230V, 3A, relay, floating per channel
Analog input modules	
031-1BB30	<b>SM 031 - Analog input</b> AI 2x12Bit, U
031-1BB40	<b>SM 031 - Analog input</b> AI 2x12Bit, I
031-1BB90	<b>SM 031 - Analog input</b> AI 2x16Bit, TC

# System SLIO

Order no.	Name/Description
031-1BD30	<b>SM 031 - Analog input</b> AI 4x12Bit, U
031-1BD40	<b>SM 031 - Analog input</b> AI 4x12Bit, I
031-1BD80	<b>SM 031 - Analog input</b> AI 4x16Bit, R, RTD (2, 3 and 4-wires)
Analog output modules	
032-1BB30	<b>SM 032 - Analog output</b> AO 2x12Bit, U
032-1BB40	<b>SM 032 - Analog output</b> AO 2x12Bit, I
032-1BD30	<b>SM 032 - Analog output</b> AO 4x12Bit, U
032-1BD40	<b>SM 032 - Analog output</b> AO 4x12Bit, I
Counter modules	
050-1BA00	<b>FM 050 - Counter module</b> Counter 1x32Bit (AB), DC 24V, up to 400kHz, DO 1xDC 24V, 0.5A
050-1BA10	<b>FM 050 - Counter module</b> Counter 1x32Bit (AB), DC 5V, up to 2MHz, DO 1xDC 24V, 0.5A
050-1BB00	<b>FM 050 - Counter module</b> Counter 2x32Bit (AB), DC 24V, up to 400kHz
050-1BB30	<b>FM 050 - Counter module</b> Counter 2x32Bit (AB), DC 24V, up to 400kHz, ECO
SSI modules	
050-1BS00	<b>FM 050S - SSI module</b> 1xSSI, RS422, 8...32Bit, 12kHz...6MHz, timestamp, diagnosis, alarm
Fieldbus slave modules w/o I/Os	
053-1CA00	<b>IM 053CAN - CANopen slave</b> DC 24V, 1Mbit/s, address 1...126, up to 64 modules
053-1DP00	<b>IM 053DP - Profibus-DP slave</b> DC 24V, 12Mbit/s, address 1...125, DP-V0, DP-V1, configuration via GSD file from VIPA, up to 64 modules
35 mm profile rail	
290-1AF00	<b>35 mm profile rail</b> 35 mm profile rail; lenght 2000 mm
290-1AF30	<b>35 mm profile rail</b> 35 mm profile rail; lenght 530 mm
Miscellaneous	
000-0AB00	<b>SLIO shield bus carrier</b> 10 pieces
000-0AA00	<b>SLIO bus cover</b> With each bus coupler, to protect the backplane bus connectors, there is a mounted bus cover in the scope of delivery. The bus cover of the bus coupler has to be removed before mounting a SLIO module. For the protection of the backplane bus connector, the bus cover should be mounted at the last right module of the system.
Manuals and operating instructions	
HB300D	<b>Manual System SLIO - German</b> Manual System SLIO - Compendium, German HB300D_SM, HB300D_IM, HB300D_FM, HB300D_PM
HB300E	<b>Manual System SLIO - English</b> Manual System SLIO - Compendium, English HB300E_SM, HB300E_IM, HB300E_FM, HB300_PM
HB300D_IM	<b>Manual System SLIO - German</b> IM - Interface modules
HB300D_SM	<b>Manual System SLIO - German</b> SM - Signal modules
HB300D_FM	<b>Manual System SLIO - German</b> FM - Function modules



# System SLIO

Order no.	Name/Description
HB300D_PM	<b>Manual System SLIO - German</b> PM - Power modules
HB300E_IM	<b>Manual System SLIO - English</b> IM - Interface modules
HB300E_SM	<b>Manual System SLIO - English</b> SM - Signal modules
HB300E_FM	<b>Manual System SLIO - English</b> FM - Function modules
HB300E_PM	<b>Manual System SLIO - English</b> PM - Power modules

System S10

System 100V

System 200V

System 300S

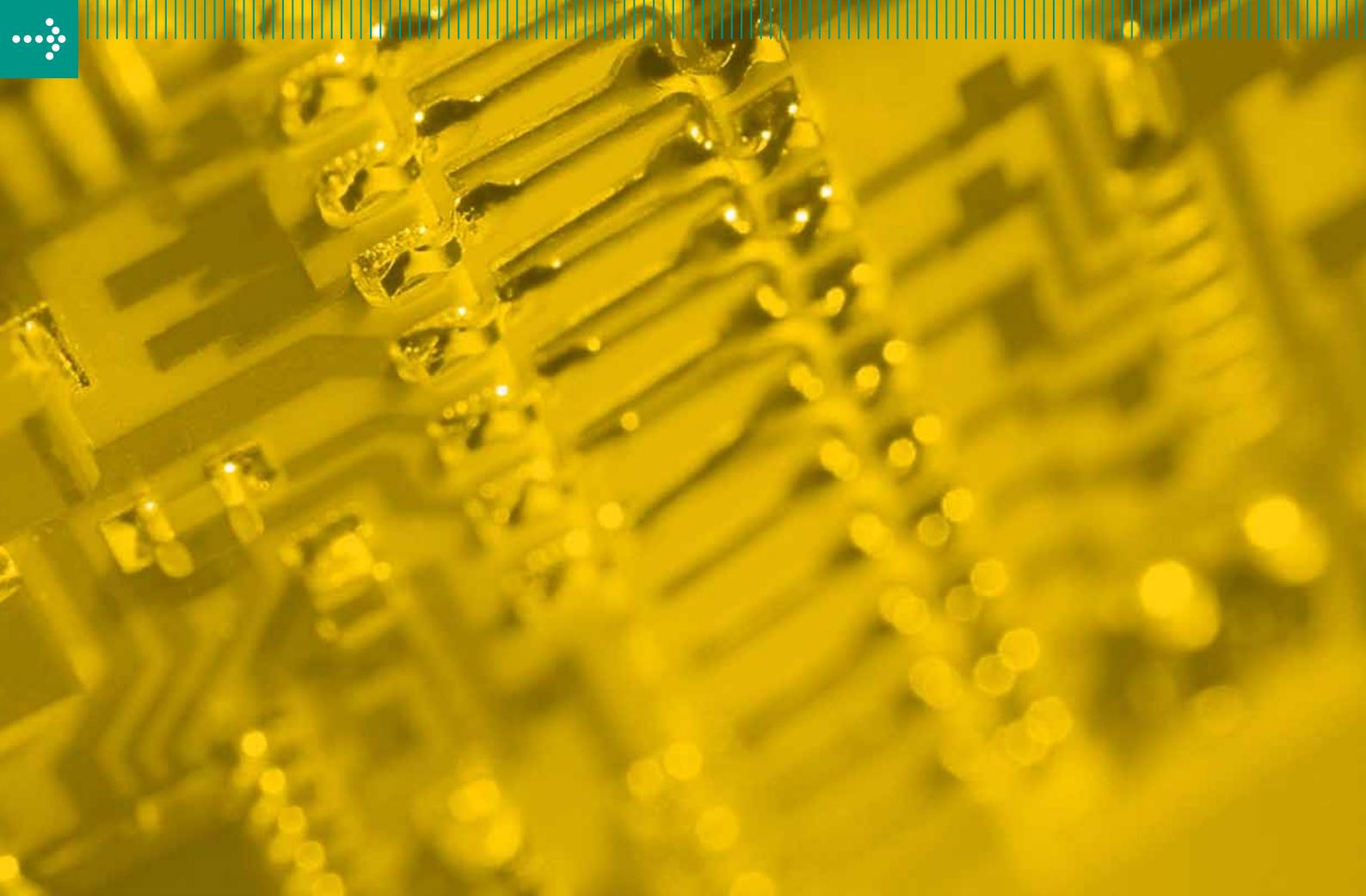
System 500S

HMI

Software

Zubehör

Anhang



## At a glance

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System 100V

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# SYSTEM 100V

the compact control system



# System description 100V

## Structure and Function

The System 100V is a very compact control system.

The system is designed for centralized and decentralized automation tasks.

The compact CPUs unify interfaces for communication and digital I/O peripherals in a casing.

By the use of up to four expansion modules the CPUs can be extended by up to 160 analog and digital I/O points.

With its space-saving assembly size it fits into almost any automation environment.

The System 100V is immediately usable central and decentral without further components. The installation of the system and the enlargement of the periphery is extremely simple. The CPU is clipped onto a standard 35 mm profile rail. If the CPU needs to be expanded bus connectors are used for communication between the CPU and expansion modules on the profile rail in advance, after that the CPU and the System 100V/200V expansion modules are snapped on - finished.

The scope of supply includes front connectors, labeling strips and, in the System 100V expansion modules, also bus connectors.



## Performance and Application

The System 100V is designed for centralized and decentralized automation tasks in the manufacturing and process industries for the lower performance range.

## Programming

The System 100V is programmed with WinPLC7 or with Siemens STEP7 in LAD, FBD and STL.

## Memory

The CPUs in the System 100V have the work and load memory already integrated. Depending on the CPU version, users can choose from 8 kByte to 32 kByte work memory. In addition, MMC cards for storing program and data are supported.

## Functions

For the connection of sensors and actuators are a variety of signaling modules in the System 100V, and System 200V for acquiring digital and analog signals in and out of the process is available. Most of the signal modules from the System 200V are bus and functionally compatible to the System 100V.

Depending on the CPU, variant counter inputs and PWM outputs are integrated. Due to the counter inputs, complex and fast counting tasks in the manufacturing and process industries will be economically realized. The adjustable PWM outputs via potentiometer allow, for example, CCFLs to be „dimmed“ or the speed of appropriate electric motors and fans to be regulated via impulses.

## Communication

For the connection of serial devices, e.g. scanner or printer, and for the integration of systems from other manufacturers, different CPU variants are available with integrated interfaces. The System 100V provides fieldbus slave modules for PROFIBUS-DP and CANopen, with which the system also serves as manufacturer-independent, central, but also as subordinate decentralized fieldbus slave unit.

The fieldbus slave modules are integrated via the device master files into existing fieldbus infrastructure.



# System 100V

Order no.	Name/Description
CPUs STEP7 programmable	
112-4BH02	<p><b>CPU 112 - Micro PLC</b>            DC 24V, 8/16kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Periphery:</b>            DI 8xDC 24V, DIO 4xDC 24V (DO 0,5A), DO 4xDC 24V, 0,5A, potential separated, not expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>
114-6BJ02	<p><b>CPU 114 - Micro PLC</b>            DC 24V, 16/24kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Periphery:</b>            DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0,5A), DO 4xDC 24V, 0,5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>
114-6BJ03	<p><b>CPU 114 - Micro PLC</b>            DC 24V, 24/32kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Periphery:</b>            DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0,5A), DO 4xDC 24V, 0,5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>
114-6BJ04	<p><b>CPU 114 - Micro PLC</b>            DC 24V, 32/40kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Periphery:</b>            DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0,5A), DO 4xDC 24V, 0,5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>
114-6BJ52	<p><b>CPU 114R - Micro PLC</b>            DC 24V, 16/24kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Periphery:</b>            DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DO 8xrelays, potential separated, expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>
114-6BJ53	<p><b>CPU 114R - Micro PLC</b>            DC 24V, 24/32kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Periphery:</b>            DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DO 8xrelays, potential separated, expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>
114-6BJ54	<p><b>CPU 114R - Micro PLC</b>            DC 24V, 32/40kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Periphery:</b>            DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DO 8xrelays, potential separated, expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>
115-6BL02	<p><b>CPU 115 - Micro PLC</b>            DC 24V, 16/24kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Periphery:</b>            DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0,5A), DO 12xDC 24V, 0,5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>
115-6BL03	<p><b>CPU 115 - Micro PLC</b>            DC 24V, 24/32kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Periphery:</b>            DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0,5A), DO 12xDC 24V, 0,5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>

# System 100V

Order no.	Name/Description
115-6BL04	<p><b>CPU 115 - Micro PLC</b> DC 24V, 32/40kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Periphery:</b> DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0.5A), DO 12xDC 24V, 0.5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>
CPUs STEP7 programmable, PtP	
115-6BL12	<p><b>CPU 115SER - Micro PLC</b> DC 24V, 16/24kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Interface:</b> PtP RS232, ASCII, STX/ETX, 3964R, Modbus master/slave, USS master</p> <p><b>Periphery:</b> DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0.5A), DO 12xDC 24V, 0.5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>
115-6BL13	<p><b>CPU 115SER - Micro PLC</b> DC 24V, 24/32kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Interface:</b> PtP RS232, ASCII, STX/ETX, 3964R, Modbus master/slave, USS master</p> <p><b>Periphery:</b> DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0.5A), DO 12xDC 24V, 0.5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>
115-6BL14	<p><b>CPU 115SER - Micro PLC</b> DC 24V, 32/40kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Interface:</b> PtP RS232, ASCII, STX/ETX, 3964R, Modbus master/slave, USS master</p> <p><b>Periphery:</b> DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0.5A), DO 12xDC 24V, 0.5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW211K2OD WinPLC7lite programming software (SW211K2OD please order separately)</p>
115-6BL32	<p><b>CPU 115SER - Micro PLC</b> DC 24V, 16/24kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Interface:</b> PtP RS485, potential separated, ASCII, STX/ETX, 3964R, Modbus master/slave, USS master</p> <p><b>Periphery:</b> DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0.5A), DO 12xDC 24V, 0.5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW221K2OD WinPLC7lite programming software (SW221K2OD please order separately)</p>
115-6BL33	<p><b>CPU 115SER - Micro PLC</b> DC 24V, 24/32kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Interface:</b> PtP RS485, potential separated, ASCII, STX/ETX, 3964R, Modbus master/slave, USS master</p> <p><b>Periphery:</b> DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0.5A), DO 12xDC 24V, 0.5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW221K2OD WinPLC7lite programming software (SW221K2OD please order separately)</p>
115-6BL34	<p><b>CPU 115SER - Micro PLC</b> DC 24V, 32/40kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock</p> <p><b>Interface:</b> PtP RS485, potential separated, ASCII, STX/ETX, 3964R, Modbus master/slave, USS master</p> <p><b>Periphery:</b> DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0.5A), DO 12xDC 24V, 0.5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW221K2OD WinPLC7lite programming software (SW221K2OD please order separately)</p>



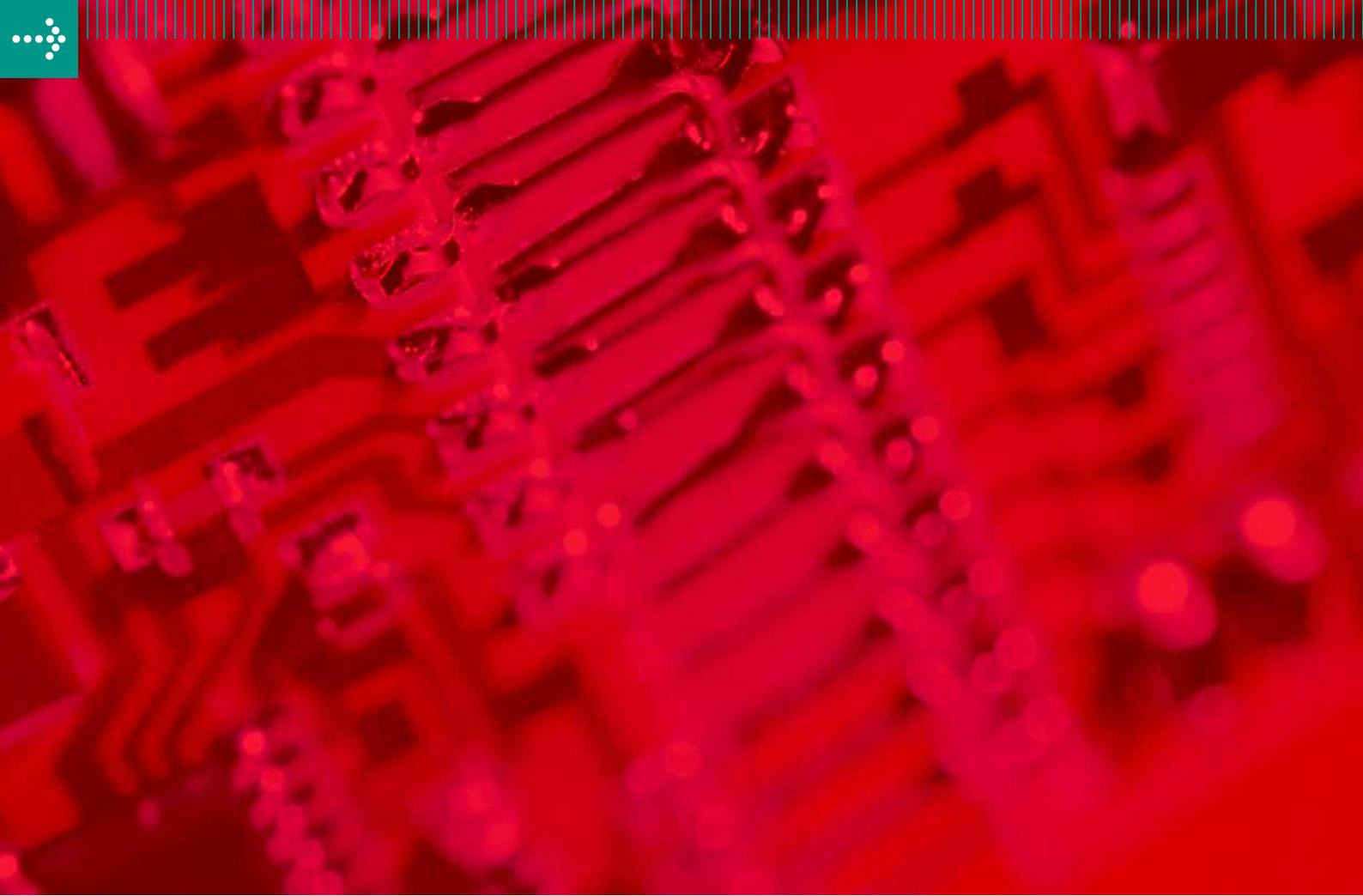
# System 100V

Order no.	Name/Description
CPUs STEP7 programmable, DP slave	
115-6BL22	<b>CPU 115DP - Micro PLC</b> DC 24V, 16/24kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Interface:</b> Profibus-DP slave, 12Mbit/s, address 1...125 <b>Periphery:</b> DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0.5A), DO 12xDC 24V, 0.5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW221K2OD WinPLC7lite programming software (SW221K2OD please order separately)
115-6BL23	<b>CPU 115DP - Micro PLC</b> DC 24V, 24/32kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Interface:</b> Profibus-DP slave, 12Mbit/s, address 1...125 <b>Periphery:</b> DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0.5A), DO 12xDC 24V, 0.5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW221K2OD WinPLC7lite programming software (SW221K2OD please order separately)
115-6BL24	<b>CPU 115DP - Micro PLC</b> DC 24V, 32/40kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Interface:</b> Profibus-DP slave, 12Mbit/s, address 1...125 <b>Periphery:</b> DI 16xDC 24V, thereof counter 2x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 0.5A), DO 12xDC 24V, 0.5A, thereof 2xPWM, 50kHz, potential separated, expandable, incl. SW221K2OD WinPLC7lite programming software (SW221K2OD please order separately)
Clamp modules	
101-4FH50	<b>CM 101 - Clamp modules</b> 8x11 clamps, passive
Digital in/output modules	
123-4EH01	<b>EM 123 - Expansion module, digital</b> DI 8xDC 24V, DO 8xDC 24V, 0.5A, potential separated
123-4EJ01	<b>EM 123 - Expansion module, digital</b> DI 16xDC 24V, DO 8xDC 24V, 0.5A, potential separated
123-4EJ11	<b>EM 123 - Expansion module, digital</b> DI 16xDC 24V, DO 8xrelays
123-4EJ20	<b>EM 123 - Expansion module, digital</b> DI 16xAC 60...230V, DO 8xrelays
123-4EL01	<b>EM 123 - Expansion module, digital</b> DI 16xDC 24V, DO 16xDC 24V, 0.5A, potential separated
Analog in/output modules	
134-4EE00	<b>EM 134 - Expansion module, analog</b> AI 3x12Bit, U, I, 1x12Bit, RTD, AO 2x12Bit, U, I
Fieldbus slave modules with I/Os, DI	
151-4PH00	<b>SM 151 - Profibus-DP slave, digital</b> DC 24V, 12Mbit/s, address 1...99, DI 16xDC 24V
151-6PH00	<b>SM 151 - Profibus-DP slave, digital</b> DC 24V, 12Mbit/s, address 1...99, DI 16xDC 24V, 4x11 clamps
151-6PL00	<b>SM 151 - Profibus-DP slave, digital</b> DC 24V, 12Mbit/s, address 1...99, DI 32xDC 24V
Fieldbus slave modules with I/Os, DO	
152-4PH00	<b>SM 152 - Profibus-DP slave, digital</b> DC 24V, 12Mbit/s, address 1...99, DO 16xDC 24V, 1A
152-6PH00	<b>SM 152 - Profibus-DP slave, digital</b> DC 24V, 12Mbit/s, address 1...99, DO 16xDC 24V, 1A, 4x11 clamps
152-6PH50	<b>SM 152 - Profibus-DP slave, digital</b> DC 24V, 12Mbit/s, address 1...99, DO 16xrelays COM
152-6PL00	<b>SM 152 - Profibus-DP slave, digital</b> DC 24V, 12Mbit/s, address 1...99, DO 32xDC 24V, 1A



