### **SIMATIC S7-1200**

It's the interplay that makes the difference



### **SIMATIC Controller**

Answers for industry.

**SIEMENS** 

### Modular. Powerful. Easy to use.

It's the common interfaces, communication, and one easy-to-use integrated engineering system for both the controller and HMI that makes the difference. The interplay between the new SIMATIC S7-1200 controller, our seamless range of SIMATIC HMI Basic Panels and the highly integrated SIMATIC STEP 7 Basic engineering system provides a unique integrated automation solution specifically for the compact controller class.

### It's the Interplay

The new modular SIMATIC S7-1200 controller is at the core of our new offering for simple but highly precise automation tasks. The optimized performance of our SIMATIC HMI Basic Panels, designed for seamless compatibility with this new controller and the powerfully integrated engineering system, ensures simplified development, fast start-up, precise monitoring and the highest level of usability. It's the interplay between these products and their innovative features that give you an unprecedented level of efficiency for small automation systems.

### The Controller

The SIMATIC S7-1200 controller is modular and compact, versatile, a secure investment, and is powerfully fit for a full range of applications. A scalable and flexible design, a communication interface that fulfills the highest standards of industrial communication and a full range of powerful integrated technology functions make this controller an integral part of a complete and comprehensive automation solution.

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### The Panels

The operation of small machines or simple applications can often be further improved with the addition of visualization. With the SIMATIC HMI Basic Panels offering essential functionality, this is an economical option that opens up new possibilities for creative automation solutions. The range of SIMATIC HMI Basic Panels includes high-contrast graphical displays with touch and tactile function keys, simple networking and seamless communication making them ideal for applications with the new SIMATIC S7-1200.

### The Software

Our highly integrated engineering system, SIMATIC STEP 7 Basic, which includes SIMATIC WinCC Basic, is task-oriented, intelligent and provides intuitive easy-to-use editors for the efficient configuration of the SIMATIC S7-1200 and SIMATIC HMI Basic Panels. In addition to programming, it is the common engineering framework for hardware and network configuration, diagnostics and more. The functionality provided by this engineering system is the key ingredient that makes the interplay between the controller and HMI so powerful.

In the field of automation, powerful components are a key factor to success. But what really gives you a unique advantage, is all of them working together.



## A modular concept for compact automation in a scalable design.

The SIMATIC S7-1200 features an integrated PROFINET interface, powerful integrated technology functions and a highly scalable and flexible design. This enables simple communication, efficient solutions for technological tasks, and perfectly fits individual automation requirements in a wide variety of applications.



### Scalable and flexible design

The SIMATIC S7-1200 controller family has been designed with maximum flexibility to fit your individual machine requirements. This allows you to custom-design your controller system to meet your needs; it also makes future system expansions quick and easy.

### Industrial communication

The SIMATIC S7-1200's integrated PROFINET interface provides seamless communication with the SIMATIC STEP 7 Basic engineering system for programming, with SIMATIC HMI Basic Panels for visualization, with additional controllers for PLC-to-PLC communication and with third-party devices for advanced integration options.

### Integrated technology

The name SIMATIC has been a reliable symbol in the field of automation for many years. We have taken our experience and have integrated our proven and innovative technology functions into our new controller – ranging from counting and measuring, speed, position and duty cycle control to simple process control functionality. This wide variety of functionality guarantees you the ability to solve a wide array of applications based on technology that has proven its validity in the field for many years.

### The Controller in detail

- Scalable and flexible design
- Industrial communication
- Integrated technologies

## Communication modules

Up to 3 communication modules can be added to any of the SIMATIC S7-1200 CPUs. The RS485 and RS232 communication modules provide the connection for performing point-to-point serial communication. This communication is configured and programmed using extended instructions or with the library functions, USS drive protocol and Modbus **RTU Master and Slave** protocols, which are included within the SIMATIC STEP 7 Basic engineering system.



### **Integrated PROFINET interface**



The integrated PROFINET interface is used for programming, as well as for HMI and PLC-to-PLC communication. Additionally, it supports communication with third-party devices using open Ethernet protocols. This interface features an RJ45 connector with auto-cross-over functionality and provides for data transmis-sion rates at 10/100 Mbit/s. It supports up to 16 Ethernet connections and the following protocols: TCP/IP native, ISO on TCP, and S7 communication.

## Integrated technology

High-speed inputs
The new SIMATIC S7-1200
controller comes with up
to 6 high-speed counters.
Three inputs at 100 kHz and
three inputs at 30 kHz are
integrated for counting and
measuring.