# System 100V

Order no.	Name/Description
Fieldbus slave modules with I/Os, DIO	
153-4CF00	<b>SM 153 - CANopen slave, digital</b> DC 24V, 1Mbit/s, address 1...99, DIO 8xDC 24V (DO 1A), 2x11 clamps
153-4CH00	<b>SM 153 - CANopen slave, digital</b> DC 24V, 1Mbit/s, address 1...99, DI 8xDC 24V, DIO 4xDC 24V (DO 1A), DO 4xDC 24V, 1A
153-4PF00	<b>SM 153 - Profibus-DP slave, digital</b> DC 24V, 12Mbit/s, address 1...99, DIO 8xDC 24V (DO 1A), 2x11 clamps
153-4PH00	<b>SM 153 - Profibus-DP slave, digital</b> DC 24V, 12Mbit/s, address 1...99, DI 8xDC 24V, DO 8xDC 24V, 1A
153-6CH00	<b>SM 153 - CANopen slave, digital</b> DC 24V, 1Mbit/s, address 1...99, DI 8xDC 24V, DIO 4xDC 24V (DO 1A), DO 4xDC 24V, 1A, 4x11 clamps
153-6CL10	<b>SM 153 - CANopen slave, digital</b> DC 24V, 1Mbit/s, address 1...99, DI 24xDC 24V, DO 8xDC 24V, 1A
153-6PH00	<b>SM 153 - Profibus-DP slave, digital</b> DC 24V, 12Mbit/s, address 1...99, DI 8xDC 24V, DO 8xDC 24V, 1A, 4x11 clamps
153-6PL00	<b>SM 153 - Profibus-DP slave, digital</b> DC 24V, 12Mbit/s, address 1...99, DI 16xDC 24V, DO 16xDC 24V, 1A
153-6PL10	<b>SM 153 - Profibus-DP slave, digital</b> DC 24V, 12Mbit/s, address 1...99, DI 24xDC 24V, DO 8xDC 24V, 1A
Bus connectors	
290-0AA10	<b>Bus connector</b> 1-tier
35 mm profile rail	
290-1AF00	<b>35 mm profile rail</b> 35 mm profile rail; lenght 2000 mm
290-1AF30	<b>35 mm profile rail</b> 35 mm profile rail; lenght 530 mm
Front connector	
292-1AF00	<b>Front connector</b> 10 pin with cage clamps (included in the scope of delivery of signal modules)
MMC memory	
953-0KX10	<b>MMC - MultiMediaCard</b> Extension memory for VIPA CPUs 11x, 21x, 24x, 31x, 51x, and 208-1DP01, CC 03 (for load memory not necessary)
Manuals and operating instructions	
HB100D	<b>Manual System 100V - Compendium, German</b> HB100D_CM, HB100D_EM, HB100D_SM-PB, HB100D_SM-CAN
HB100D_CM	<b>Manual System 100V - German</b> CM - Clamps modules
HB100D_CPU	<b>Manual System 100V - German</b> CPU 11x, incl. operations list
HB100D_EM	<b>Manual System 100V - German</b> EM - Expansion modules
HB100D_SM-CAN	<b>Manual System 100V - German</b> SM-CAN - Block I/O CAN
HB100D_SM-PB	<b>Manual System 100V - German</b> SM-PB - Block I/O Profibus
HB100E	<b>Manual System 100V - Compendium, English</b> HB100E_CM, HB100E_EM, HB100E_SM-PB, HB100E_SM-CAN
HB100E_CM	<b>Manual System 100V - English</b> CM - Clamps modules
HB100E_CPU	<b>Manual System 100V - English</b> CPU 11x, incl. operations list
HB100E_EM	<b>Manual System 100V - English</b> EM - Expansion modules
HB100E_SM-CAN	<b>Manual System 100V - English</b> SM-CAN - Block I/O CAN
HB100E_SM-PB	<b>Manual System 100V - English</b> SM-PB - Block I/O Profibus



## At a glance

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# SYSTEM 200V

the modular control system



# System description 200V

## Structure and Concept

The System 200V is a highly compact and modular expandable system.

The system is designed for centralized and decentralized automation tasks.

With a central extension of a maximum of 32 modules directly to the CPU and up to 126 fieldbus slave modules with a further maximum of 32 modules per fieldbus slave module, the System 200V is highly flexible. The module size allows use in almost any automation environment.

The assembly is extremely simple. The bus connector for communication between the modules and the CPU can be easily inserted into a 35 mm standard rail, and then the System 200V modules are snapped on – finished.

Included with the supply of the signal and function modules are front connectors and labeling strips.



## Performance and Application

The System 200V is designed for centralized and decentralized automation tasks in the manufacturing and process industry up to medium power range.

## Programming

The System 200V is programmed with WinPLC7 or with Siemens STEP7 in LAD, FBD and STL.

## Memory

The CPUs in the System 200V have the work and load memory already integrated. Depending on the CPU version, users can choose from 32 kByte to 128 kByte work memory. In addition, MMC cards for storing program and data are supported.

## Functions

For the connection of sensors and actuators, a variety of signaling modules are available for acquiring digital and analog signals in and out of the process.

For positioning tasks and path measurement various SSI, servo and stepper modules can be chosen.

The counter modules in the System 200V also support complex and fast counting tasks in the manufacturing and process industry to calculate the comparative features and the connection of sensors, such as photoelectric barriers.

## Communication

For the connection of serial devices, e.g. scanner or printer, and for the integration of systems from other manufacturers, the system offers a full complement of serial communication processors.

Ethernet communication processors incorporates the System 200V horizontally and vertically into the existing network structures, and thus make all relevant data connected to the MES and ERP systems available.

The System 200V possesses fieldbus master and slave modules with various fieldbus protocols and can therefore function, manufacturer-independent, as master control as well as subordinate fieldbus slave unit.



# System 200V

Order no.	Name/Description
CPUs STEP5 programmable, Standard	
241-1BA01	<b>CPU 241 - PLC CPU</b> 8kByte memory, AS511, MMC slot
241-2BP01	<b>CPU 241DP - PLC CPU</b> 8kByte memory, AS511, MMC slot <b>Interface:</b> Profibus-DP slave, 12Mbit/s, address 1...125
242-1BA01	<b>CPU 242 - PLC CPU</b> 32kByte memory, AS511, MMC slot
242-2BP01	<b>CPU 242DP - PLC CPU</b> 32kByte memory, AS511, MMC slot <b>Interface:</b> Profibus-DP slave, 12Mbit/s, address 1...125
243-1BA01	<b>CPU 243 - PLC CPU</b> 52kByte memory, AS511, MMC slot, real-time clock
243-2BP01	<b>CPU 243DP - PLC CPU</b> 52kByte memory, AS511, MMC slot, real-time clock <b>Interface:</b> Profibus-DP slave, 12Mbit/s, address 1...125
244-1BA01	<b>CPU 244 - PLC CPU</b> 104kByte memory, AS511, MMC slot, real-time clock
244-2BP01	<b>CPU 244DP - PLC CPU</b> 104kByte memory, AS511, MMC slot, real-time clock <b>Interface:</b> Profibus-DP slave, 12Mbit/s, address 1...125
CPUs STEP5 programmable, Net-CPUs	
241-2BT10	<b>CPU 241NET - PLC CPU</b> 8kByte memory, AS511, MMC slot, real-time clock <b>Interface:</b> Ethernet-CP 243, RFC1006, TCP/IP, UDP, parameterizable via handling blocks
242-2BT10	<b>CPU 242NET - PLC CPU</b> 32kByte memory, AS511, MMC slot, real-time clock <b>Interface:</b> Ethernet-CP 243, RFC1006, TCP/IP, UDP, parameterizable via handling blocks
243-2BT10	<b>CPU 243NET - PLC CPU</b> 52kByte memory, AS511, MMC slot, real-time clock <b>Interface:</b> Ethernet-CP 243, RFC1006, TCP/IP, UDP, parameterizable via handling blocks
244-2BT10	<b>CPU 244NET - PLC CPU</b> 104kByte memory, AS511, MMC slot, real-time clock <b>Interface:</b> Ethernet-CP 243, RFC1006, TCP/IP, UDP, parameterizable via handling blocks
CPUs STEP7 programmable, standard	
214-1BA02	<b>CPU 214 - PLC CPU</b> DC 24V, 48/80kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock
214-1BC02	<b>CPU 214 - PLC CPU</b> DC 24V, 32/40kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock
215-1BA02	<b>CPU 215 - PLC CPU</b> DC 24V, 96/144kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock
216-1BA02	<b>CPU 216 - PLC CPU</b> DC 24V, 128/192kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock
CPUs STEP7 programmable, Net-CPUs	
214-2BT10	<b>CPU 214NET - PLC CPU</b> DC 24V, 48/80kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Interface:</b> Ethernet-CP 243, S7 communication, RFC1006, TCP/IP, parameterizable with NetPro from Siemens
215-2BT10	<b>CPU 215NET - PLC CPU</b> DC 24V, 96/144kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Interface:</b> Ethernet-CP 243, S7 communication, RFC1006, TCP/IP, parameterizable with NetPro from Siemens

# System 200V

Order no.	Name/Description
216-2BT10	<p><b>CPU 216NET - PLC CPU</b>            DC 24V, 128/192kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            Ethernet-CP 243, S7 communication, RFC1006, TCP/IP, parameterizable with NetPro from Siemens</p>
CPUs STEP7 programmable, PtP	
214-2BS02	<p><b>CPU 214SER - PLC CPU</b>            DC 24V, 48/80kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            PtP 2x RS232, ASCII, STX/ETX, 3964R with RK512</p>
214-2BS12	<p><b>CPU 214SER - PLC CPU</b>            DC 24V, 48/80kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            PtP RS232, ASCII, STX/ETX, 3964R, Modbus master/slave, USS master, modem connectable</p>
214-2BS32	<p><b>CPU 214SER - PLC CPU</b>            DC 24V, 48/80kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            PtP RS485, ASCII, STX/ETX, 3964R, Modbus master/slave, USS master</p>
215-2BS02	<p><b>CPU 215SER - PLC CPU</b>            DC 24V, 96/144kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            PtP 2xRS232, ASCII, STX/ETX, 3964R with RK512</p>
215-2BS12	<p><b>CPU 215SER - PLC CPU</b>            DC 24V, 96/144kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            PtP RS232, ASCII, STX/ETX, 3964R, Modbus master/slave, USS master, modem connectable</p>
215-2BS32	<p><b>CPU 215SER - PLC CPU</b>            DC 24V, 96/144kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            PtP RS485, ASCII, STX/ETX, 3964R, Modbus master/slave, USS master</p>
216-2BS02	<p><b>CPU 216SER - PLC CPU</b>            DC 24V, 128/192kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            PtP 2xRS232, ASCII, STX/ETX, 3964R with RK512</p>
216-2BS12	<p><b>CPU 216SER - PLC CPU</b>            DC 24V, 128/192kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            PtP RS232, ASCII, STX/ETX, 3964R, Modbus master/slave, USS master, modem connectable</p>
216-2BS32	<p><b>CPU 216SER - PLC CPU</b>            DC 24V, 128/192kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            PtP RS485, ASCII, STX/ETX, 3964R, Modbus master/slave, USS master</p>
CPUs STEP7 programmable, DP master	
214-2BM02	<p><b>CPU 214DPM - PLC CPU</b>            DC 24V, 48/80kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            Profibus-DP master, 12Mbit/s, up to 124 slaves</p>
215-2BM02	<p><b>CPU 215DPM - PLC CPU</b>            DC 24V, 96/144kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            Profibus-DP master, 12Mbit/s, up to 124 slaves</p>
216-2BM02	<p><b>CPU 216DPM - PLC CPU</b>            DC 24V, 128/192kByte work/load memory, MP<sup>2</sup>I, MMC slot, real-time clock  <b>Interface:</b>            Profibus-DP master, 12Mbit/s, up to 124 slaves</p>



# System 200V

Order no. Name/Description	
CPUs STEP7 programmable, DP slave	
214-2BP02	<b>CPU 214DP - PLC CPU</b> DC 24V, 48/80kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Interface:</b> Profibus-DP slave, 12Mbit/s, address 1...125
215-2BP02	<b>CPU 215DP - PLC CPU</b> DC 24V, 96/144kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Interface:</b> Profibus-DP slave, 12Mbit/s, address 1...125
216-2BP02	<b>CPU 216DP - PLC CPU</b> DC 24V, 128/192kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Interface:</b> Profibus-DP slave, 12Mbit/s, address 1...125
CPUs STEP7 programmable, CAN master	
214-2CM02	<b>CPU 214CAN - PLC CPU</b> DC 24V, 48/80kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Interface:</b> CANopen master, 1Mbit/s, up to 125 slaves
215-2CM02	<b>CPU 215CAN - PLC CPU</b> DC 24V, 96/144kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Interface:</b> CANopen master, 1Mbit/s, up to 125 slaves
216-2CM02	<b>CPU 216CAN - PLC CPU</b> DC 24V, 128/192kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Interface:</b> CANopen master, 1Mbit/s, up to 125 slaves
Clamp modules	
201-1AA00	<b>CM 201 - Double clamps module</b> 2x11 clamps, grey/grey
201-1AA10	<b>CM 201 - Double clamps module</b> 2x11 clamps, green-yellow/grey
201-1AA20	<b>CM 201 - Double clamps module</b> 2x11 clamps, red/blue
201-1AA40	<b>CM 201 - 4-tier clamps module</b> 2x5 clamps grey/grey and 2x6pole red/blue
Power supply	
207-1BA00	<b>PS 207 - Power supply</b> AC 100/240V, DC 24V, 2A, 48W
207-2BA20	<b>PS 207 - Power supply</b> AC 100/240V, DC 24V, 2A, 48W with 2x11 clamps red/blue
Digital input modules	
221-1BF00	<b>SM 221 - Digital input</b> DI 8xDC 24V
221-1BF10	<b>SM 221 - Digital input</b> DI 8xDC 24V, 0,2 ms
221-1BF21	<b>SM 221 - Digital input</b> DI 8xDC 24V, 0.2ms, alarm
221-1BF30	<b>SM 221 - Digital input ECO</b> DI 8xDC 24V
221-1BF40	<b>SM 221 - Digital input</b> DI 8xDC 24V, 0.2ms, storing
221-1BF50	<b>SM 221 - Digital input</b> DI 8xDC 24V, NPN
221-1BH00	<b>SM 221 - Digital input</b> DI 16xDC 24V, for conversion module DEA-UB4x
221-1BH10	<b>SM 221 - Digital input</b> DI 16xDC 24V
221-1BH30	<b>SM 221 - Digital input ECO</b> DI 16xDC 24V
221-1BH50	<b>SM 221 - Digital input</b> DI 16xDC 24V, NPN, for conversion module DEA-UB4x

# System 200V

Order no.	Name/Description
221-1BH51	<b>SM 221 - Digital input</b> DI 16xDC 24V, NPN
221-1FD00	<b>SM 221 - Digital input</b> DI 4xAC/DC 90...230V, potential separated per channel
221-1FF20	<b>SM 221 - Digital input</b> DI 8xAC/DC 60...230V
221-1FF30	<b>SM 221 - Digital input</b> DI 8xAC/DC 24...48V
221-1FF40	<b>SM 221 - Digital input</b> DI 8xAC 230V, 20mA input current, hysteresis
221-1FF50	<b>SM 221 - Digital input</b> DI 8xAC/DC 180...265V
221-2BL10	<b>SM 221 - Digital input</b> DI 32xDC 24V
KSD221-1BH00	<b>SM 221 Set - Digital input</b> 1xSM 221-1BH00, DI 16xDC 24V, 1xDEA-KB91A (1m), 1xDEA-UB48D (3-wire)
KS221-1BH00	<b>SM 221 Set - Digital input</b> 1xSM 221-1BH00, DI 16xDC 24V, 1xDEA-KB91A (1m), 1xDEA-UB48
Digital input with counter	
221-1BH20	<b>SM 221 - Digital input</b> DI 16xDC 24V, thereof counter 1x32Bit (AB), up to 100kHz
Digital output modules	
222-1BF00	<b>SM 222 - Digital output</b> DO 8xDC 24V, 1A
222-1BF10	<b>SM 222 - Digital output</b> DO 8xDC 24V, 2A
222-1BF20	<b>SM 222 - Digital output</b> DO 8xDC 24V, 2A, 4 groups per 2 outputs
222-1BF30	<b>SM 222 - Digital output ECO</b> DO 8xDC 24V, 0.5A
222-1BF50	<b>SM 222 - Digital output</b> DO 8xDC 24V, 0.5A, NPN
222-1BH00	<b>SM 222 - Digital output</b> DO 16xDC 24V, 0.5A, for conversion module DEA-UB4x
222-1BH10	<b>SM 222 - Digital output</b> DO 16xDC 24V, 1A, sum current up to 10A
222-1BH20	<b>SM 222 - Digital output</b> DO 16xDC 24V, 2A, sum current up to 10A
222-1BH30	<b>SM 222 - Digital output ECO</b> DO 16xDC 24V, 0.5A
222-1BH50	<b>SM 222 - Digital output</b> DO 16xDC 24V, 0.5A NPN, for conversion module DEA-UB4x
222-1BH51	<b>SM 222 - Digital output</b> DO 16xDC 24V, 0.5A, NPN
222-1DB00	<b>SM 222 - Digital output</b> DO 2xAC 230V, 2A, dimmer
222-1FD10	<b>SM 222 - Digital output</b> DO 4xDC 400V/AC 230V, 0.5A, Solid State relays, potential separated per channel
222-1FF00	<b>SM 222 - Digital output</b> DO 8xDC 400V/AC 230V, 0.5A, solid state relays COM
222-1HD10	<b>SM 222 - Digital output</b> DO 4xDC 30V/AC 230V, 5A, relays, potential separated per channel
222-1HD20	<b>SM 222 - Digital output</b> DO 4xDC 30V/AC 230V, 16A, relays, bistable, potential separated per channel
222-1HF00	<b>SM 222 - Digital output</b> DO 8xDC 30V/AC 230V, 5A, relays COM
222-2BL10	<b>SM 222 - Digital output</b> DO 32xDC 24V, 1A, 2 groups per 16 DO, sum current per group 10A



# System 200V

Order no.	Name/Description
KSD222-1BH00	<b>SM 222 Set - Digital output</b> 1xSM 222-1BH00, DO 16xDC 24V, 0.5A, 1xDEA-KB91A (1m), 1xDEA-UB48D (3-wire)
KS222-1BH00	<b>SM 222 Set - Digital output</b> 1xSM 222-1BH00, DO 16xDC 24V, 0.5A, 1xDEA-KB91A (1m), 1xDEA-UB48
Digital in/output modules	
223-1BF00	<b>SM 223 - Digital in-/output</b> DIO 8xDC 24V (DO 1A)
223-2BL10	<b>SM 223 - Digital in-/output</b> DI 16xDC 24V, DO 16xDC 24V, 1A, sum current up to 10A
Analog input modules	
231-1BD30	<b>SM 231 - Analog input ECO</b> AI 4x12Bit, +/- 10V
231-1BD40	<b>SM 231 - Analog input ECO</b> AI 4x12Bit, 4...20mA, +/- 20mA
231-1BD53	<b>SM 231 - Analog input</b> AI 4x16Bit, U, I, R, TC, RTD
231-1BD60	<b>SM 231 - Analog input</b> AI 4x12Bit, 0/4..20mA, potential separated per channel
231-1BD70	<b>SM 231 - Analog input</b> AI 4x12Bit, +/- 10V, potential separated per channel
231-1BF00	<b>SM 231 - Analog input</b> AI 8x16Bit (2-wire), 4x16Bit (4-wire), 0..60 mV, TC, RTD
231-1FD00	<b>SM 231 - Analog input FAST</b> AI 4x16Bit, U, I, 1ms total
Analog output modules	
232-1BD30	<b>SM 232 - Analog output ECO</b> AO 4x12Bit, 0...10V, +/- 10V
232-1BD40	<b>SM 232 - Analog output ECO</b> AO 4x12Bit, 0/4..20mA
232-1BD51	<b>SM 232 - Analog output</b> AO 4x12Bit, U, I
Analog in/output modules	
234-1BD50	<b>SM 234 - Analog in-/output</b> AI 2x12Bit, U, I, AO 2x12Bit, U, I
234-1BD60	<b>SM 234 - Analog in-/output</b> AI 3x12Bit, U, I, 1x12Bit, RTD, AO 2x12Bit, U, I
Combination modules	
238-2BC00	<b>SM 238C - Digital in-/output, counter, analog in-/output</b> DI 12xDC 24V, counter 3x32Bit (AB), up to 30kHz, DIO 4xDC 24V (DO 1A); AI 3x12Bit, U, I, 1x12Bit, RTD, AO 2x12Bit, U, I, only in combination with 21x CPUs
RS232/422/485- and other CPs	
240-1DA10	<b>CM 240 - Mini-switch</b> 4xRJ45, Ethernet, 10/100Mbit/s, Auto-negotiation, Speed-auto-sensing, Auto MDI/MDIX crossover, (external DC-In port for stand-alone operation, order no. 970-0CM00, EUR 5,00)
240-1BA20	<b>CP 240 - Communication processor</b> PtP RS232, SubD 9 pol., potential separated, ASCII fragmented, STX/ETX, 3964R with RK512, Modbus master/slave short/long
240-1CA20	<b>CP 240 - Communication processor</b> PtP RS485, SubD 9 pol., potential separated, ASCII fragmented, STX/ETX, 3964R with RK512, Modbus master/slave short/long
240-1CA21	<b>CP 240 - Communication processor</b> PtP RS422/485, SubD 9 pol., potential separated, ASCII fragmented, STX/ETX, 3964R with RK512, Modbus master/slave short/long
240-1EA20	<b>CP 240 - Communication processor</b> EnOcean functransceiver, SMA jack, 868,3MHz, (please order antenna separately: 240-0EA00 or 240-0EA10)
240-1FA20	<b>CP 240 - Communication processor</b> M-Bus master, potential separated, up to 6 slaves

# System 200V

Order no.	Name/Description
Fieldbus master modules	
208-1CA00	<b>IM 208CAN - CANopen master</b> RS485, 1Mbit/s, up to 125 slaves
208-1DP01	<b>IM 208DP - Profibus-DP master</b> RS485, 12Mbit/s, up to 124 slaves
208-1DP11	<b>IM 208DPO - Profibus-DP master</b> LWL interface (POF, HCS), 12Mbit/s, up to 124 slaves
Counter modules	
250-1BA00	<b>FM 250 - Counter module</b> counter 2x32Bit (AB), up to 1MHz, DO 2xDC 24V, 1A
SSI modules	
250-1BS00	<b>FM 250S - SSI module</b> 1xSSI, RS422, 12/24 Bit, 600kbit/s, DO 2xDC 24V, 1A
Positioning modules	
253-1BA00	<b>FM 253 - Positioning module</b> for stepper motor, 1 axle, RS422, potential separated, DI 3xDC 24V, DO 2xDC 24V, 1A
254-1BA00	<b>FM 254 - Positioning module</b> for servo motor, 1 axle, incremental encor, RS422, potential separated, DI 3xDC 24V, DO 1xDC 24V, 1A
Row interface connection	
260-1AA00	<b>IM 260 - Interface module</b> basic module for up to 3 expansion modules
261-1CA00	<b>IM 261 - Interface module</b> expansion module for the 2nd up to 4th line
Fieldbus slave modules w/o I/Os	
253-1CA01	<b>IM 253CAN - CANopen slave</b> DC 24V, 1Mbit/s, address 0...99, up to 32 modules
253-1CA30	<b>IM 253CAN - CANopen slave ECO</b> DC 24V, 1Mbit/s, address 1...125, up to 8 modules
253-1DN00	<b>IM 253DN - DeviceNet slave</b> DC 24V, 500kbit/s, address 0...63, up to 32 modules
253-1DP01	<b>IM 253DP - Profibus-DP slave</b> DC 24V, 12Mbit/s, address 1...99, DP-V0, DP-V1, configuration via GSD file from VIPA, up to 32 modules
253-1DP11	<b>IM 253DPO - Profibus-DP slave</b> DC 24V, LWL interface (POF, HCS), 12Mbit/s, address 1...99, DP-V0, DP-V1, configuration via GSD file from VIPA, up to 32 modules
253-1DP31	<b>IM 253DP - Profibus-DP slave ECO</b> DC 24V, 12Mbit/s, address 1...125, DP-V0, DP-V1, configuration via GSD file from VIPA, up to 8 modules
253-2DP50	<b>IM 253DPR - Profibus-DP slave</b> DC 24V, 12Mbit/s, address 1...99, 2 channels redundant
253-1EC00	<b>IM 253EC - EtherCAT slave</b> DC 24V, Ethernet RJ45, 10/100Mbit, EtherCAT, up to 32 modules (in preparation)
253-1IB00	<b>IM 253IBS - INTERBUS slave</b> DC 24V, up to 16 I/O modules
253-1NE00	<b>IM 253NET - Ethernet slave</b> DC 24V, Ethernet RJ45, 10/100Mbit/s, S5 communication, Modbus TCP, up to 32 modules
Bus connectors	
290-0AA10	<b>Bus connector</b> 1-tier
290-0AA20	<b>Bus connector</b> 2-tier
290-0AA40	<b>Bus connector</b> 4-tier
290-0AA80	<b>Bus connector</b> 8-tier

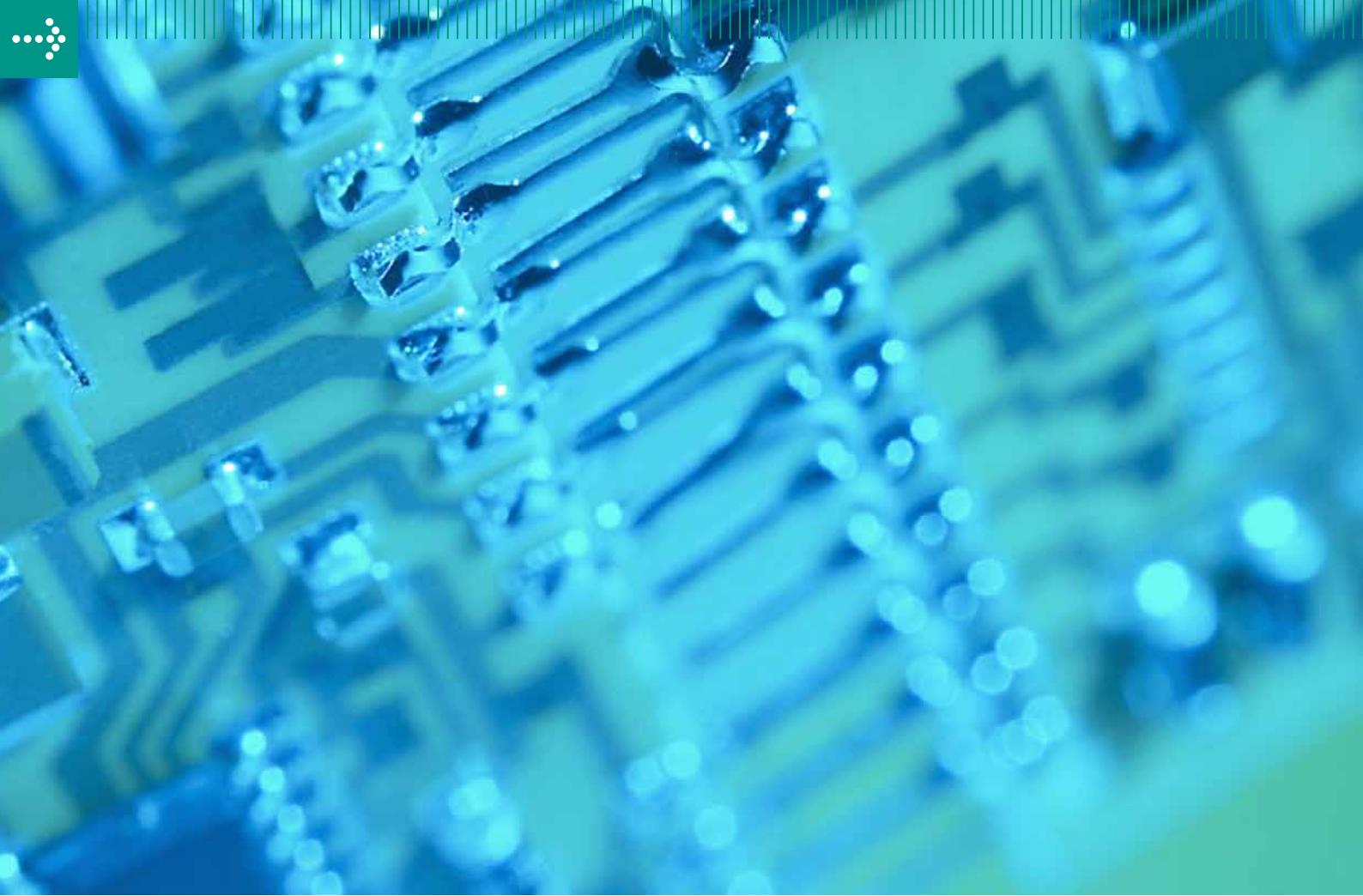


# System 200V

Order no.	Name/Description
35 mm profile rail	
290-1AF00	<b>35 mm profile rail</b> 35 mm profile rail; lenght 2000 mm
290-1AF30	<b>35 mm profile rail</b> 35 mm profile rail; lenght 530 mm
Front connector	
292-1AF00	<b>Front connector</b> 10 pin with cage clamps (included in the scope of delivery of signal modules)
292-1AH00	<b>Front connector</b> 18 pin with cage clamps (included in the scope of delivery of signal modules)
Cables	
260-1XY05	<b>Connection cable</b> Connection cable for interface modules, lenght 0.5 m
260-1XY10	<b>Connection cable</b> Connection cable for interface modules, lenght 1.0 m
260-1XY15	<b>Connection cable</b> Connection cable for interface modules, lenght 1.5 m
260-1XY20	<b>Connection cable</b> Connection cable for interface modules, lenght 2.0 m
260-1XY25	<b>Connection cable</b> Connection cable for interface modules, lenght 2.5 m
Antennas, connectors etc.	
970-0CM00	<b>CM 240 - Jack</b> For communication processor CM 240 - mini switch, external DC 24 V power supply
240-0EA00	<b>CP 240 - Portable Antenna</b> EnOcean Antenna portable, incl. SMA connector
240-0EA10	<b>CP 240 - Magnetic base antenna</b> EnOcean Antenna magnetic base, incl. 150 cm cable and SMA connector
MMC memory	
953-0KX10	<b>MMC - MultiMediaCard</b> Extension memory for VIPA CPUs 11x, 21x, 24x, 31x, 51x, and 208-1DP01, CC 03 (for load memory not necessary)
Labeling	
292-1XY10	<b>Labelling cards</b> I/O labelling, perforated, 10 sheets each 8 cards
292-1XY20	<b>Clip-on cards</b> Module labelling, perforated, 10 sheets each 108 cards
292-1XY00	<b>Labelling cards</b> I/O labelling, with transparent cover foil, 10 pieces

# System 200V

Order no.	Name/Description
Manuals and operating instructions	
HB97D	<b>Manual System 200V - Compendium, German</b> HB97D_PS-CM, HB97D_SM, HB97D_CP, HB97D_IM, HB97D_FM
HB97D_CP	<b>Manual System 200V - German</b> CP 240 Communication processors
HB97D_CPU	<b>Manual System 200V - German</b> CPU 21x, incl. operations list
HB99D_CPU	<b>Manual System 200V - German</b> CPU 24x, incl. operations list
HB97D_FM	<b>Manual System 200V - German</b> FM - Function modules
HB97D_IM	<b>Manual System 200V - German</b> IM - Interface modules
HB97D_PS-CM	<b>Manual System 200V - German</b> PS-CM - Power supply / Expansion modules
HB97D_SM	<b>Manual System 200V - German</b> SM - Signal modules
HB97E	<b>Manual System 200V - Compendium, English</b> HB97E_PS-CM, HB97E_SM, HB97E_CP, HB97E_IM, HB97E_FM
HB97E_CP	<b>Manual System 200V - English</b> CP 240 Communication processors
HB97E_CPU	<b>Manual System 200V - English</b> CPU 21x, incl. operations list
HB99E_CPU	<b>Manual System 200V - English</b> CPU 24x, incl. operations list
HB97E_FM	<b>Manual System 200V - English</b> FM - Function modules
HB97E_IM	<b>Manual System 200V - English</b> IM - Interface modules
HB97E_PS-CM	<b>Manual System 200V - English</b> PS-CM - Power supply / Expansion modules
HB97E_SM	<b>Manual System 200V - English</b> SM - Signal modules



## At a glance

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# SYSTEM 300S

the High-Speed control system



# System description 300S

## Structure and Concept

The System 300S is both a compact and a modular expandable system.

The System 300S is designed for centralized and decentralized automation tasks in the manufacturing and process industry up to the highest power range.

With a central extension of up to 32 modules directly to the CPU and up to 126 fieldbus slave modules, it is deployable almost anywhere. The module size allows use in almost any automation environment.

The assembly is extremely simple. First, the backplane bus connectors for communication between the modules and the CPU are entered from behind and then the modules are individually placed and secured on the rail and screwed down.

The backplane bus connectors are supplied with the I/O modules. In the SPEED-Bus, the bus connection takes place via a SPEED-Bus terminal strip (PCB) integrated in the profile rail. The SPEED-Bus modules are mounted on the left of the CPU - depending on bus length 2, 6 or 10 SPEED-Bus modules can be deployed.



## Performance and Application

The System 300S is designed for centralized and decentralized automation tasks. The integrated SPEED7 ASIC System 300S is among the world's fastest automation systems. A wide range of CPU options makes the system universally deployable. The selection ranges from C-class CPUs with integrated I/O peripherals for smaller applications up to CPU versions with built-in Ethernet, fieldbus master interfaces, and High-SPEED-Bus.

The CPU versions with integrated SPEED-Bus have been especially developed for automation tasks with very high demands on performance. Furthermore special high-speed modules for communication and for digital as well as analog signal processing are available.

## Programming

System 300S is programmed with WinPLC7 or with Siemens STEP7 in LAD, FBD and STL.

## Memory

The CPUs in System 300S have the work and load memory already integrated. Depending on the CPU-memory variant of the different users are available. The work and load memory can be adapted to the needs of memory card by plugging in an MCC memory expansion card. To back up program and data standard MMC cards are also supported.

## Functions

For the connection of sensors and actuators, a variety of signal modules are available for recording digital and analog signals into and out of the process is available - also known as high-speed modules for SPEED-Bus.