### **High-speed outputs**Two high-speed pulse train

outputs at 100 kHz are integrated for controlling the speed and position of a stepper motor or a servo drive. They can alternatively be used as pulse-width-modulated outputs for controlling the speed of a motor, position



### Memory

Up to 50 KB of integrated work memory is provided with a floating boundary between the user program and user data. Up to 2 MB of integrated load memory and 2 KB of integrated retentive memory are also provided.

The optional SIMATIC Memory Card provides an easy way to transfer programs to multiple CPUs. This card can also be used for storing miscellaneous files or to update the firmware of the controller system.

### of a valve, or duty cycle of a heating element.

### PID control

Up to 16 PID control loops with auto-tune functionality are possible in the SIMATIC S7-1200 controller for simple closed-loop process control applications.



### Scalable and flexible design



### Signal modules

Up to eight signal modules can be connected to the largest CPUs for the support of additional digital and analog I/Os.

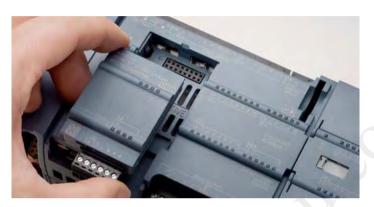
### Signal boards

One signal board can be connected to all CPUs, allowing you to customize the CPUs by adding digital or analog I/Os to the controller without affecting its physical size. The modular concept provided by the SIMATIC S7-1200 allows you to design a controller system to exactly fit your application needs.

#### The Controller in detail

- Scalable and flexible design
- Industrial communication
- Integrated technologies

## Design or expand a controller system to exactly fit your requirements.



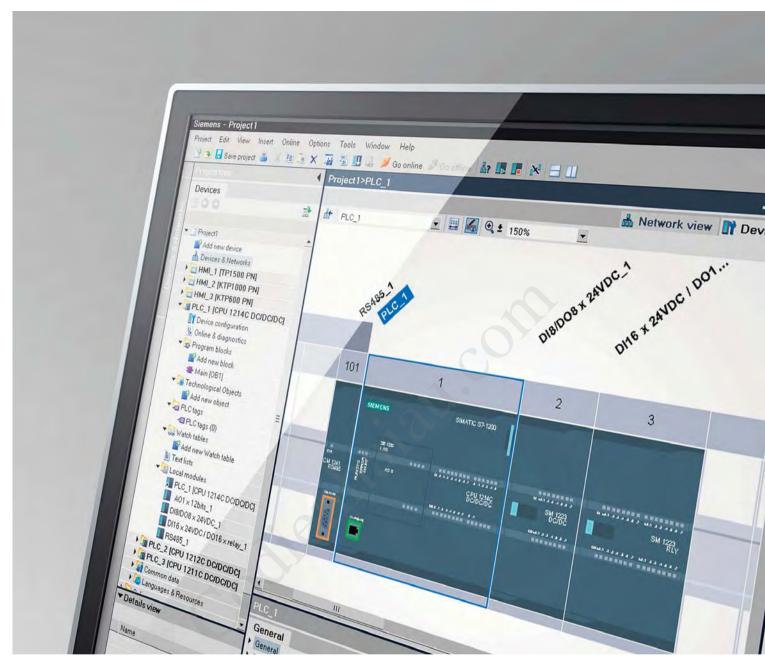
With the addition of a signal board, you can increase the number of digital or analog I/Os on the controller to custom-fit your needs without increasing the controller's footprint.

### Signal boards, signal modules, communication modules

The SIMATIC S7-1200 system comes in three different models, CPU 1211C, CPU 1212C and CPU 1214C, that may each be expanded to exactly fit your machine requirements. One signal board can be added inside the front of any CPU to easily expand the digital or analog I/Os without affecting the physical size of the controller. Signal modules can be connected to the right side of the CPU to further expand the digital or analog I/O capacity. CPU 1212C accepts two and CPU 1214C accepts eight signal modules. Finally, all SIMATIC S7-1200 CPUs can be equipped with up to three communication modules on the left side of the controller for performing point-topoint serial communication.

### Easy and convenient installation

All SIMATIC S7-1200 hardware has built-in clips that allow for easy and convenient mounting on a standard 35-mm DIN rail. These built-in clips can also be snapped into an extended position to provide mounting holes for situations where panel mounting is required. The SIMATIC S7-1200 hardware can be installed in either a horizontal or vertical position providing you with additional installation options. These integrated features offer users maximum flexibility during the installation process and they make the SIMATIC S7-1200 a practical solution for a wide variety of applications.



### Removable terminals

All SIMATIC S7-1200 hardware is equipped with removable terminal blocks. This means that wiring only has to be done once, saving valuable time during the start-up and commissioning phases of a project. Additionally, the removable terminal blocks are an added convenience when hardware components must be replaced.

### Space-saving design

All SIMATIC S7-1200 hardware has been specifically designed to save space in the control panel. For example, CPU 1214C has a width measuring only 110 mm and both the CPU 1212C and CPU 1211C are only 90 mm wide. Together with the small footprint of the communication modules and signal modules, this modular and compact system saves valuable space and offers you the highest level efficiency and flexibility during the installation process.

The device view within the SIMATIC STEP 7 Basic engineering system allows you to easily configure and visualize your SIMATIC S7-1200 controller system.

#### The Controller in detail

- Scalable and flexible design
- Industrial communication
- Integrated technologies

## Fast, easy and flexible industrial communication.



The integrated PROFINET interface meets the high demands of modern industrial communication.

### **Integrated PROFINET interface**

The new SIMATIC S7-1200 is equipped with an integrated PROFINET interface which provides seamless communication with the integrated SIMATIC STEP 7 Basic engineering system for programming, with SIMATIC HMI Basic Panels for visualization, with additional controllers for PLC-to-PLC communication and with third-party devices for advanced integration possibilities.

### Simple networking

The SIMATIC S7-1200 communication interface consists of a noise-immune RJ45 connector with auto-crossover functionality supporting up to 16 Ethernet connections and providing data transmission rates up to 10/100 Mbit/s. To minimize cabling and provide maximum networking flexibility, the new CSM 1277 Compact Switch Module can be used together with the SIMATIC S7-1200 to easily configure a uniform or mixed network consisting of line, tree or star topologies. The CSM 1277 is a 4-port unmanaged switch which allows you to connect the SIMATIC S7-1200 with up to 3 additional devices. Additionally, using the SIMATIC S7-1200

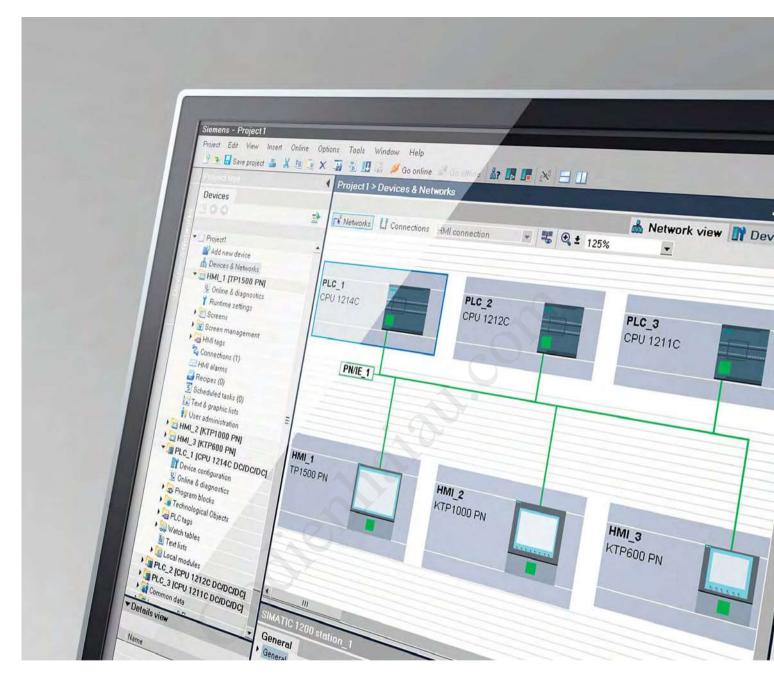
in combination with SIMATIC NET Industrial Wireless LAN components, you are provided with a completely new dimension in networking possibilities.

### Communication with additional controllers and HMI devices

To ensure communication with additional SIMATIC controllers and HMI devices, the SIMATIC S7-1200 supports the connection to multiple S7 controllers and HMI devices communicating together with the proven S7 communication protocol.

### Communication with third-party devices

Seamless integration of devices from other manufacturers is possible with the integrated interface on the SIMATIC S7-1200. It is possible to connect and communicate with multiple third-party devices utilizing the supported open Ethernet protocols TCP/IP native and ISO on TCP. Configured with the standard T-Send/T-Receive instructions provided by the integrated engineering system SIMATIC STEP 7 Basic, this capability offers you an even higher level of flexibility in designing your automation solution.