Measurements and the control of pressures, temperatures, flow rates and levels are realized at the highest level with the measurement and control modules.

## Communication

An Ethernet programming interface is integrated on all CPUs in System 300S. Ethernet communication processors link System 300S horizontally and vertically into network structures. Therefore, all relevant data are made available to the connected host systems.

System 300S offers fieldbus master and slave modules with different fieldbus protocols to can and to act as a master controller or as a subordinate fieldbus slave unit.

Multi-master applications with very high performance of communication can be implemented via the fieldbus master module for SPEED-Bus.



# System 300S

Order no.	Name/Description
CPUs STEP7 programmable, standard	
314-2BG03	<p><b>CPU 314SE/DPS - SPEED7 technology</b>            DC 24V, 128kByte work memory expandable up to 512kByte            (50% program/50% data), MPI, MMC slot, real-time clock</p> <p><b>Interface:</b>            Profibus-DP slave, 12Mbit/s, address 1...125/PtP RS485, potential separated,            ASCII, STX/ETX, 3964R, Modbus master, USS master,            Ethernet interface for PU/OP communication</p>
315-2AG12	<p><b>CPU 315SB/DPM - SPEED7 technology</b>            DC 24V, 1MByte work memory expandable up to 2MByte            (50% program/50% data), MPI, MMC slot, real-time clock</p> <p><b>Interface:</b>            Profibus-DP master, 12Mbit/s, up to 124 slaves/PtP RS485, potential separated,            ASCII, STX/ETX, 3964R, Modbus master, USS master,            Ethernet interface for PU/OP communication</p>
317-2AJ12	<p><b>CPU 317SE/DPM - SPEED7 technology</b>            DC 24V, 2MByte work memory expandable up to 8MByte            (50% program/50% data), MPI, MMC slot, real-time clock, <b>SPEED bus</b></p> <p><b>Interface:</b>            Profibus-DP master, 12Mbit/s, up to 124 slaves/PtP RS485, potential separated,            ASCII, STX/ETX, 3964R, Modbus master, USS master,            Ethernet interface for PU/OP communication</p>
CPUs STEP7 programmable, Net-CPUs	
315-4NE12	<p><b>CPU 315SN/NET - SPEED7 technology</b>            DC 24V, 1MByte work memory expandable up to 2MByte            (50% program/50% data), MPI, MMC slot, real-time clock</p> <p><b>Interface:</b>            Profibus-DP master, 12Mbit/s, up to 124 slaves/PtP RS485, potential separated,            ASCII, STX/ETX, 3964R, Modbus master, Ethernet interface for PU/OP            communication, USS master, Ethernet-CP 343, Lean S7 communication,            RFC1006, H1, TCP/IP, UDP, up to 8 connections</p>
317-4NE12	<p><b>CPU 317SN/NET - SPEED7 technology</b>            DC 24V, 2MByte work memory expandable up to 8MByte (50% program/50%            data), MPI, MMC slot, real-time clock, <b>SPEED-Bus</b></p> <p><b>Interface:</b>            Profibus-DP master, 12Mbit/s, up to 124 slaves/PtP RS485, potential separated,            ASCII, STX/ETX, 3964R, Modbus master, USS master,            Ethernet interface for PU/OP communication, Ethernet-CP 343, S7 communication,            RFC1006, H1, TCP/IP, UDP, up to 64 connections</p>
CPUs STEP7 programmable, class C	
312-5BE03	<p><b>CPU 312SC - SPEED7 technology</b>            DC 24V, 32kByte work memory expandable up to 512kByte            (50% program/50% data), MPI, MMC slot, real-time clock</p> <p><b>Interface:</b>            PtP RS485, potential separated, ASCII, STX/ETX, 3964R, Modbus master,            USS master, Ethernet interface for PU/OP communication</p> <p><b>Periphery:</b>            DI 16xDC 24V (16 interrupt capable), counter 2x32Bit (AB), up to 10kHz,            DO 8xDC 24V, 0,5A, (not incl. front connector 1x40pole)</p>
313-5BF03	<p><b>CPU 313SC - SPEED7 technology</b>            DC 24V, 64kByte work memory expandable up to 512kByte            (50% program/50% data), MPI, MMC slot, real-time clock</p> <p><b>Interface:</b>            PtP RS485, potential separated, ASCII, STX/ETX, 3964R, Modbus master,            USS master, Ethernet interface for PU/OP communication</p> <p><b>Periphery:</b>            DI 24xDC 24V (16 interrupt capable), counter 3x32Bit (AB), up to 30kHz,            DO 16xDC 24V, 0,5A, AI 4x12Bit, U, I, 1x12Bit, RTD, AO 2x12Bit, U, I            (not incl. front connector 2x40pole)</p>

# System 300S

Order no.	Name/Description
313-6CF03	<p><b>CPU 313SC/DPM - SPEED7 technology</b></p> <p><b>Interface:</b> Profibus-DP master, 12Mbit/s, up to 124 slaves/PtP RS485, potential separated, ASCII, STX/ETX, 3964R, Modbus master, USS master, Ethernet interface for PU/OP communication</p> <p><b>Periphery:</b> DI 16xDC 24V (16 interrupt capable), counter 3x32Bit (AB), up to 30kHz, DO 16xDC 24V, 0,5A, (not incl. front connector 1x40pole)</p>
314-6CF02	<p><b>CPU 314ST/DPM - SPEED7 technology</b></p> <p>DC 24V, 512kByte work memory expandable up to 2MByte (50% program/50% data), MPI, MMC slot, real-time clock, <b>SPEED-Bus</b></p> <p><b>Interface:</b> Profibus-DP master, 12Mbit/s, up to 124 slaves/PtP RS485, potential separated, ASCII, STX/ETX, 3964R, Modbus master, USS master, Ethernet interface for PU/OP communication</p> <p><b>Periphery:</b> DI 8xDC 24V (interrupt capable), counter 4x32Bit (AB), up to 100kHz, DIO 8xDC 24V (DI alarm capable, DO 0,5A), AI 4x12Bit, U, I, 1x12Bit, RTD, AO 2x12Bit, U, I (not incl. front connector 1x40pole)</p>
314-6CG03	<p><b>CPU 314SC/DPM - SPEED7 technology</b></p> <p>DC 24V, 128kByte work memory expandable up to 1MByte (50% program/50% data), MPI, MMC slot, real-time clock</p> <p><b>Interface:</b> Profibus-DP master, 12Mbit/s, up to 124 slaves/PtP RS485, potential separated, ASCII, STX/ETX, 3964R, Modbus master, USS master, Ethernet interface for PU/OP communication</p> <p><b>Periphery:</b> DI 24xDC 24V (16 interrupt capable), counter 4x32Bit (AB), up to 60kHz, DIO 8xDC 24V (DO 0,5A), DO 16xDC 24V, 0,5A, AI 4x12Bit, U, I, 1x12Bit, RTD, AO 2x12Bit, U, I (not incl. front connector 2x40pole)</p>
Power supply	
307-1BA00	<b>PS 307 - Power supply</b> AC 100/240V, DC 24V, 2,5A
307-1EA00	<b>PS 307 - Power supply</b> AC 120/230V, DC 24V, 5A
307-1FB70	<b>PS 307S - Power supply - SPEED bus</b> DC 24V, 6...12A (only applicable with CPU 317S)
307-1KA00	<b>PS 307 - Power supply</b> AC 120/230V, DC 24V, 10A
Digital input modules	
321-1BH01	<b>SM 321 - Digital input</b> DI 16xDC 24V
321-1BH70	<b>SM 321S - FAST Digital input - SPEED-Bus</b> DI 16xDC 24V, parameterizable 2.56µs...40ms
321-1BL00	<b>SM 321 - Digital input</b> DI 32xDC 24V, two groups
321-1FH00	<b>SM 321 - Digital input</b> DI 16xAC 120/230V, four groups
Digital output modules	
322-1BF01	<b>SM 322 - Digital output</b> DO 8xDC 24V, 2A, two groups
322-1BH01	<b>SM 322 - Digital output</b> DO 16xDC 24V, 1A, two groups
322-1BH41	<b>SM 322 - Digital output</b> DO 16xDC 24V, 2A, two groups
322-1BH60	<b>SM 322 - Digital output</b> DO 16xDC 24V, 0,5A, one group, for manual operation
322-1BH70	<b>SM 322S - FAST Digital output - SPEED-Bus</b> DO 16xDC 24V, 0,5A, 100kHz
322-1BL00	<b>SM 322 - Digital output</b> DO 32xDC 24V, 1A

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 System 100V  
 System 200V  
 System 300S  
 System 500S  
 HMI  
 Software  
 Zubehör  
 Anhang



# System 300S

Order no.	Name/Description
322-1HH00	<b>SM 322 - Digital output</b> DO 16xrelays, DC 24V/AC 230V, 5A, two groups
322-5FF00	<b>SM 322 - Digital output</b> DO 8xAC 120/230V, 2A, potential separated per channel
Digital in/output modules	
323-1BH00	<b>SM 323 - Digital in-/output</b> DIO 16xDC 24V (DO 1A), two groups
323-1BH01	<b>SM 323 - Digital in-/output</b> DI 8xDC 24V, DO 8xDC 24V, 1A, two groups
323-1BH70	<b>SM 323S - FAST Digital in-/output - SPEED-Bus</b> DIO 16xDC 24V (DO 0.5A), DI parameterizable 2.56µs...40ms, DO 100kHz
323-1BL00	<b>SM 323 - Digital in-/output</b> DI 16xDC 24V, DO 16xDC 24V, 1A, one or two groups
Analog input modules	
331-1KF01	<b>SM 331 - Analog input</b> AI 8x13Bit, U, I, R, RTD, for 40pole front connector
331-7AF70	<b>SM 331S - FAST Analog input - SPEED-Bus</b> AI 8x16Bit, ±20mA (interrupt capability), 25µs...1000µs sampling frequency (parameterizable), cycle end alarm, memory: 8192 value/channel, FIFO mode, oscilloscope mode (trigger function)
331-7BF70	<b>SM 331S - Analoge input FAST - SPEED-Bus</b> AI 8x16Bit, ±10V (interrupt capability), 25µs...1000µs sampling frequency (parameterizable), cycle end alarm, memory: 8192 value/channel, FIFO mode, oscilloscope mode (trigger function)
331-7KB01	<b>SM 331 - Analog input</b> AI 2x12Bit, U, I, R, TC, RTD
331-7KF01	<b>SM 331 - Analog input</b> AI 8x12Bit, U, I, R, TC, RTD
Analog output modules	
332-5HB01	<b>SM 332 - Analog output</b> AO 2x12Bit, U, I
332-5HD01	<b>SM 332 - Analog output</b> AO 4x12Bit, U, I
332-5HD50	<b>SM 332 - Analog output</b> AO 4x12Bit, 4...20mA, for manual operation
332-5HD60	<b>SM 332 - Analog output</b> AO 4x12Bit, 0...10V, for manual operation
Analog in/output modules	
334-0KE00	<b>SM 334 - Analog in-/output</b> AI4x12Bit, R, U, AO2x12Bit, U
RS232/422/485- and other CPs	
341-1AH01	<b>CP 341 - Communication processor</b> PtP RS232, SubD 9 pol., potential separated, ASCII, 3964R
341-1CH01	<b>CP 341 - Communication processor</b> PtP RS422/485, SubD 9 pol., potential separated, ASCII, 3964R
341-2CH71	<b>CP 341 - Communication processor - SPEED-Bus</b> 2xPtP RS422/485, SubD 9 pol., potential separated, ASCII
Fieldbus master modules	
342-1CA70	<b>CP 342S CAN - CANopen master - SPEED-Bus</b> 1Mbit/s, up to 125 slaves
342-1DA70	<b>CP 342S DP - Profibus-DP master - SPEED-Bus</b> 12Mbit/s, up to 124 slaves
342-1IA70	<b>CP 342S IBS - Interbus master - SPEED-Bus</b> 500kbit/s, up to 128 slaves
342-2IA71	<b>CP 342S IBS - Interbus master - SPEED-Bus</b> 2xRJ45, 500kbit/s, up to 128 slaves
Aktor-Sensor-Interfaces	
343-2AH10	<b>CP 343-2P ASI - AS-i master</b> 167 kBit/s, up to 62 slaves

# System 300S

Order no.	Name/Description
Ethernet-CPs	
343-1EX71	<b>CP 343S TCP/IP - Ethernet-CP 343 - SPEED-Bus</b> S7 communication, RFC1006, H1, TCP/IP, UDP, up to 64 connections
Fieldbus slave modules w/o I/Os	
353-1DP01	<b>IM 353DP - Profibus-DP slave</b> DC 24V, 12Mbit/s, address 1...99, up to 29 modules, configuration via GSD file from VIPA
SPEED7 starterKIT	
800-7DK10	<p><b>CPU 312SC - SPEED7 technology</b></p> <p>Immediately ready for use by enclosed accessories and software. SPEED7 technology for highest performance: DC 24 V, 32 kB work memory expandable up to 512 kB (50% program/50% data each), MPI, MMC slot, real time clock, PtP RS485, isolated, ASCII, STX/ETX, 3964R, Modbus master, USS master, Ethernet interface for PU/OP communication, DI 16xDC 24 V (with interrupt capability), counter 2x32 Bit (AB), up to 10 kHz, DO 8xDC 24 V, 0.5 A.</p> <p><b>Accessories included:</b> WinPLC7 programming software, user friendly full software version, project simulation tool for testing and diagnostics, practical case, front connector (40 pin), Ethernet cable for programming, Manual &amp; More CD, manual.</p> <p><b>Interface:</b> PtP RS485, isolated, ASCII, STX/ETX, 3964R, Modbus master, USS master, Ethernet interface for PU/OP communication</p> <p><b>Periphery:</b> DI 16xDC 24 V (with interrupt capability), counter 2x32 Bit (AB), up to 10 kHz, DO 8xDC 24 V, 0.5 A, (excl. front connector 1x40 pin)</p>
800-7DK20	<p><b>CPU 313SC - SPEED7 technology</b></p> <p>Immediately ready for use by enclosed accessories and software. SPEED7 technology for highest performance: DC 24 V, 64 kB work memory expandable up to 512 kB (50% program/50% data each), MPI, MMC slot, real time clock, PtP RS485, isolated, ASCII, STX/ETX, 3964R, Modbus master, USS master, Ethernet interface for PU/OP communication, DI 16xDC 24 V (with interrupt capability), counter 3x32 Bit (AB), up to 30 kHz, DO 16xDC 24 V, 0.5 A, AI 4x12 Bit, U, I, 1x12 Bit, RTD, AO 2x12 Bit, U, I.</p> <p><b>Accessories included:</b> WinPLC7 programming software, user friendly full software version, project simulation tool for testing and diagnostics, practical case, front connector (40 pin), Ethernet cable for programming, Manual &amp; More CD, manual.</p> <p><b>Interface:</b> PtP RS485, isolated, ASCII, STX/ETX, 3964R, Modbus master, USS master, Ethernet interface for PG/OP communication</p> <p><b>Periphery:</b> DI 24xDC 24 V (with interrupt capability), counter 3x32 Bit (AB), up to 30 kHz, DO 16xDC 24 V, 0.5 A, AI 4x12 Bit, U, I, 1x12Bit, RTD, AO 2x12 Bit, U, I (excl. front connector 1x40 pin)</p>
800-7DK30	<p><b>CPU 313SC/DPM - SPEED7 technology</b></p> <p>Immediately ready for use by enclosed accessories and software. SPEED7 technology for highest performance: DC 24 V, 64 kB work memory expandable up to 512 kB (50% program/50% data each), MPI, MMC slot, real time clock, Profibus-DP master, 12 Mbit/s, up to 124 slaves/PtP RS485, isolated, ASCII, STX/ETX, 3964R, Modbus master, USS master, Ethernet interface for PU/OP communication, DI 16xDC 24 V (with interrupt capability), counter 3x32 Bit (AB), up to 30 kHz, DO 16xDC 24 V, 0.5 A.</p> <p><b>Accessories included:</b> WinPLC7 programming software, user friendly full software version, project simulation tool for testing and diagnostics, practical case, front connector (40 pin), Ethernet cable for programming, Manual &amp; More CD, manual.</p> <p><b>Interface:</b> PROFIBUS-DP master, 12 Mbit/s, up to 124 slaves/PtP RS485, isolated, ASCII, STX/ETX, 3964R, Modbus master, USS master, Ethernet interface for PG/OP communication</p> <p><b>Periphery:</b> DI 16xDC 24 V (with interrupt capability), counter 3x32 Bit (AB), up to 30 kHz, DO 16xDC 24 V, 0.5 A, (excl. front connector 1x40 pin)</p>



# System 300S

Order no.	Name/Description
Memory extensions	
953-0KX10	<b>MMC - MultiMediaCard</b> Extension memory for VIPA CPUs 11x, 21x, 24x, 31x, 51x, and 208-1DP01, CC 03 (for load memory not necessary)
953-1LE00	<b>Memory Configuration Card (MCC) 32kByte</b> for SPEED7 CPUs, 16kByte program/16kByte data
953-1LF00	<b>Memory Configuration Card (MCC) 64kByte</b> for SPEED7 CPUs, 32kByte program/32kByte data
953-1LG00	<b>Memory Configuration Card (MCC) 128kByte</b> for SPEED7 CPUs, 64kByte program/64kByte data
953-1LH00	<b>Memory Configuration Card (MCC) 256kByte</b> for SPEED7 CPUs, 128kByte program/128kByte data
953-1LJ00	<b>Memory Configuration Card (MCC) 512kByte</b> for SPEED7 CPUs, 256kByte program/256kByte data
953-1LK00	<b>Memory Configuration Card (MCC) 1MByte</b> for SPEED7 CPUs, 512kByte program/512kByte data
953-1LL00	<b>Memory Configuration Card (MCC) 2MByte</b> for SPEED7 CPUs, 1MByte program/1MByte data
953-1LM00	<b>Memory Configuration Card (MCC) 4MByte</b> for SPEED7 CPUs, 2MByte program/2MByte data
953-1LP00	<b>Memory Configuration Card (MCC) 8MByte</b> for SPEED7 CPUs, 4MByte program/4MByte data
Configuration- and diagnosis modules	
342-0IA01	<b>CP 342 IBS - Configuration-/Diagnosis module</b> LC display, 7 buttons, cable 0.5 m, RJ45 plug, for 342-1IA71
Profile rail	
391-1AF10	<b>BP 391 - SPEED bus</b> Profile rail, 530 mm with integrated High-SPEED rear panel bus for 2 expansion slots
391-1AF30	<b>BP 391 - SPEED bus</b> Profile rail, 530 mm with integrated High-SPEED rear panel bus for 6 expansion slots
391-1AF50	<b>BP 391 - SPEED bus</b> Profile rail, 530 mm with integrated High-SPEED rear panel bus for 10 expansion slots
391-1AJ10	<b>BP 391 - SPEED bus</b> Profile rail, 830 mm with integrated High-SPEED rear panel bus for 2 expansion slots, left justified
391-1AJ30	<b>BP 391 - SPEED bus</b> Profile rail, 830 mm with integrated High-SPEED rear panel bus for 6 expansion slots, left justified
391-1AJ50	<b>BP 391 - SPEED bus</b> Profile rail, 830 mm with integrated High-SPEED rear panel bus for 10 expansion slots, left justified
390-1AB60	<b>Profile rail</b> Length: 160 mm
390-1AE80	<b>Profile rail</b> Length: 482 mm
390-1AF30	<b>Profile rail</b> Length: 530 mm
390-1AJ30	<b>Profile rail</b> Length: 830 mm
390-9AB60	<b>Profile rail</b> Length: 160 mm, ECO pack: 100 pieces
390-9AE80	<b>Profile rail</b> Length: 482 mm, ECO pack: 32 pieces
390-9AF30	<b>Profile rail</b> Length: 530 mm, ECO pack: 32 pieces
390-9AJ30	<b>Profile rail</b> Length: 830 mm, ECO pack: 20 pieces
390-9BC00	<b>Profile rail</b> Length: 2000 mm, ECO pack: 10 pieces