### PROFINET – the open Industrial Ethernet standard

Utilizing established TCP/IP standards, the integrated PROFINET interface provided with the SIMATIC S7-1200 can be used for programming, HMI and PLC-to-PLC communication. In the future, it will be possible to connect distributed field devices to the SIMATIC S7-1200 via PROFINET or to use the

SIMATIC S7-1200 as a PROFINET IO device linked to a PLC which operates as PROFINET IO controller. This capability is currently in preparation and will provide the SIMATIC S7-1200 system with uniform communication from the field level up to the control level satisfying one of the most important demands currently placed on industrial automation.

The network view within the SIMATIC STEP 7 Basic engineering system allows you to easily configure and visualize your network configuration.

#### The Controller in detail

- Scalable and flexible design
- Industrial communication
- Integrated technologies

## Powerful technology functions. Completely integrated.



Integrated technology for counting and measuring, closed-loop control and motion control make the SIMATIC S7-1200 an extremely versatile system for many types of automation tasks.

### High-speed inputs for counting and measuring

Up to six high-speed counters, three at 100 kHz and three at 30 kHz, are integrated for precise monitoring of incremental encoders, frequency counting, or high-speed counting of process events.

### High-speed outputs for speed, position or duty cycle control

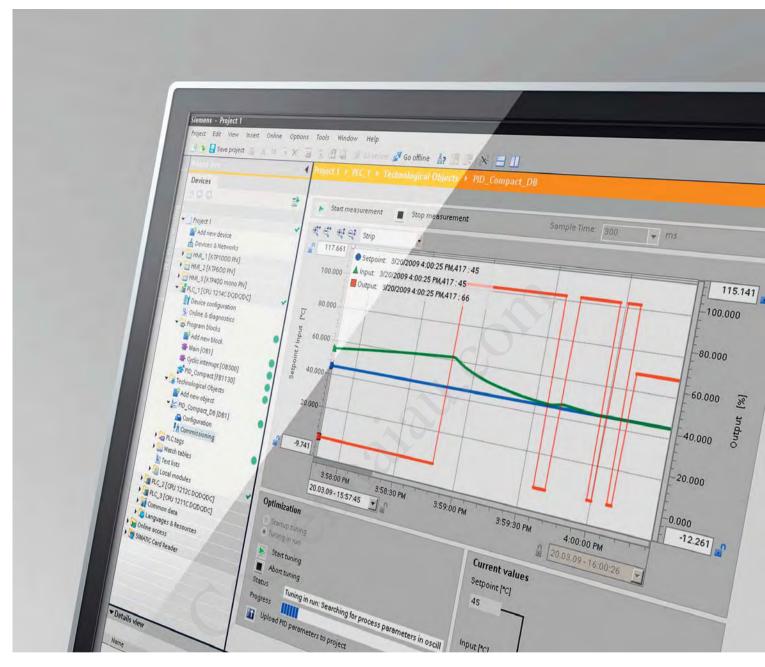
Two high-speed outputs are integrated into the SIMATIC S7-1200 controller for use as either pulse train outputs or pulse-width-modulated outputs. When configured as a PTO, a 50 percent duty cycle pulse train is provided at a rate of up to 100 kHz for the open-loop speed and position control of stepper motors and servo drives. Feedback for the pulse train outputs is provided internally using two of the high-speed counters. When configured as a PWM output, a fixed cycle time output with a variable duty cycle is provided for controlling the speed of a motor, position of a valve, or duty cycle of a heating element.

### PLCopen motion function blocks

The SIMATIC S7-1200 supports the open-loop speed and position control of stepper motors and servo drives. This functionality is easily configured using an axis technology object along with the internationally accepted PLCopen motion function blocks included within the engineering system SIMATIC STEP 7 Basic. Absolute, relative and velocity moves are supported in addition to home and jog functions.

### **Drive commissioning control panel**

The drive commissioning control panel included with the engineering system SIMATIC STEP 7 Basic simplifies the start-up and commissioning of stepper motors and servo drives. It provides both automatic and manual control of a single motion axis as well as online and diagnostics information.



### PID functionality for closed-loop control

The SIMATIC S7-1200 supports up to 16 PID control loops for simple process control applications. These control loops are easily configured using a PID controller technology object and the supporting editors provided within the engineering system SIMATIC STEP 7 Basic. Additionally, the SIMATIC S7-1200 supports PID auto-tuning to automatically compute the optimum tuning values for the gain, integral time and derivative time.