# System 300S

Order no.	Name/Description
Front connector	
392-1AJ00	<b>Front connector</b> 20pole with screw contact
392-1BJ00	<b>Front connector</b> 20pole with cage clamps
392-1AM00	<b>Front connector</b> 40pole with screw contact
392-1BM01	<b>Front connector</b> 40pole with cage clamps
392-9AJ00	<b>Front connector</b> 20pole with screw contact, ECO pack: 100 pieces
392-9AM00	<b>Front connector</b> 40pole with screw contact, ECO pack: 100 pieces
Manuals and operating instructions	
HB140D	<b>Manual System 300S - SPEED7, compendium, German</b> HB140D_PS, HB140D_SM, HB140D_CP
HB140D_CP	<b>Manual System 300S - SPEED7, German</b> CP 34x SPEED bus communication processors
HB140D_CPU	<b>Manual System 300S - SPEED7, German</b> CPU 31xS, incl. operations list
HB140D_CPU_SC	<b>Manual System 300S - SPEED7, German</b> CPU 31xSC, incl. operations list
HB140D_PS	<b>Manual System 300S - SPEED7, German</b> PS - SPEED bus power supply
HB140D_SM	<b>Manual System 300S - SPEED7, German</b> SM - SPEED bus signal modules
HB140E	<b>Manual System 300S - SPEED7, compendium, English</b> HB140D_PS, HB140D_SM, HB140D_CP
HB140E_CP	<b>Manual System 300S - SPEED7, English</b> CP 34x SPEED bus communication processors
HB140E_CPU	<b>Manual System 300S - SPEED7, English</b> CPU 31xS, incl. operations list
HB140E_CPU_SC	<b>Manual System 300S - SPEED7, English</b> CPU 31xSC, incl. operations list
HB140E_PS	<b>Manual System 300S - SPEED7, English</b> PS - SPEED bus power supply
HB140E_SM	<b>Manual System 300S - SPEED7, English</b> SM - SPEED bus signal modules
HB130D	<b>Manual System 300V - Compendium, German</b> HB130D_PS, HB130D_SM, HB130D_CP, HB130D_FM, HB130D_IM
HB130D_CP	<b>Manual System 300V - German</b> CP 34x Communication processors
HB130D_CPU	<b>Manual System 300V - German</b> CPU 31x, incl. operations list
HB130D_FM	<b>Manual System 300V - German</b> FM 355 - Temperature control modules
HB130D_IM	<b>Manual System 300V - German</b> IM - Interface modules
HB130D_PS	<b>Manual System 300V - German</b> PS - Power supply
HB130D_SM	<b>Manual System 300V - German</b> SM - Signal modules
HB130E	<b>Manual System 300V - Compendium, English</b> HB130E_PS, HB130E_SM, HB130E_CP, HB130E_FM, HB130E_IM
HB130E_CP	<b>Manual System 300V - English</b> CP 34x Communication processors
HB130E_CPU	<b>Manual System 300V - English</b> CPU 31x, incl. operations list
HB130E_FM	<b>Manual System 300V - English</b> FM 355 - Temperature control modules

System SLO  
 System 100V  
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# System 300S

Order no.	Name/Description
HB130E_IM	<b>Manual System 300V - English</b> IM - Interface modules
HB130E_PS	<b>Manual System 300V - English</b> PS - Power supply
HB130E_SM	<b>Manual System 300V - English</b> SM - Signal modules
HB144D_IBS-DIAG	<b>Manual CP 342 IBS-DIAG German</b> Manual CP 342 IBS-DIAG for configuration / diagnosis module 342-0IA00 or 342-0IA01
HB144E_IBS-DIAG	<b>Manual CP 342 IBS-DIAG English</b> Manual CP 342 IBS-DIAG for configuration / diagnosis module 342-0IA00 or 342-0IA01
Spare Parts	
355-3SD00	<b>FM 355 - Temperature control module</b> 4 channels, current/voltage measurement inputs
355-3SD10	<b>FM 355 - Temperature control module</b> 4 channels, thermo element/Pt100 measurement inputs
355-3SF00	<b>FM 355 - Temperature control module</b> 8 channels, current/voltage measurement inputs
355-3SF10	<b>FM 355 - Temperature control module</b> 8 channels, thermo element/Pt100 measurement inputs
355-4SD00	<b>FM 355 - Temperature control module</b> 4 channels with output 8xDIO DC 24V (DO 0.5A), current/voltage measurement inputs
355-4SD10	<b>FM 355 - Temperature control module</b> 4 channels, thermo element/Pt100 measurement inputs
355-4SF00	<b>FM 355 - Temperature control module</b> 8 channels with output 24xDIO DC 24V (DO 0.5A), current/voltage measurement inputs
355-4SF10	<b>FM 355 - Temperature control module</b> 8 channels with output 24xDIO DC 24V (DO 0.5A), thermo element/Pt100 measurement inputs
355-0AM00	<b>Summing point FM 355 Temperature control module</b> For front connector 40pole screw contact in combination with thermo elements
355-0BM00	<b>Summing point FM 355 Temperature control module</b> For front connector 40pole cage clamps in combination with thermo elements
SW303A1LA	<b>FM 355-Projecting package</b> Single licence, for configuration and parameterization of VIPA FM 355 temperature controller (Parameter/configuration transfer: PC/PU -> controller module)
SW303A2LA	<b>FM 355-Projecting package remote</b> Single licence, for configuration and parameterization of VIPA FM 355 temperature controller (Parameter/configuration transfer: PC/PU -> controller module (via network))

System S10

System 100V

System 200V

System 300S

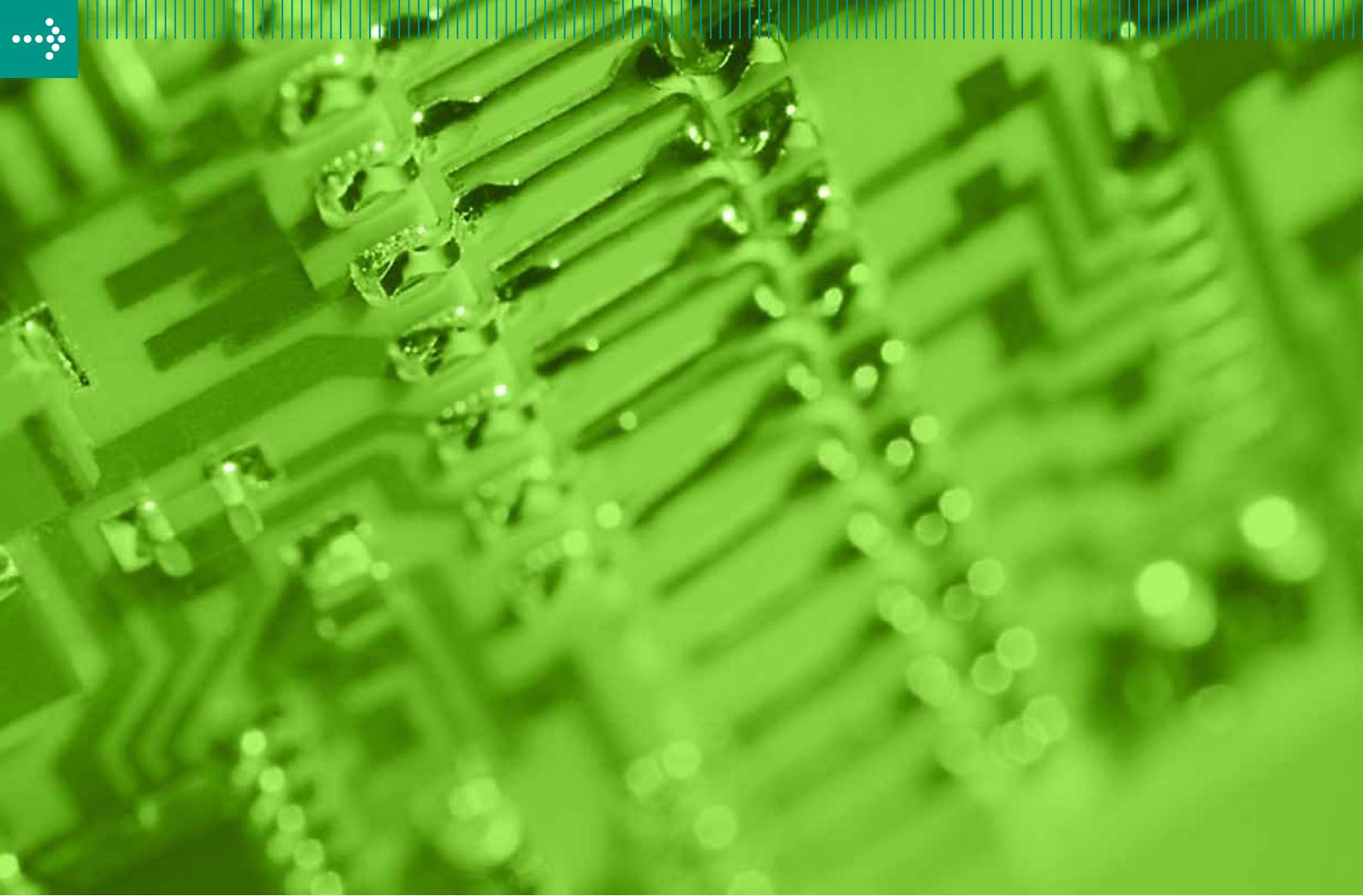
System 500S

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## At a glance

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System 500S

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# SYSTEM 500S

the PC slot PLC system



# System description 500S

## Structure and Concept

The Slot-PLC, based on the SPEED7 technology is designed for use within the core of a PC with a PCI interface.

System 500S can be extended with up to 124 PROFIBUS-DP slave stations. Thereby all systems from VIPA can be used with PROFIBUS-DP slave peripherals.

The CPU is supplied with power externally, for example with an interconnected UPS, thereby autarchic operation is possible and the operation of the CPU is also secured during a power outage.

Operation and monitoring of the CPU are supported by the program „PLCTool“. The tool provides schematic representation of a CPU from System 300S with all status LEDs on the PC monitor.

An OPC server for communication between the CPU and PC is included in the delivery.

Due to the module size, the CPUs fit into any standard desktop PC.



## Performance and Application

System 500S is designed for centralized automation tasks for application within a PC with a PCI interface. It covers all requirements in the manufacturing and process industries up to the highest power range. With System 500S CPU integrated SPEED7 ASIC the system is among the fastest automation systems worldwide.

## Programming

System 500S is programmed with WinPLC7 or with STEP7 from Siemens in LAD, FBD and STL.

## Memory

The CPUs in System 300S have the work and load memory already integrated. Depending on the CPU-memory variant of the different users are available. The work and load memory can be adapted to the needs of memory card by plugging in an MCC memory expansion card. To back up program and data standard MMC cards are also supported.

## Functions

Signal, communication and function modules, and devices with PROFIBUS-DP slave interfaces are connected via the integrated PROFIBUS-DP master interface.

## Communication

An Ethernet programming interface is integrated on all CPUs in System 500S. The integrated Ethernet communication processor CP 543 or a Network card integrated in the PC link System 500S horizontally and vertically into network structures. Therefore, all relevant data is made available to the connected host systems. The CPUs in System 500S already have a PROFIBUS-DP master interface integrated, therefore the system can act, manufacturer-independent, as master control.



# System 500S

Order no.	Name/Description
CPUs STEP7 programmable, standard	
515-2AJ02	<p><b>CPU 515S/DPM - SPEED7 technology</b>            external DC 24V power supply, 2MByte work memory expandable up to 8MByte (50% program/50% data), MP2I, MMC slot, real-time clock</p> <p><b>Interface:</b>            Profibus-DP master, 12Mbit/s, up to 124 slaves,            PCI-Ethernet interface for PU/OP communication,            incl. SW110A2LA OPC server (SW110A2LA please order separately)</p>
517-2AJ02	<p><b>CPU 517S/DPM - SPEED7 technology</b>            external DC 24V power supply, 2MByte work memory expandable up to 8MByte (50% program/50% data), MP2I, MMC slot, real-time clock</p> <p><b>Interface:</b>            Profibus-DP master, 12Mbit/s, up to 124 slaves,            PCI-Ethernet interface for PU/OP communication,            incl. SW110A2LA OPC server (SW110A2LA please order separately)</p>
CPUs STEP7 programmable, Net-CPUs	
517-4NE02	<p><b>CPU 517S/NET - SPEED7 technology</b>            external DC 24V power supply, 2MByte work memory expandable up to 8MByte (50% program/50% data), MP2I, MMC slot, real-time clock</p> <p><b>Interface:</b>            Profibus-DP master, 12Mbit/s, up to 124 slaves,            PCI-Ethernet interface for PU/OP communication,            incl. SW110A2LA OPC server (SW110A2LA please order separately),</p> <p><b>2nd slot:</b>            Ethernet-CP 543, S7 communication, RFC1006, H1, TCP/IP, UDP,            up to 16 connections</p>
Memory extensions	
953-0KX10	<p><b>MMC - MultiMediaCard</b>            Extension memory for VIPA CPUs 11x, 21x, 24x, 31x, 51x, and 208-1DP01,            CC 03 (for load memory not necessary)</p>
953-1LE00	<p><b>Memory Configuration Card (MCC) 32kByte</b>            for SPEED7 CPUs, 16kByte program/16kByte data</p>
953-1LF00	<p><b>Memory Configuration Card (MCC) 64kByte</b>            for SPEED7 CPUs, 32kByte program/32kByte data</p>
953-1LG00	<p><b>Memory Configuration Card (MCC) 128kByte</b>            for SPEED7 CPUs, 64kByte program/64kByte data</p>
953-1LH00	<p><b>Memory Configuration Card (MCC) 256kByte</b>            for SPEED7 CPUs, 128kByte program/128kByte data</p>
953-1LJ00	<p><b>Memory Configuration Card (MCC) 512kByte</b>            for SPEED7 CPUs, 256kByte program/256kByte data</p>
953-1LK00	<p><b>Memory Configuration Card (MCC) 1MByte</b>            for SPEED7 CPUs, 512kByte program/512kByte data</p>
953-1LL00	<p><b>Memory Configuration Card (MCC) 2MByte</b>            for SPEED7 CPUs, 1MByte program/1MByte data</p>
953-1LM00	<p><b>Memory Configuration Card (MCC) 4MByte</b>            for SPEED7 CPUs, 2MByte program/2MByte data</p>
953-1LP00	<p><b>Memory Configuration Card (MCC) 8MByte</b>            for SPEED7 CPUs, 4MByte program/4MByte data</p>
Manuals	
HB145D_CPU	<p><b>Manual System 500S - SPEED7, English</b>            PCI CPU 51xS, incl. operations list</p>
HB145E_CPU	<p><b>Manual System 500S - SPEED7, English</b>            PCI CPU 51xS, incl. operations list</p>

System S10

System 100V

System 200V

System 300S

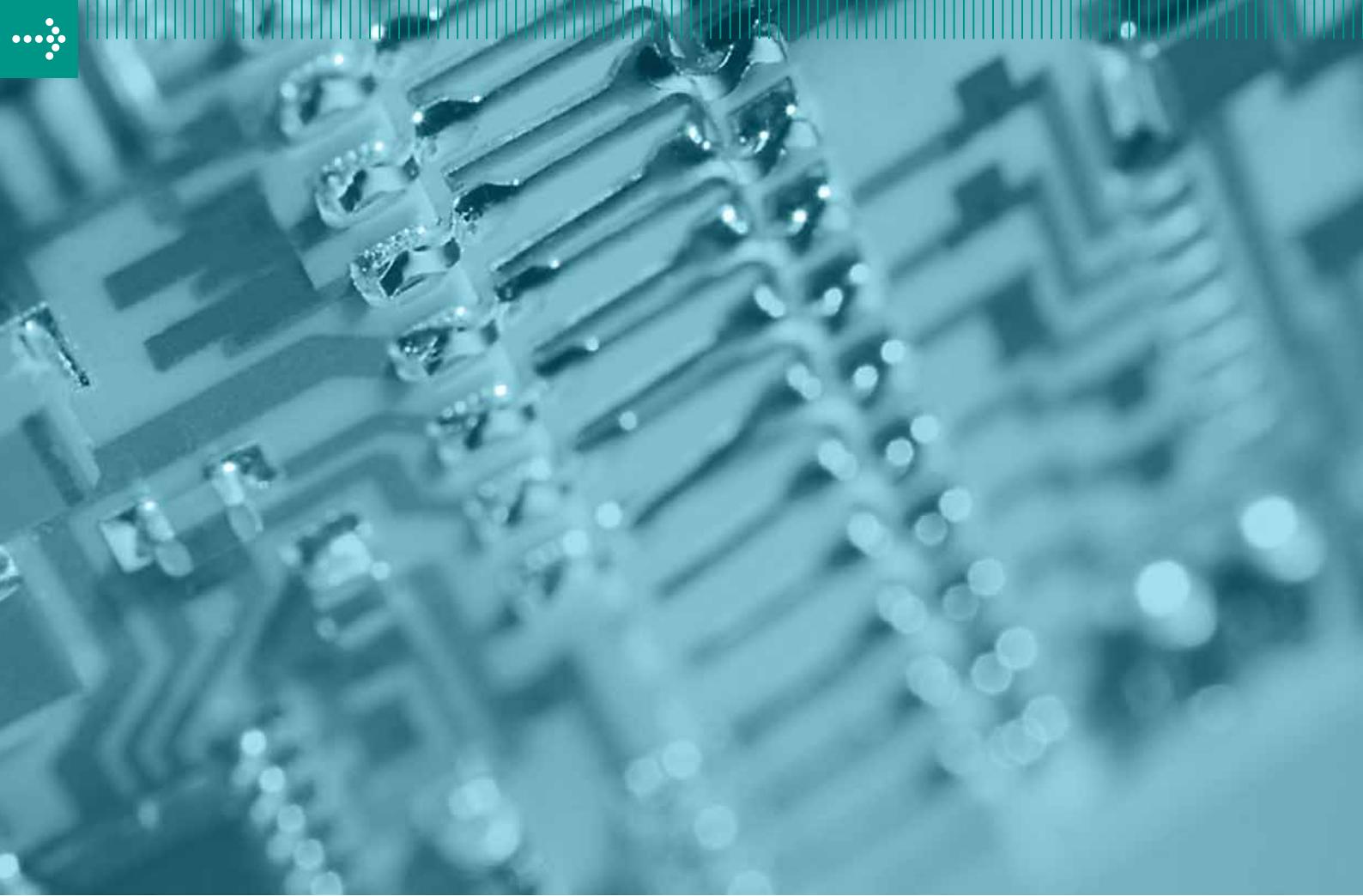
System 500S

HMI

Software

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## At a glance

System description HMI  
HMI

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**HMI**  
Operate and Control Systems



# System description HMI

## Structure and Concept

The VIPA Touch Panel with 5.7" to 12.1" display, Windows CE 5.0/6.0 and visualization system can be used universally. The touch panels are equipped with Windows Embedded CE and the visualization software Movicon Real Flexible or zenon. The VIPA Commander Compact CC 03 with two-line display and integrated PLC-CPU is the ideal device for small control and operating tasks. The VIPA Operator Panel OP 03 and the Text Display TD 03 are universal operating units for use with VIPA systems and other control systems with MPI interface.

### The following is required for operation:

- Editor/parameterization (+ programming software in Commander Compact CC 03)
- Data cable (depending on device type MPI, USB or Ethernet cable)
- Memory card where appropriate
- Protective foil where appropriate



## Performance and Application

The operating and monitoring devices from VIPA are universal in the manufacturing and process industries, but can also be used in building automation. The line displays and touch panels are designed both for watching and for the active use of machinery, plant and buildings.

## Parameterization and Programming

The Text Display TD 03 is configured with the free tool, TD-Wizard \*). The Operator Panels OP 03 and Commander Compact CC 03 devices are configured with OP-Manager \*) or alternatively with Siemens ProTool. The PLC CPUs integrated in Commander Compact CC 03 are programmed in addition with Siemens STEP7.

The basis for the touch panels are Windows Embedded CE operating systems from Microsoft. Then the applications and visualizations offered by VIPA (also partially their own) are ported. The user can choose between two powerful visualization systems: Movicon Real Flexible and zenon. VIPA Touch Panels are shipped with pre-installed operating system and a visualization system corresponding to the selected runtime. The project, created with the appropriate editor on the PC, is transferred via data cable or memory card from the PC to the Touch Panel.

## Memory

The Text Display TD 03 has no built-in memory. The messages, generated with TD-Wizard, are stored in the CPU. The Operator Panel OP 03 and the Commander Compact CC 03 devices make 256 kByte work memory available for projects. Incorporated in the Commander Compact CC 03 devices is an additional 16 kByte work memory for the PLC program. The touch panels offer up to 2048 MB of user memory (depending on the model). External expansion of the memory can easily be achieved by inserting a CFII or MMC-/SD-Card.

## Functions

Depending on the device type different and very versatile functions are realizable. The Text Display TD 03 is provided primarily for the simple presentation and the acknowledgement of messages. With the Operator Panels OP 03 advanced operating and monitoring tasks are already being realized with their own projects deposited in OP 03. Touch panels have multi-functional use. Depending on the application projects with up to several thousand variables will be realized on the PC. Thereby CPUs, higher-level systems and other devices are connected for the purpose of data collection, data sharing, visualization and operation.

## Communication

The exchange of data with the CPUs occurs at TD 03 and OP 03 via MPI. The Commander Compact CC 03 devices combine display and operating elements as well as PLC CPU with I/O peripherals in one casing. They can thus be used completely self-contained.

\*) Downloadable on the tool Demo-CD SW900TOLA or under <http://www.vipa.de/de/service/downloads/software/>.



# HMI

Order no.	Name/Description
Text displays and operator panels	
603-1TD00	<b>TD 03 - Text Display</b> DC 24V, 2x 20 characters display for application at VIPA CPUs with MP <sup>2</sup> I interface and with STEP7 programmable CPUs from Siemens, incl. programming cable 2.5m and SW300T1EA TD-Wizard parameterization software (SW300T1EA please order separately)
603-1OP00	<b>OP 03 - Operator Panel</b> DC 24V, 2x 20 characters display, 256kByte operator memory, 4096 variables, for application at VIPA CPUs with MP <sup>2</sup> I interface and with STEP7 programmable CPUs from Siemens, incl. programming cable 2.5m
603-1OP10	<b>OP 03 - Operator Panel</b> DC 24V, 2x 20 characters display (GB, RU, GER without umlaut), 256kByte operator memory, 4096 variables, for application at VIPA CPUs with MP <sup>2</sup> I interface and with STEP7 programmable CPUs from Siemens, incl. programming cable 2.5m
Commander compact	
603-1CC21	<b>CC 03 - Commander Compact</b> DC 24V, 2x 20 characters display, integrated PLC CPU, 16/24kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Periphery:</b> DI 16xDC 24V, DO 16xDC 24V, 0.5A on board, potential separated, up to 4 I/O expansion modules via periphery expansion cable
603-2CC21	<b>CC 03 - Commander Compact</b> DC 24V, 2x 20 characters display, integrated PLC CPU, 16/24kByte work/load memory, MP <sup>2</sup> I, MMC slot, real-time clock <b>Interface:</b> Profibus-DP slave, 12Mbit/s, address 1...125 <b>Periphery:</b> DI 16xDC 24V, DO 16xDC 24V, 0.5A on board, potential separated, up to 4 I/O expansion modules via periphery expansion cable
Touch Panels	
605-1B1C0	<b>Touch Panel TP 605LQE</b> DC 24V, 5.7" QVGA, LCD monochrome, Xscale-CPU, 520MHz, 64MByte work memory, 0MByte user memory, Ethernet RJ45, USB-B, incl. operating system Windows CE 5.0 Core and Runtime Movicon Real Flexible or Runtime zenOn
605-1B1E0	<b>Touch Panel TP 605MQ</b> DC 24V, 5.7" QVGA, LCD monochrome, Xscale-CPU, 520MHz, 64MByte work memory, 0MByte user memory, MPI/Profibus-DP, RS232, RS422/RS485, USB-A, USB-B, Ethernet RJ45, incl. operating system Windows CE 5.0 Core and Runtime Movicon Real Flexible or Runtime zenOn
605-1B1P0	<b>Touch Panel TP 605LQS</b> DC 24V, 5.7" QVGA, LCD monochrome, Xscale-CPU, 520MHz, 64MByte work memory, 0MByte user memory, MPI/Profibus-DP, USB-B, incl. operating system Windows CE 5.0 Core and Runtime Movicon Real Flexible or Runtime zenOn
605-3B1E0	<b>Touch Panel TP 605CQ</b> DC 24V, 5.7" QVGA, TFT color, Xscale CPU, 520MHz, 64MByte work memory, 0MByte user memory, MPI/Profibus-DP, RS232, RS422/RS485, USB-A, USB-B, Ethernet RJ45, incl. operating system Windows CE 5.0 Core and Runtime Movicon Real Flexible or Runtime zenOn
605-3B1F0	<b>Touch Panel TP 605CQ CAN</b> DC 24V, 5.7" QVGA, TFT color, Xscale CPU, 520MHz, 64MByte work memory, 0MByte user memory, CAN interface, RS232, RS422/RS485, USB-A, USB-B, Ethernet RJ45, incl. operating system Windows CE 5.0 Core and Runtime Movicon Real Flexible or Runtime zenOn
606-3B1E0	<b>Touch Panel TP 606C</b> DC 24V, 6.5" VGA, TFT color, Xscale CPU, 520MHz, 64MByte work memory, 0MByte user memory, MPI/Profibus-DP, RS232, RS422/RS485, USB-A, USB-B, Ethernet RJ45, incl. operating system Windows CE 5.0 Core and Runtime Movicon Real Flexible or Runtime zenOn

**HMI**

Order no.	Name/Description
606-3B1F0	<b>Touch Panel TP 606C CAN</b> DC 24V, 6.5“ VGA, TFT color, Xscale CPU, 520MHz, 64MByte work memory, 0MByte user memory, CAN interface, RS232, RS422/ RS485, USB-A, USB-B, Ethernet RJ45, incl. operating system Windows CE 5.0 Core and Runtime Movicon Real Flexible or Runtime zenOn
606-3B2E0	<b>Touch Panel TP 606C</b> DC 24V, 6.5“ VGA, TFT color, Xscale CPU, 800MHz, 128MByte work memory, 2048MByte user memory, MPI, RS232, RS422/RS485, USB-A, USB-B, Ethernet RJ45, incl. operating system Windows CE 5.0 Core and Runtime Movicon Real Flexible or Runtime zenOn
606-3B2F0	<b>Touch Panel TP 606C CAN</b> DC 24V, 6.5“ VGA, TFT color, Xscale CPU, 800MHz, 128MByte work memory, 2048MByte user memory, CAN interface, RS232, RS422/ RS485, USB-A, USB-B, Ethernet RJ45, incl. operating system Windows CE 5.0 Core and Runtime Movicon Real Flexible or Runtime zenOn
608-3B2G0	<b>Touch Panel TP 608C</b> DC 24V, 8.4“ SVGA, TFT color, Xscale CPU, 800MHz, 128MByte work memory, 2048MByte user memory, MPI/Profibus-DP, RS232, RS422/485, USB-A, USB-B, 2x Ethernet RJ45 (switch), incl. operating system Windows CE 5.0 Pro Plus or operating system Windows Embedded CE 6.0 and Runtime Movicon Real Flexible or Runtime zenOn
608-3B2H0	<b>Touch Panel TP 608C CAN</b> DC 24V, 8.4“ SVGA, TFT color, Xscale CPU, 800MHz, 128MByte work memory, 2048MByte user memory, CAN interface, RS232, RS422/485, USB-A, USB-B, 2xEthernet RJ45 (switch), incl. operating system Windows CE 5.0 Pro Plus or operating system Windows Embedded CE 6.0 and Runtime Movicon Real Flexible or Runtime zenOn
610-3B2I0	<b>Touch Panel TP 610C</b> DC 24V, 10.4“ SVGA, TFT color, Xscale-CPU, 800MHz, 128MByte work memory, 2048MByte user memory, MPI/Profibus-DP, RS232, RS422/485, 2xUSB-A, USB-B, 2xEthernet RJ45 (switch), incl. operating system Windows CE 5.0 Pro Plus or operating system Windows Embedded CE 6.0 and Runtime Movicon Real Flexible or Runtime zenOn
610-3B2J0	<b>Touch Panel TP 610C CAN</b> DC 24V, 10.4“ SVGA, TFT color, Xscale CPU, 800MHz, 128MByte work memory, 2048MByte user memory, CAN interface, RS232, RS422/485, 2xUSB-A, USB-B, 2xEthernet RJ45 (switch), incl. operating system Windows CE 5.0 Pro Plus or operating system Windows Embedded CE 6.0 and Runtime Movicon Real Flexible or Runtime zenOn
612-3B2I0	<b>Touch Panel TP 612C</b> DC 24V, 12.1“ SVGA, TFT color, Xscale CPU, 800MHz, 128MByte work memory, 2048MByte user memory, MPI/Profibus-DP, RS232, RS422/485, 2xUSB-A, USB-B, 2xEthernet RJ45 (switch), incl. operating system Windows CE 5.0 Pro Plus or operating system Windows Embedded CE 6.0 and Runtime Movicon Real Flexible or Runtime zenOn
612-3B2J0	<b>Touch Panel TP 612C CAN</b> DC 24V, 12.1“ SVGA, TFT color, Xscale CPU, 800MHz, 128MByte work memory, 2048MByte user memory, CAN interface, RS232, RS422/485, 2xUSB-A, USB-B, 2xEthernet RJ45 (switch), incl. operating system Windows CE 5.0 Pro Plus or operating system Windows Embedded CE 6.0 and Runtime Movicon Real Flexible or Runtime zenOn
HZ608-1BC00	<b>VIPA IQ Home Zone HZ608C</b> DC 24V, 8.4“ SVGA, TFT color, 520MHz, MPI/Profibus-DP, RS232, RS422/485, USB-A, USB-B, 2xEthernet RJ45 (switch), incl. operating system Windows CE 5.0 Core and Runtime Movicon Real Flexible or Runtime zenOn



# HMI

Order no.	Name/Description
HMI software - Runtime	
SW515R1LBU2	<b>zenon 6.22 Runtime</b> Upgrade from 256 to 512 tags
SW515R1LBU3	<b>zenon 6.22 Runtime</b> Upgrade from 256 to 1024 tags
SW515R1LBU4	<b>zenon 6.22 Runtime</b> Upgrade from 256 to 2048 tags
SW515R1LBU5	<b>zenon 6.22 Runtime</b> Upgrade from 256 to 4096 tags (only in combination with Windows Embedded CE 6.0 Professional)
SW515R2LBU3	<b>zenon 6.22 Runtime</b> Upgrade from 512 to 1024 tags
SW515R3LBU4	<b>zenon 6.22 Runtime</b> Upgrade from 1024 to 2048 tags
SW515R4LBU5	<b>zenon 6.22 Runtime</b> Upgrade from 2048 to 4096 tags (only in combination with Windows Embedded CE 6.0 Professional)
SW515O1LA	<b>zenon 6.22 - Extended Trend &amp; Archivserver (SE)</b> (only in combination with Windows Embedded CE 6.0 Professional)
SW515O2LA	<b>zenon 6.22 - WEB Server Pro</b> Up to 3 parallel connections (only in combination with VIPA touch panels and Windows CE)
HMI software - Editors	
SW614E1MA	<b>MoviconX Editor</b> MoviconX Editor for Windows CE projects, incl. USB dongle
SW614E1MB	<b>Movicon11 Editor</b> Movicon11 Editor for Windows CE projects, incl. USB dongle
SW614E1MAUB	<b>MoviconX Editor</b> Upgrade to Movicon 11
SW615E1MB	<b>zenon 6.22 Editor</b> zenon 6.22 Editor for Windows CE projects, incl. USB dongle, up to 256 tags
SW615E2MB	<b>zenon 6.22 Editor</b> zenon 6.22 Editor for Windows CE projects, incl. USB dongle, up to 512 tags
SW615E3MB	<b>zenon 6.22 Editor</b> zenon 6.22 Editor for Windows CE projects, incl. USB dongle, up to 1024 tags
SW615E4MB	<b>zenon 6.22 Editor</b> zenon 6.22 Editor for Windows CE projects, incl. USB dongle, up to 2048 tags
SW615E5MB	<b>zenon 6.22 Editor</b> zenon 6.22 Editor for Windows CE projects, incl. USB dongle, up to 4096 tags (only in combination with Windows Embedded CE 6.0 Professional)
SW615E1MAUB	<b>zenon 6.22 Editor</b> Version upgrade 6.21 to 6.22
SW615E1MBU2	<b>zenon 6.22 Editor</b> Upgrade from 256 to 512 tags
SW615E2MBU3	<b>zenon 6.22 Editor</b> Upgrade from 512 to 1024 tags
SW615E3MBU4	<b>zenon 6.22 Editor</b> Upgrade from 1024 to 2048 tags
SW615E4MBU5	<b>zenon 6.22 Editor</b> Upgrade from 2048 to 4096 tags

**HMI**

Order no.	Name/Description
Operating system and tools	
SW416B1EAUB	<b>Windows CE 5.0 Core - Upgrade</b> Upgrade to Windows CE 5.0 Professional Plus
SW416B1EBUC	<b>Windows CE 5.0 Professional Plus - Upgrade</b> Upgrade to Windows Embedded CE 6.0 Professional, only in combination with VIPA Touch Panels Xscale CPU 800 MHz
SW410O1EA	<b>PLC-Tool CE</b> Load-, test-, diagnosis tool for Windows CE, S7 communication via MPI, Profibus-DP and Ethernet
SW419O3EA	<b>Java (TM) VM</b> for Windows CE; the software is pre-installed on the touch panels
SW410O2EA	<b>S7-TCP to MPI gateway</b> S7-TCP to MPI gateway for VIPA Touch Panels with Windows CE, in combination with STEP7 from Siemens
Memory modules for touch panels	
574-2AG00	<b>Compact Flash (CF) 512MByte</b> for VIPA Touch Panels
574-2AH00	<b>Compact Flash (CF) 1GByte</b> for VIPA Touch Panels
574-2AI00	<b>Compact Flash (CF) 2GByte</b> for VIPA Touch Panels
953-1SG00	<b>Secure Disc (SD) 512MByte</b> for VIPA Touch Panels
953-1SH00	<b>Secure Disc (SD) 1GByte</b> for VIPA Touch Panels
953-1SI00	<b>Secure Disc (SD) 2GByte</b> for VIPA Touch Panels
Protective foil	
574-1AD01	<b>Protective foil TP605</b> for Touch Panel 5.7“, 10 pieces
574-1AE01	<b>Protective foil TP606</b> for Touch Panel 6.5“, 10 pieces
574-1AF01	<b>Protective foil TP608</b> for Touch Panel 8.4“, 10 pieces
574-1AG01	<b>Protective foil TP610</b> for Touch Panel 10.4“, 10 pieces
574-1AH01	<b>Protective foil TP612</b> for Touch Panel 12.1“, 10 pieces
Cables	
670-0KB20	<b>Ethernet programming cable</b> for Touch Panels with Movicon and zenon, 3.0 m
670-0KB00	<b>OP/AG-cable 0°/90° with PU/Diagnostic port</b> for VIPA CC 03, OP 03, TD 03
670-0KB01	<b>OP/AG-cable 90°/90° with PU/Diagnostic port</b> PU-/Diagnostic port, 2.5 m
660-0KB00	<b>Periphery expansion cable CC 03</b> for up to 4 expansion modules EM 123 or System 200V modules, 0.5 m
670-0KB10	<b>USB programming cable</b> for Touch Panels with Movicon, 3.0 m
950-0KB50	<b>PC/AG programming cable</b> MPI cable with PU-/Diagnostic port, 2.5 m; use as PC/AG or TP/AG
Housings, connectors etc.	
HZ608-0UP00	<b>VIPA IQ-HomeZone HZ608C</b> Flush mounting case