### PID commissioning control panel

The PID commissioning control panel included within SIMATIC STEP 7 Basic simplifies the loop tuning process. It provides both automatic tuning and manual control capabilities for a single control loop and it also provides a graphical trend view of the tuning process.

The tuning of PID control loops is fast and accurate using the commissioning control panel included with SIMATIC STEP 7 Basic.



KTP400 Basic mono PN



KTP600 Basic color PN

## The SIMATIC HMI Basic Panels: high-quality panels at attractive prices.

The SIMATIC HMI Basic Panels are designed for seamless compatibility with the new SIMATIC S7-1200 controller. Our new SIMATIC HMI Basic Panels for compact applications provide a solution that adapts to your specific visualization requirements with optimized performance and functionality, a wide variety of screen sizes and mounting compatibility for easy upgrades.





### Optimized performance and functionality

The SIMATIC S7-1200 integrates perfectly with the SIMATIC HMI Basic Panels to provide simple visualization and control options for compact automation applications. With the seamless integration between the controller and HMI engineering software, SIMATIC STEP 7 Basic and SIMATIC WinCC Basic, the perfect solution with the best results can be achieved in the shortest amount of time.

### Touch screen and tactile keys

The new SIMATIC HMI Basic Panels feature a touch display for intuitive operation. Apart from touch screen operation on 4", 6" or 10" displays, the panels also have fully programmable keys with tactile feedback. A device with a 15" touch screen is also available for applications where visualization requires a larger display area. With an IP65 degree of protection, the SIMATIC HMI Basic Panels are suitable for use in rough industrial environments.

# Numerous standard functions for engineering of compact automation tasks.



The new SIMATIC HMI Basic Panels with an integrated PROFINET interface allow easy and user-friendly visualization of machines and processes. This represents an essential part of the interplay with the SIMATIC S7-1200.

#### **PROFINET** interface

Each of the SIMATIC HMI Basic Panels has an integrated PROFINET interface. This enables communication with the controller and the transmission of parameterization and configuration data. The PROFINET interface, which is integrated in the SIMATIC S7-1200 controller, makes the interplay between the controller and the SIMATIC HMI Basic Panels easy and reliable.

### Space-saving design and ruggedness

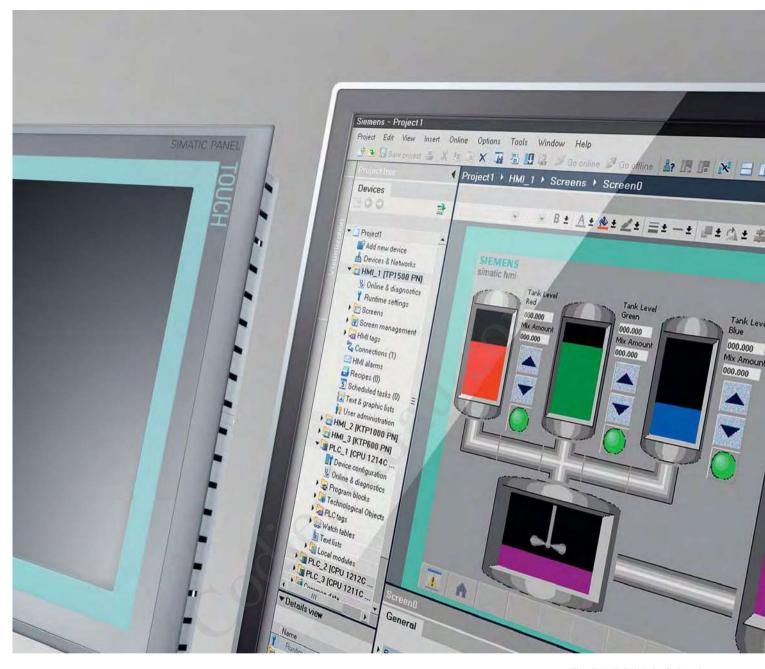
With the IP65 degree of protection, the SIMATIC HMI Basic Panels are very well suited for use in rough industrial environments. With compact installation dimensions, they are also fit for applications where space is limited. In applications where space is extremely limited, the four- and six-inch variants can be installed and configured in an upright position.

#### **Functionalities**

All SIMATIC HMI Basic Panels are equipped with a complete range of relevant functionalities, such as alarm logging systems, recipe management, trend functionality, and vector graphics. A comprehensive library with various graphics and objects is provided within the engineering system. User administration according to the demands of different industries is available as well, for example authentication with user ID and password.

### Worldwide application

With various certifications and the fulfillment of different norms and regulations, configuration data being available in up to 32 languages and support of Asian and Cyrillic fonts, the SIMATIC HMI Basic Panels are perfectly fit for worldwide application. During operation, up to five languages are available and can be changed online. Language-dependent graphics additionally support intuitive operation.



### Display and graphics

The SIMATIC HMI Basic Panels have a standard touch display for intuitive operation. The use of displays with graphical functionality offers entirely new possibilities for visualization: Vector graphics, the representation of trend charts, texts, bitmaps and I/O fields enable a clearly arranged and thus user-friendly operation display.

### **Function keys**

Aside from touch screen functionality, the SIMATIC HMI Basic Panels in sizes of four-, six- and ten-inch screens have individually configurable function keys — this means individual functionalities may be configured according to the selected display on the screen. Additional usability and operational reliability is ensured with the tactile feedback provided by these function keys.

The SIMATIC HMI Basic Panels are easily configured using SIMATIC WinCC Basic which is integrated into the SIMATIC STEP 7 Basic engineering system.



## One software is all you need for basic tasks in various applications.

SIMATIC STEP 7 Basic is designed to be intuitive, easy to learn and easy to use. This provides you with highest efficiency in engineering. Smart functionalities such as intuitive editors, drag and drop functionality as well as "IntelliSense" tools simply let you engineer faster. This new software architecture comes from a stable source for future innovations – Siemens has many years of experience in software development and has thus made SIMATIC STEP 7 Basic highly future-oriented.



#### One common engineering framework

SIMATIC STEP 7 Basic, including
SIMATIC WinCC Basic, has task-oriented, intelligent and intuitive editors that enable it to serve as one common engineering framework for programming SIMATIC S7-1200 controllers and configuring SIMATIC HMI Basic Panels. The new integrated engineering system SIMATIC STEP 7 Basic offers you intuitive and fast engineering capabilities for programming and commissioning comprehensive automation solutions.

### Supporting first-time users and professionals

With SIMATIC STEP 7 Basic, ease of use is guaranteed, whether you are just starting out in engineering or have many years of routine. Engineering is easy to learn and use for starters, and fast and efficient for professionals.

Different users may choose from two different types of views – which ever suits them best. Using the portal view, you have all tasks for an automation

project at a glance. This means beginners are supported with a task-oriented user guidance and with recommended editors that are perfectly fit for their automation task. When using the project view, your entire project is hierarchically structured in the project tree, enabling fast, intuitive access to all editors, parameters and project data, ensuring object-oriented engineering. Both first-time users and professionals will be able to solve engineering tasks fast and efficiently.

The Controller in detail
The Panels in detail
The Software in detail

## A new dimension in intuitive and efficient engineering.

SIMATIC STEP 7 Basic with integrated SIMATIC WinCC Basic enables the user to perform an unparalleled fast and easy engineering. One project view for all, state-of-the-art user interface technology for intuitive graphical engineering with intelligent drag and drop functionality, shared data handling and more ensures high-quality projects.

### One common project tree for controller and HMI

One common project view relieves you from handling separate files for each automation device. This makes sure that your whole project is always consistent after changes in any part of the project. Thus, high project quality is ensured. The project tree's clearly arranged structure remains organized even with complex engineering projects. This is the basis for fast access to respective devices, folders or specific views that will assist you in engineering an automation task.

### Intelligent drag and drop between controller and HMI editors

Symbols may be assigned to hardware with the drag and drop functionality; the same method can be used for connecting tags between the controllers and HMI. This enables the user to efficiently use both HMI and controller editors within one common engineering framework.

### Clearly arranged graphical engineering

A fast and intuitive configuration of devices and networks is ensured by the graphical editors. Connections can be easily configured by graphically connecting the individual devices with lines. In the online mode, visual diagnostics information is provided. For users, this means complex systems may be handled easily and efficiently and large projects are still clearly arranged.

### Clear and intuitive user interface for highest usability

The software has a task-oriented user concept. All editors are embedded into one common framework. The user may intuitively work with all editors

and change between them per mouse click. Common functions for all editors enable the user to handle projects fast and efficiently. An attractive graphical user interface and immediate system responsiveness on a standard PC ensure ease of use and highest productivity from the beginning of every project.