# HMI

Order no.	Name/Description
Manuals and operating instructions	
HB160D_TP_X5	<b>Manual Touch Panel, xScale 520 MHz - Compendium, German</b> HB160D_605-1B1P0, HB160D_605-1B1C0, HB160D_605-1B1E0, HB160D_605-3B1E0, HB160D_605-3B1F0, HB160D_606-3B1E0, HB160D_606-3B1F0
HB160E_TP_X5	<b>Manual Touch Panel, xScale 520 MHz - Compendium, English</b> HB160E_605-1B1P0, HB160E_605-1B1C0, HB160E_605-1B1E0, HB160E_605-3B1E0, HB160E_605-3B1F0, HB160E_606-3B1E0, HB160E_606-3B1F0
HB160D_TP_X8	<b>Manual Touch Panel, xScale 800 MHz - Compendium, German</b> HB160D_606-3B2E0, HB160D_606-3B2F0, HB160D_608-3B2G0, HB160D_608-3B2H0, HB160D_610-3B2I0, HB160D_610-3B2J0, HB160D_612-3B2I0, HB160D_612-3B2J0
HB160E_TP_X8	<b>Manual Touch Panel, xScale 800 MHz - Compendium, English</b> HB160E_606-3B2E0, HB160E_606-3B2F0, HB160E_608-3B2G0, HB160E_608-3B2H0, HB160E_610-3B2I0, HB160E_610-3B2J0, HB160E_612-3B2I0, HB160E_612-3B2J0
HB116D	<b>Manual Line displays - Compendium, German</b> Compendium Line displays (HB116D_CC incl. operations list, HB116D_OP, HB116D_TD)
HB116E	<b>Manual Line displays - Compendium, English</b> Compendium Line displays (HB116E_CC incl. operations list, HB116E_OP, HB116E_TD)
HB116D_CC03	<b>Manual Line displays - German</b> Commander Compact CC 03, incl. operations list
HB116E_CC03	<b>Manual Line displays - English</b> Commander Compact CC 03, incl. operations list
HB116D_OP03	<b>Manual Line displays - German</b> Operator Panel OP 03
HB116E_OP03	<b>Manual Line displays - English</b> Operator Panel OP 03
HB116D_TD03	<b>Manual Line displays - German</b> Text Display TD 03
HB116E_TD03	<b>Manual Line displays - English</b> Text Display TD 03

# HMI Software

## Microsoft® Windows® CE

Features	Windows®	Windows®	Windows®
	CE 5.0 Core	CE 5.0 Professional Plus	Embedded CE 6.0
Web server	+	+	+
VNC server	+	+	+
FTP server	+	+	+
RAS-Server	-	+	+
Telnet	+	+	+
ActiveSync File Transfer (USB, RS232C, Ethernet)	+	+	+
RDP (Remote Desktop Protocol)	-	+	+
Internet Explorer 6	-	+	+
Registry Editor	+	+	+
WordPad	-	+	+
Mouse pointer	-	+	+
USB keyboard driver	+	+	+
HP printer driver (COM, Ethernet, USB)	+	+	+
Support Bluetooth USB flash drive (Keyboard, mouse, modem, network)	-	+	+
WLAN support (CF Card, USB flash drive)	+	+	+
Data Viewer: Word, Excel, Powerpoint, PDF	-	+	-
VIPA Startup manager	+	+	+



Article no. + [X] + [Y] = Order no.

Operating system

Runtime

Article no.  
Touch Panel



**movicon**  
Fast Flexible

**zenon**  
do it your way

+



+



or



Order no.

Operating system - please choose:

**Windows CE 5.0 Core**  
for Touch Panel with XScale, 520 MHz

A

**Windows CE 5.0 Professional Plus**  
for Touch Panel with XScale, 520 MHz\* and 800 MHz

B

**Windows Embedded CE 6.0 Professional**  
for Touch Panel with XScale, 800 MHz

C

Runtime - please choose:

w/o Runtime

X X

**MoviconX**  
for Touch Panel with Windows CE 5.0 Core or  
Windows CE 5.0 Professional Plus

M A

**Movicon11**  
for Touch Panel with Windows CE 5.0 Core, Windows CE 5.0 Professional Plus or  
Windows Embedded CE 6.0

M B

**zenon6.21**  
256 Tags, for Touch Panel with Windows CE 5.0 Core or  
Windows CE 5.0 Professional Plus

Z A

**zenon6.22**  
256 Tags, for Touch Panel with Windows CE 5.0 Core, Windows CE 5.0 Professional Plus or Windows  
Embedded CE 6.0

Z B

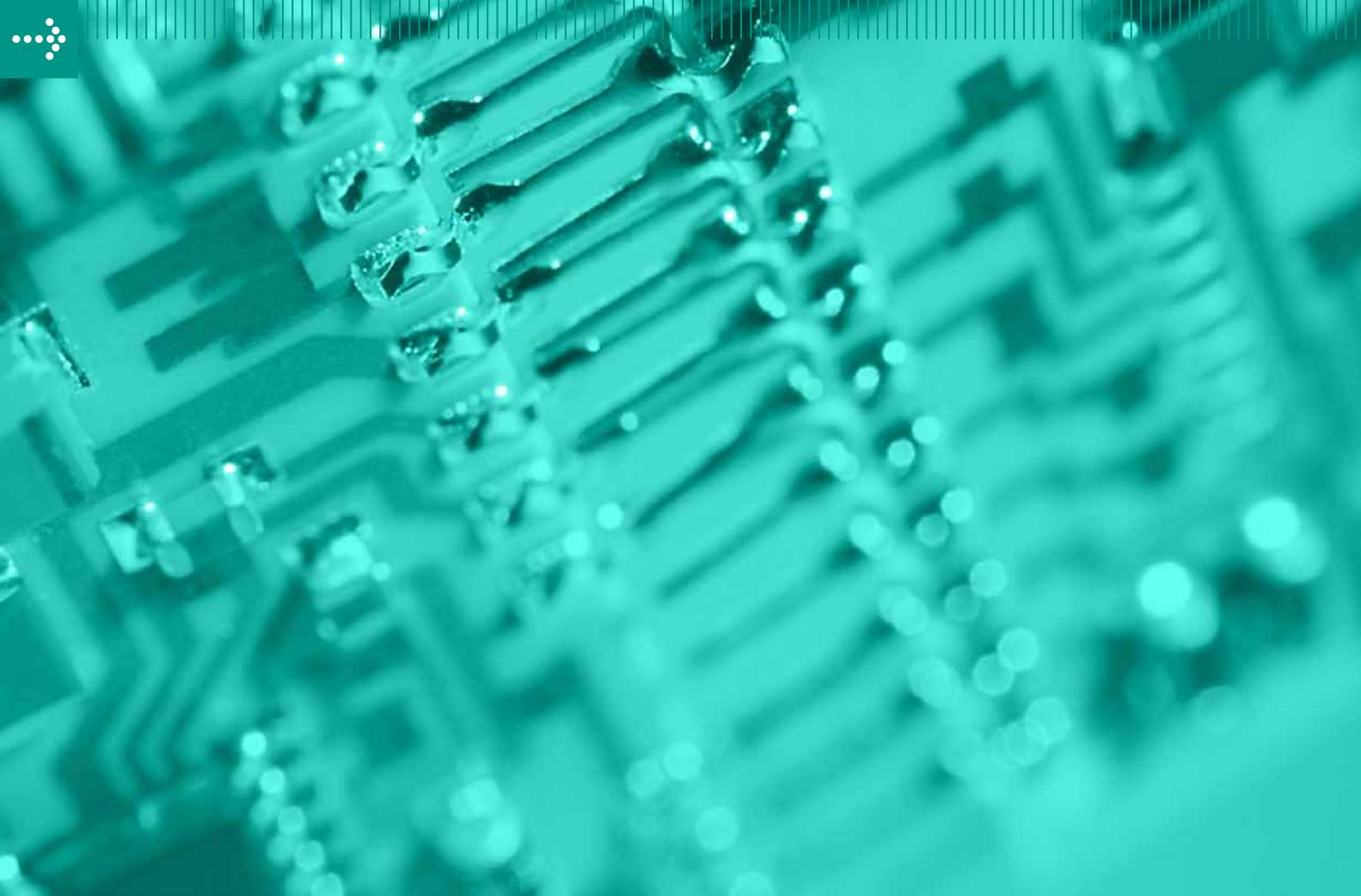
Example order number  
(Touch Panel + operating system + Runtime)

606-3B1E0-

B

M A

\* additional charge



## At a glance

Software

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# | SOFTWARE



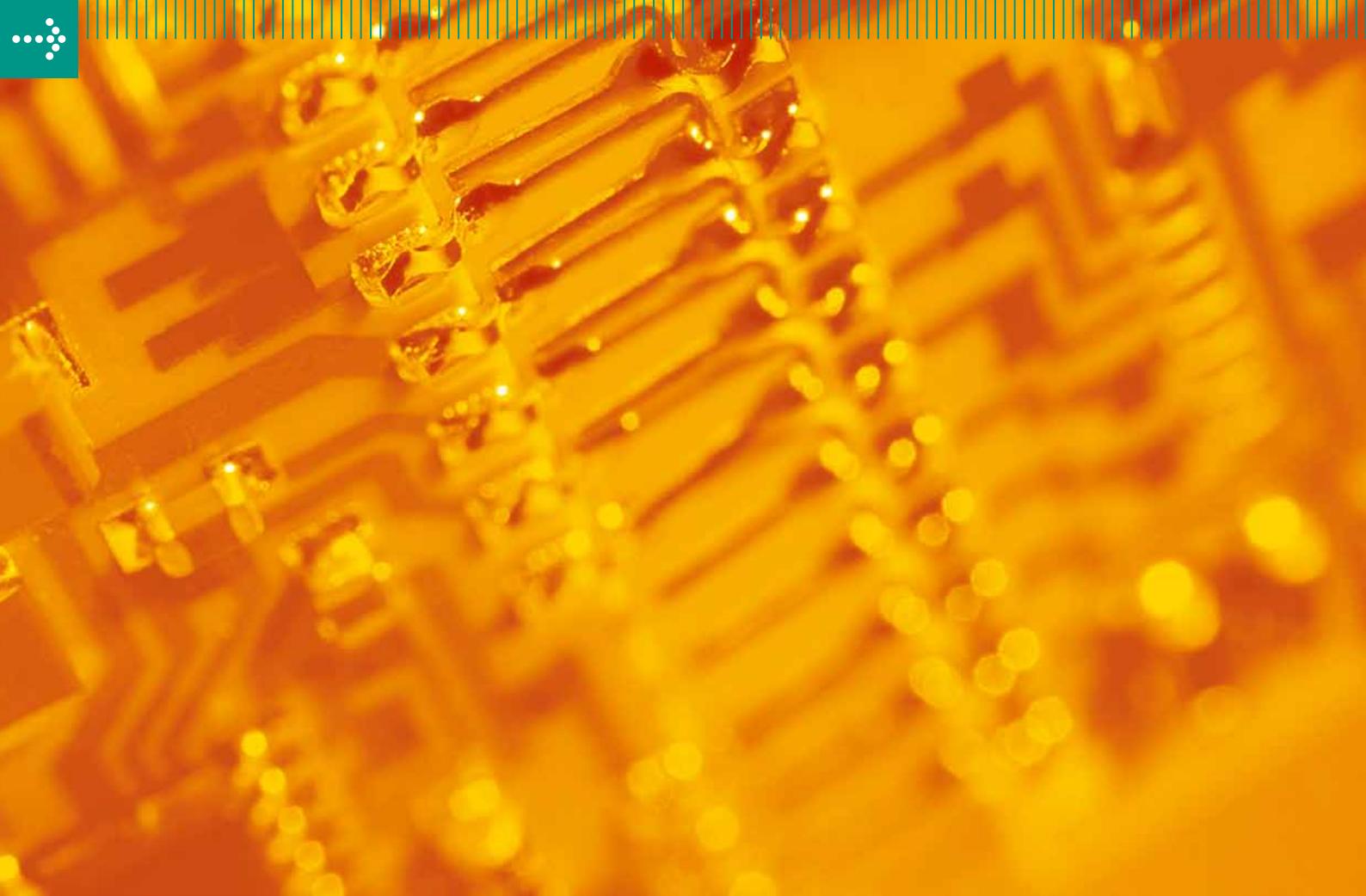
# Software

Order no.	Name/Description
Communication software	
SW110A1LA	<b>OPC server MPI driver</b> Single licence, part of the ToolDemo CD SW900T0LA
SW110A2LA	<b>OPC server RFC1006 driver</b> Single licence, part of the ToolDemo CD SW900T0LA
SW110A3LA	<b>OPC server TCP/IP driver (read/write)</b> Single licence, part of the ToolDemo CD SW900T0LA
Programming software	
SW211C1DD	<b>WinPLC7 - Single licence, CD, German, Tool for STEP7 from Siemens</b> Programming-, test-, diagnosis- and simulation software for VIPA Systems and S7-300 from Siemens, STL-, LAD- and FBD programming
SW211C1ED	<b>WinPLC7 - Single licence, CD, English, Tool for STEP7 from Siemens</b> Programming-, test-, diagnosis- and simulation software for VIPA Systems and S7-300 from Siemens, STL-, LAD- and FBD programming
SW211D1DD	<b>WinPLC7 - Single licence, CD + Dongle, German, Tool for STEP7 from Siemens</b> Programming-, test-, diagnosis- and simulation software for VIPA Systems and S7-300 from Siemens, STL-, LAD- and FBD programming, Download version: <a href="http://www.winplc.com/v4/vipa-download.htm">http://www.winplc.com/v4/vipa-download.htm</a>
SW211D1ED	<b>WinPLC7 - Single licence, CD + Dongle, English, Tool for STEP7 from Siemens</b> Programming-, test-, diagnosis- and simulation software for VIPA Systems and S7-300 from Siemens, STL-, LAD- and FBD programming, Download version: <a href="http://www.winplc.com/v4/vipa-download.htm">http://www.winplc.com/v4/vipa-download.htm</a>
SW211K1OD	<b>WinPLC7 - Single licence, Key, Tool for STEP7 from Siemens</b> Programming-, test-, diagnosis- and simulation software for VIPA Systems and S7-300 from Siemens, STL-, LAD- and FBD programming, Download-Version: <a href="http://www.winplc.com/v4/vipa-download.htm">http://www.winplc.com/v4/vipa-download.htm</a>
SW211K2OD	<b>WinPLC7lite - Single licence</b> Licensable with System 100V CPUs, included on SW900T0LA ToolDemo CD, registration via Internet possible
Parameterization software	
SW300O1LA	<b>OP-Manager</b> Single licence, parameterization tool for OP 03
SW300T1EA	<b>TD-Wizard</b> Parameterization tool for TD 03 (included on Software CD SW900T0LA)
SW307A1MA	<b>TM-eBuddy</b> Configuration tool, Modem-TCP/IP configuration, firmware updater, backup/restore (downloadable from VIPA homepage)
SW300C1EA	<b>WinCoCT</b> Single licence, CANopen configuration tool
SW300P1LA	<b>WinNCS parameterization software</b> Universal parameterization and configuration tool, components engineering, Ethernet protocols, TCP/IP, SINEC H1, IPK, RFC1006 - PROFIBUS-DP (2BF), included on Software CD SW900T0LA
Analysis tool	
SW711A1LA	<b>WinPLC-Analyzer</b> Single licence, CD + dongle, German/English, for VIPA Systems and S7-300/400 from Siemens (in combination with WinPLC7), incl. driver
SW711A2LA	<b>WinPLC-Analyzer</b> Single licence, CD + dongle, German/English, for VIPA Systems and S7-300/400 from Siemens, incl. driver
SW900T0LA	<b>ToolDemo-CD, complete VIPA software collection</b> Demo versions/registration possible, WinPLC7, Movicon11 Editor, OP manager, TD wizard, OPC server, WinCoCT, WinNCS, GSD-/EDS files, handling blocks, drivers, How-to-do's

# Software

Order no.	Name/Description
Manuals and operating instructions	
S7-CRASHKURS-EX	<b>STEP®7-Crashkurs Extended Edition - German/English</b> Practical introduction into PLC programming with simulation software WinPLC. Targeted at users looking for introduction into PLC programming software STEP®7 and practical experience at the same time.
HB45D	<b>Manual OPC server - German</b> Installations and operating manual OPC server
HB45E	<b>Manual OPC server - English</b> Installations and operating manual OPC server
HB91D	<b>Manual WinNCS - German</b> Installations and operating manual WinNCS
HB91E	<b>Manual WinNCS - English</b> Installations and operating manual WinNCS
SW900HOLA	<b>DVD: Manuals &amp; More</b> Complete documentation on DVD