### Higher project quality due to shared data handling and consistent symbolism

Automated data consistency ensures high project quality. Modified application data is automatically updated within the entire project. The cross-referencing concept ensures that variables are used consistently within all parts of the project and for various devices – they can thus be updated consistently. Symbols are automatically generated and assigned to respective I/Os. Data is only entered once, meaning that no additional address and data module handling is needed, which reduces the risk of errors. 1234

### Reuse of data due to a comprehensive library concept

Users may save various engineering elements such as blocks, tags, alarms, HMI screens, individual modules and entire stations in local and global libraries. These elements can be reused within the same project and in different projects as well. Data may be exchanged between separately configured systems with the help of the global library. (4)







### More beneficial features.

Whether the direct online testing and diagnosis, the easy addition of technology objects or the library concept for time-efficient reuse of data – these and many more functions in detail add to the overall concept of a new dimension in engineering.

#### Online test and diagnostics

Only a single mouse click is needed to go online, even if a project has not been loaded. Once online, the project's online and offline status are immediately compared to detect possible differences. Differences or conflicts are clearly displayed, as different engineering modules can be opened in both online and offline status.

#### Adding technology objects

Adding technology objects is only a mouse click away as well. While adding new objects such as an axis or a PID controller, respective settings are displayed in the engineering system's "Add new object" window. The object may be named according to its function. When fine-tuning various objects, the user is supported with a function description and may obtain additional information

via help online. Once all information has been assigned, the new object is opened in the editor right away, if required.

### Controller programming

Intelligent functions support the user and reduce errors. Configuration and modification of program modules is easy and efficient with only little information to put in. Frequently used commands can even be stored in a favorites list and the entire engineering modules can be copied and added to programs of other SIMATIC S7-1200 controllers; new symbols are automatically added.

Changes can be made very quickly. With a single click, functional modules can be altered subsequently. The modules may be saved, even if not all symbols or I/Os have been assigned. The symbols can also be altered within the user program.

It is also easy to configure and modify connections.

### Integrated HMI

SIMATIC STEP 7 Basic includes the powerful HMI software SIMATIC WinCC Basic for efficient programming and configuring of SIMATIC HMI Basic Panels. Efficient engineering means for example: direct use of controller process values in the HMI project using intelligent drag and drop functionality. HMI is part of the entire project which means that consistent HMI data is always guaranteed. Connections between HMI and PLC can be centrally defined. Several templates can be created and assigned to other screens. Completely integrated HMI functionality makes configuring the SIMATIC HMI Basic Panels very easy, highly powerful and efficient at the same time.