## At a glance

Accessories

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## | ACCESSORIES

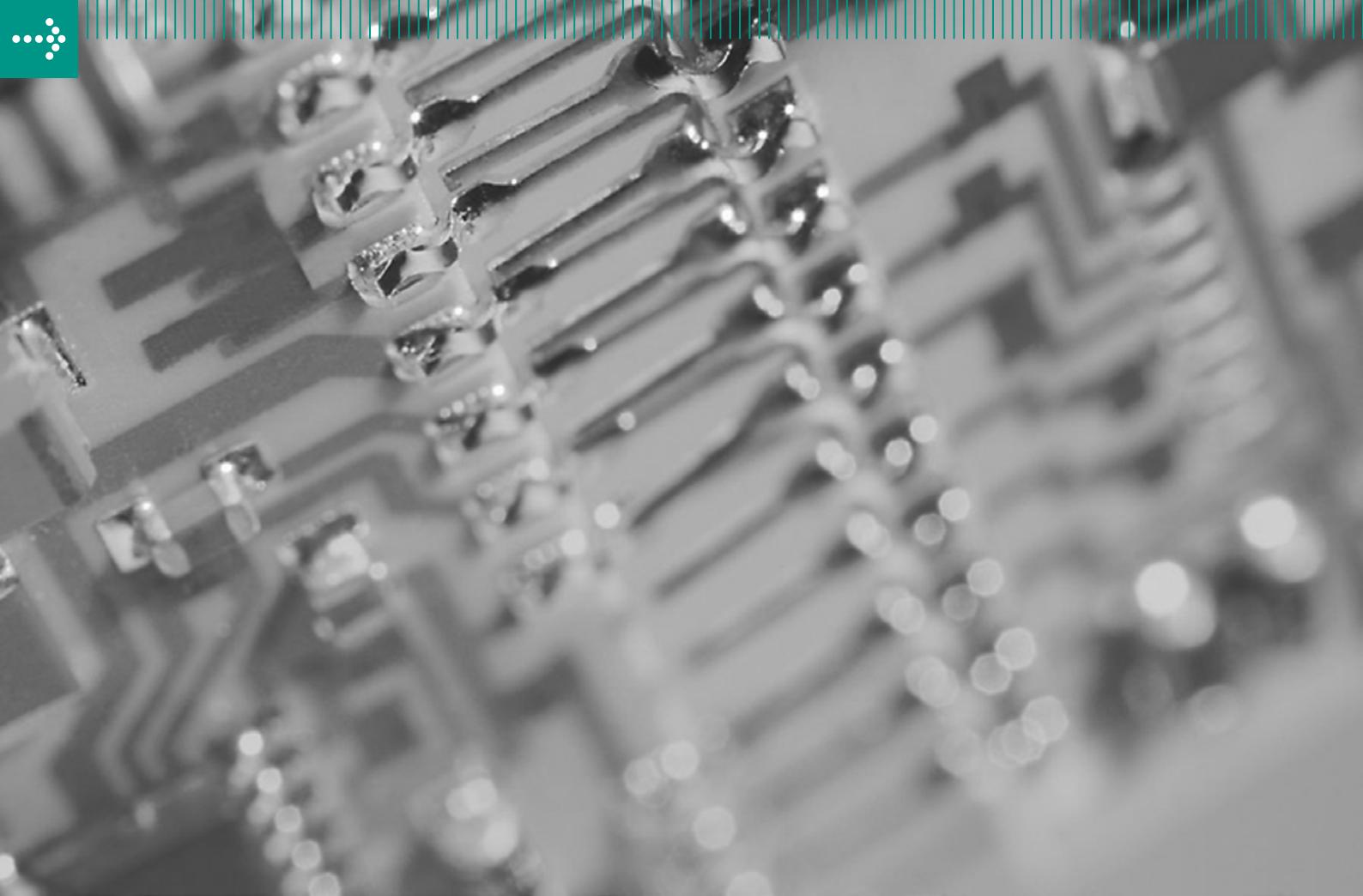


# Accessories

Order no.	Name/Description
S5 components	
306-1LE00	<b>IM 306 DP slave - 115U ZG/EG IM</b> for the integration of central and expansion units of SIMATIC S5-115U from Siemens into Profibus-DP networks, applicable into IM slot
306-1UE00	<b>IM 306 DP slave - 135U/155U ZG/EG IM</b> for the integration of central and expansion units of SIMATIC 135U/155U from Siemens into Profibus-DP networks, applicable into IM slot
306-1UZ00	<b>IM 306 DP slave - 135U/155U ZG CPU</b> for the integration of central units of SIMATIC 135U from Siemens into Profibus-DP networks, applicable into CPU slot
PROFIBUS connectors	
972-0DP01	<b>EasyConn PB 90° - SubD connector</b> 12 Mbit/s, metal case, PG-jack, insulation piercing connection, switchable termination resistor, 90° outgoing cable
972-9DP01	<b>EasyConn PB 90° - SubD connector</b> 12 Mbit/s, metal case, PG-jack, insulation piercing connection, switchable termination resistor, 90° outgoing cable, ECO pack: 100 pieces
972-0DP10	<b>EasyConn PB 90° - SubD connector</b> 12 Mbit/s, metal case, PG-jack, insulation piercing connection, switchable termination resistor, 90° outgoing cable
972-9DP10	<b>EasyConn PB 90° - SubD connector</b> 12 Mbit/s, metal case, PG-jack, insulation piercing connection, switchable termination resistor, 90° outgoing cable, bus diagnosis via LEDs, ECO pack: 100 pieces
972-0DP20	<b>EasyConn PB 45° - SubD connector</b> 12 Mbit/s, metal case, PG-jack, insulation piercing connection, switchable termination resistor, 45° outgoing cable
972-9DP20	<b>EasyConn PB 45° - SubD connector</b> 12 Mbit/s, metal case, PG-jack, insulation piercing connection, switchable termination resistor, 45° outgoing cable, bus diagnosis via LEDs, ECO pack: 100 pieces
972-0DP30	<b>EasyConn PB 0° - SubD connector</b> 12 Mbit/s, metal case, PG-jack, insulation piercing connection, switchable termination resistor, 0° outgoing cable
972-9DP30	<b>EasyConn PB 0° - SubD connector</b> 12 Mbit/s, metal case, PG-jack, insulation piercing connection, switchable termination resistor, 0° outgoing cable, bus diagnosis via LEDs, ECO pack: 100 pieces
Miscellaneous	
905-6AA00	<b>EasyStrip</b> Stripping tool for PROFIBUS cable
6ES5491-0LB11	<b>Adaptation capsule for S5-115U/F</b> Siemens 6ES5 491-0LB11, Siemens SIMATIC S5, adaptation capsule for S5-115U/F (type ES 902) for connecting of up to 2 modules of S5-135U/155U, refreshed, 1 year warranty
Teleservice modules	
900-2E631	<b>TM-E ISDN Router</b> DC 12V...24V, ISDN, MPI, Ethernet RJ45, router functions, DI 1xDC 24V, DO 1xDC 24V 0.2A
900-2E641	<b>TM-E Analog Router</b> DC 12V...24V, PSTN (Analog), MPI, Ethernet RJ45, router functions, DI 1xDC 24V, DO 1xDC 24V 0.2A
900-2E651	<b>TM-E GSM/GPRS Router</b> DC 12V...24V, GSM/GPRS Quadband, MPI, Ethernet RJ45, router functions, DI 1xDC 24V, DO 1xDC 24V 0.2A, (please order antenna separately: 240-0EA00)
900-2H611	<b>TM-H Router VPN</b> DC 12V...24V, MPI, 5 x Ethernet RJ45, router functions, VPN, DI 1xDC 24V, DO 1xDC 24V 0.2A
900-2H681	<b>TM-H HSDPA Router VPN</b> DC 12V...24V, HSDPA, MPI, 5 x Ethernet RJ45, router functions, VPN, DI 1xDC 24V, DO 1xDC 24V 0.2A

# Accessories

Order no.	Name/Description
Cables	
830-0LC00	<b>FCC 2xAWG 22 - Standard Profibus cable</b> Fixed installation according to EN 50170, flame-retardant according to VDE 0472, T804 test type B, cable shell color violet, 100 m ring
830-0LD00	<b>FCC 2xAWG 22 - Standard Profibus cable</b> Fixed installation according to EN 50170, flame-retardant according to VDE 0472, T804 test type B, cable shell color violet, 200 m ring
830-0LE00	<b>FCC 2xAWG 22 - Standard Profibus cable</b> Fixed installation according to EN 50170, flame-retardant according to VDE 0472, T804 test type B, cable shell color violet, 500 m ring
830-0LF00	<b>FCC 2xAWG 22 - Standard Profibus cable</b> Fixed installation according to EN 50170, flame-retardant according to VDE 0472, T804 test type B, cable shell color violet, 1000 m ring
950-0AD00	<b>USB adapter</b> For MMC programming (Windows 98SE/ME/2000/XP)
950-0AD10	<b>PCMCIA adapter</b> For MMC programming
950-0KB00	<b>VIPA „Green Cable“</b> Programming and download cable, RS232/MP2I, 2 m for VIPA CPUs 100V, 200V and 300V
950-0KB01	<b>PC/AG programming cable</b> RS232-MPI/PROFIBUS adapter, 3 m
950-0KB10	<b>PC/AG programming cable</b> RS232-MPI/PPI adapter, LCD, 3 m
950-0KB20	<b>PC/AG programming cable</b> RS232/MPI adapter, external DC 24 V power supply, 1.3 m
950-0KB30	<b>PC/AG programming cable – USB-MPI/PROFIBUS adapter</b> , LCD 3 m
950-0KB31	<b>PC/AG programming cable – USB-MPI/PROFIBUS adapter</b> , 3 m
950-0KB40	<b>PC/AG programming cable – TCP/IP-MPI/PROFIBUS adapter</b> , 3 m
950-0KB41	<b>PC/AG programming cable</b> TCP/IP-MPI/PROFIBUS adapter, 3 m, incl. driver, part of the ToolDemo-CD SW900TOLA
950-0KB50	<b>PC/AG programming cable</b> MPI cable with PU-/Diagnostic port, 2.5 m; use as PC/AG or TP/AG
Memory modules for S7-300/400	
951-0KD00	<b>Memory Card (MC)</b> – for S7-300/400 from Siemens, Flash Eprom, short
951-0KE00	<b>Memory Card (MC)</b> – for S7-300/400 from Siemens, Flash Eprom, short
951-0KF00	<b>Memory Card (MC)</b> – for S7-300/400 from Siemens, Flash Eprom, short
951-0KG00	<b>Memory Card (MC)</b> – for S7-300/400 from Siemens, Flash Eprom, short
951-0KJ00	<b>Memory Card (MC)</b> – for S7-300/400 from Siemens, Flash Eprom, short
Antennas and accessories	
900-0AA00	<b>TM antenna GSM/GPRS</b> dipole antenna incl. SMA (male), resistance: 50 Ohm, power: 3 W, gain: 2.0 dBi, 900/1800 MHz
900-0AB50	<b>TM antenna GSM/GPRS</b> portable antenna incl. 5m cable, SMA (male) and assembly bracket, resistance: 50 Ohm, power: 10 W, gain: 2.14 dBi, 900/1800 MHz
900-0AQ50	<b>TM antenna GSM/GPRS</b> rod antenna incl. 5m cable and SMA (male) and mounting bracket, resistance: 50 Ohm, power: 20 W, gain: 2.14 dBi, 900/1800 MHz
Manuals and operating instructions	
HB37D_IM	<b>Manual IM 306 DP slave - Compendium, German</b> HB37D_306-1LE00, HB37D_306-1UE00, HB37D_306-1UZ00
HB37E_IM	<b>Manual IM 306 DP slave - Compendium, English</b> HB37E_306-1LE00, HB37E_306-1UE00, HB37E_306-1UZ00
HB39D_TM	<b>Manual Accessories - Teleservice</b> Manual Accessories, German for TM-E 900-2E6x and TM-H 900-2H6x Teleservice modules
HB39E_TM	<b>Manual Accessories - Teleservice</b> Manual Accessories, English for TM-E 900-2E6x and TM-H 900-2H6x Teleservice modules



## At a glance

Distributors and branch offices  
Terms and conditions of sale and delivery

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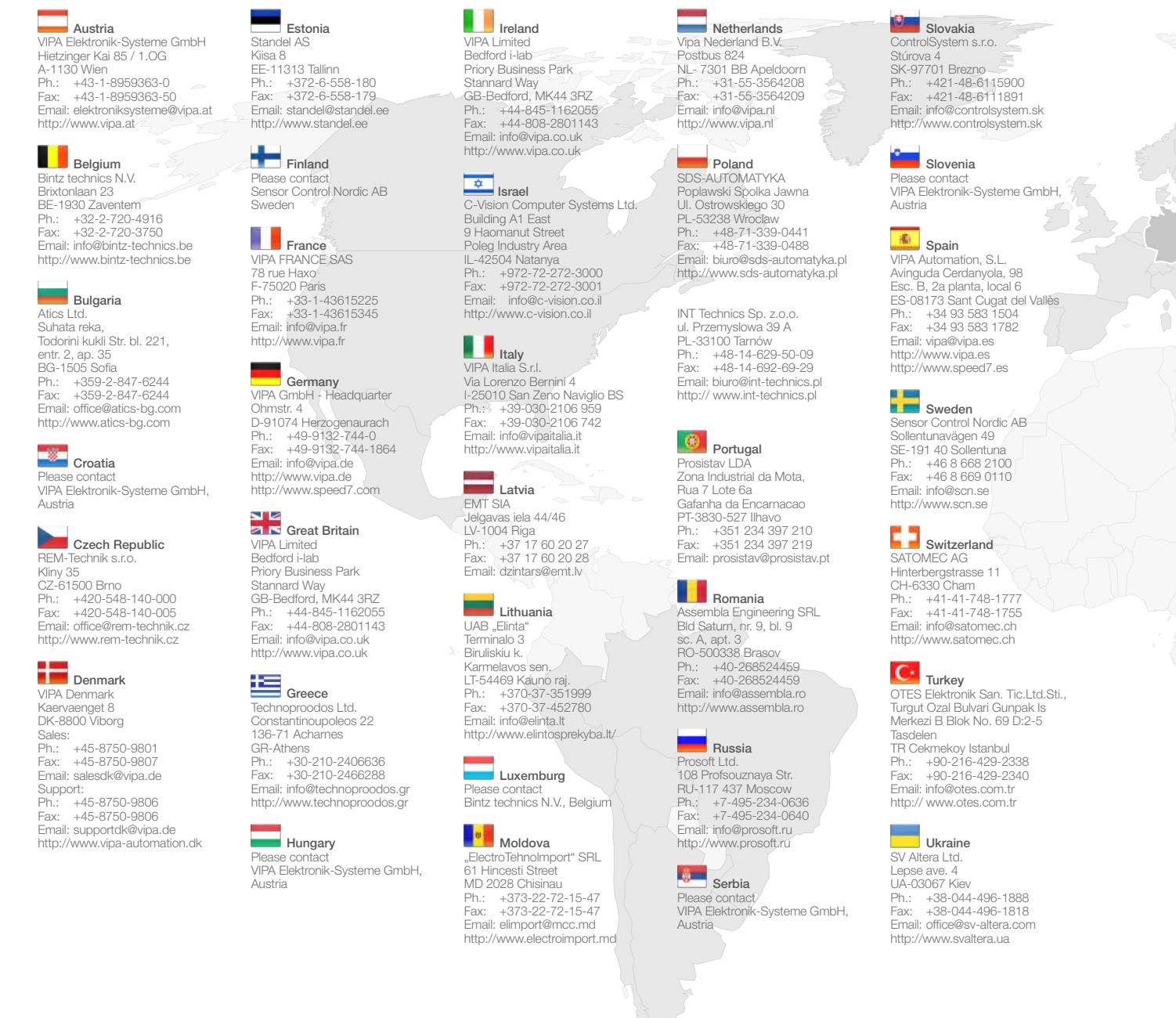
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## | APPENDIX

# Distributors and branch offices

## Distributors - Europe



## Distributors - Africa

**South Africa:** Anytech (Pty) Ltd., Cnr. Orleans and Homestead ZA- Kya-Sand, Gauteng 2163 Ph.: +27-11-708-1992 Fax: +27-11-708-1745 Email: info@anytech.co.za <http://www.anytech.co.za>

## Distributors - Australia

**Australia:** VIPA Automation, PO Box 1778 AUS-Cleveland DC, QLD 4163 Ph.: +61-7-3488-0177 Fax: +61-7-3488-0144 <http://www.vipaautomation.com>

**New Zealand:** Please contact VIPA Automation, Australia  
**Pacific Islands:** Please contact VIPA Automation, Australia

## Distributors – America

### Argentina

Exsol S.A.  
Martin Coronado 925  
Acassuso, 1641  
AR-Buenos Aires  
Ph.: +54-11-4742-9611  
Fax: +54-11-4742-7118  
Email: info@exsol.com.ar  
<http://www.exsol.com.ar>

### Canada

ONTOR Ltd.  
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# Terms and conditions of sale and delivery

## General



The general supply and delivery terms for products and services of the Electrical Industry published by ZVEI Frankfurt am Main are valid in their latest version as well as the addendum on extended retention of title. Court of jurisdiction: Erlangen.

In case they are not at your disposal, please ask for a printed copy or make a download from our homepage:

[www.vipa.de](http://www.vipa.de) -> contact -> terms of delivery.

The prices are quoted in Euro (€) ex works, without insurance, freight and packaging. They do not include any VAT.

Packaging cannot be returned.

VAT will be indicated separately according to legal regulations and at the respective valid rate.

## Minimum Order Value



The minimum value for each order amounts to € 150,- net. Orders with a value less than € 150,- will be charged with a handling fee of € 20,- to cover costs.

## Dispatch and packing costs



### Export sales:

Dispatch will be organized on ex works basis with a forwarding agent/courier service named by customer; alternatively freight cost will be calculated and charged according to weight and/or volume on the basis of VIPA Germany's freight rates at local partners.

### Domestic sales:

Order value to 1.000 € = 10,00 €

1.001 € - 2.500 € = 1,00% of net price

2.501 € - 5.000 € = 0,85% of net price

5.001 € - 7.500 € = 0,65% of net price

7.501 € and higher = all inclusive 57,00 €

Freight charges for bulky goods (e.g. 2 m of rails and cable drums) are calculated separately.

## Validity



With the date this price list comes into effect all former prices are no longer valid.

The price list may be subject to changes, especially as far as the values, dimensions and weights are concerned, if nothing different is noted explicitly.

The goods will be invoiced at the date of dispatch.

## Manuals



When ordering modules, you will receive the corresponding customer documentation free of charge in PDF format on DVD. If you wish to receive hard copies of manuals, please order them separately.

The latest versions of all our manuals can be found on our homepage: [www.vipa.de](http://www.vipa.de) -> service -> manuals.

For further information please contact us:

Export sales: +49 (0)9132/744 - 1675 or -1670

Domestic sales: +49 (0)9132 / 744 - 1730

Homepage: <http://www.vipa.de>

## Legend



MP<sup>2</sup>I = MPI + RS232

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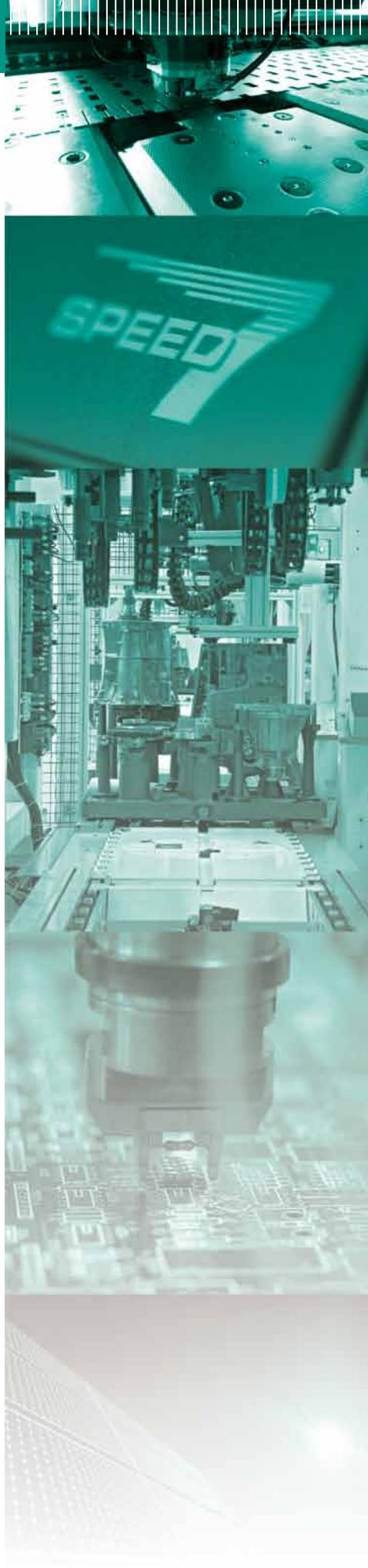
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