### **SIMATIC HMI Basic Panels**



#### KTP400 Basic mono PN

Touch Screen + 4 Function Keys, 3.8" LCD mono FSTN display, 4 gray scales

6AV6 647-0AA11-3AX0



#### KTP600 Basic mono PN

Touch Screen + 6 Function Keys, 5.7" LCD mono FSTN display, 4 gray scales

6AV6 647-0AB11-3AX0



### KTP600 Basic color PN

Touch Screen + 6 Function Keys, 5.7" LCD TFT display, 256 colors

6AV6 647-0AD11-3AX0



### KTP1000 Basic color PN

Touch Screen + 8 Function Keys, 10.4" LCD TFT display, 256 colors

6AV6 647-0AF11-3AX0



### TP1500 Basic color PN

Touch Screen, 15.0" LCD TFT display, 256 colors

6AV6 647-0AG11-3AX0

### Compact Switch Module



### CSM 1277

4-port unmanaged switch, 4xRJ45 sockets, 10/100 Mbit/s

6GK7 277-1AA00-0AA0

### Power Module



#### PM 1207

Input: AC 120/230 V, 50/60 Hz, 1.2 A/0.67 A, Output: DC 24 V/2.5 A

6EP1 332-1SH71



### **Engineering System**



SIMATIC STEP 7 Basic 6ES7 822-0AA00-0YA0

**Software Update Service** 6ES7 822-0AA00-0YL0

### Communication Modules



**CM 1241 RS232** 6ES7 241-1AH30-0XB0

**CM 1241 RS485** 6ES7 241-1CH30-0XB0

### Signal Boards



**SB 1221 DC 200 kHz** DI 4x5 V DC DI 4x24 V DC

6ES7 221-3AD30-0XB0 6ES7 221-3BD30-0XB0

**SB 1222 DC 200 kHz** DQ 4x5 V DC 0.1 A DQ 4x24 V DC 0.1 A

6ES7 222-1AD30-0XB0 6ES7 222-1BD30-0XB0

SB 1223 DC/DC

DI 2x24 V DC / DQ 2x24 V DC 0.5 A

6ES7 223-0BD30-0XB0

SB 1223 DC/DC 200 kHz

DI 2x5 V DC / DQ 2x5 V DC 0.1 A DI 2x24 V DC / DQ 2x24 V DC 0.1 A 6ES7 223-3AD30-0XB0 6ES7 223-3BD30-0XB0

SB 1232 AQ

AQ 1x12 Bit ±10 V DC or 0-20 mA

6ES7 232-4HA30-0XB0







### SIMATIC S7-1200 Compact Controllers



### CPU 1211C

DI 6x24 V DC, DQ 4x24 V DC or 4xRLY, AI 2x10 Bit 0–10 V DC DC/DC/DC 6ES7 211-1AD30-0XB0 AC/DC/RLY 6ES7 211-1BD30-0XB0 DC/DC/RLY 6ES7 211-1HD30-0XB0



#### CPU 1212C

DI 8x24 V DC, DQ 6x24 V DC or 6xRLY, AI 2x10 Bit 0–10 V DC DC/DC/DC 6ES7 212-1AD30-0XB0 AC/DC/RLY 6ES7 212-1BD30-0XB0 DC/DC/RLY 6ES7 212-1HD30-0XB0



#### CPU 1214C

DI 14x24 V DC, DQ 10x24 V DC or 10xRLY, AI 2x10 Bit 0–10 V DC DC/DC/DC 6ES7 214-1AE30-0XB0 AC/DC/RLY 6ES7 214-1BE30-0XB0 DC/DC/RLY 6ES7 214-1HE30-0XB0

### Accessories



SIMATIC Memory Card 2 MB (optional) 24 MB (optional)



SIM 1274 Input Simulator 8 position for CPU 1211C/CPU 1212C 14 position for CPU 1214C



Signal Module Expansion Cable 2.0 m

### Signal Modules



SM 1221 DC DI 8x24 V DC DI 16x24 V DC

6ES7 221-1BF30-0XB0 6ES7 221-1BH30-0XB0

SM 1222 DC DQ 8x24 V DC 0.5 A DO 16x24 V DC 0.5 A

6FS7 222-1RF30-0XR0 6ES7 222-1BH30-0XB0



**SM 1222 RLY** DQ 8xRLY 30 V DC/250 V AC 2 A DO 16xRLY 30 V DC/250 V AC 2 A

6ES7 222-1HF30-0XB0 6ES7 222-1HH30-0XB0

SM 1223 DC/DC DI 8x24 V DC, DQ 8x24 V DC 0.5 A DI 16x24 V DC, DQ 16x24 V DC 0.5 A

6ES7 223-1BH30-0XB0 6ES7 223-1BL30-0XB0



SM 1223 DC/RLY DI 8x24 V DC, DQ 8xRLY 30 V DC/250 V AC 2 A DI 16x24 V DC, DQ 16xRLY 30 V DC/250 V AC 2 A

6ES7 223-1PH30-0XB0 6ES7 223-1PL30-0XB0



SM 1231 AI AI 4x13 Bit ±10 V DC, ±5 V DC, ±2.5 V DC or 0-20 mA 6ES7 231-4HD30-0XB0 Al 8x13 Bit ±10 V DC, ±5 V DC, ±2.5 V DC or 0–20 mA 6ES7 231-4HF30-0XB0



6ES7 954-8LB00-0AA0

6ES7 954-8LF00-0AA0

6ES7 274-1XF30-0XA0

6ES7 274-1XH30-0XA0

6ES7 290-6AA30-0XA0

**SM 1231 RTD** AI 4xRTDx16 Bit Types: Platinum (Pt), Copper (Cu), Nickel (Ni) or Resistance 6FS7 231-5PD30-0XB0



SM 1231 TC AI 4xTCx16 Bit Types: J, K, T, E, R, S, N, C, TXK/XK(L) Voltage range: ±80 mV 6ES7 231-5QD30-0XB0



SM 1232 AQ AQ 2x14 Bit ±10 V DC or 0-20 mA 6ES7 232-4HB30-0XB0 AQ 4x14 Bit ±10 V DC or 0-20 mA 6ES7 232-4HD30-0XB0



SM 1234 AI/AO AI 4x13 Bit  $\pm 10$  V DC,  $\pm 5$  V DC,  $\pm 2.5$  V DC or 0-20 mA, AQ 2x14 Bit ±10 V DC or 0-20 mA 6ES7 234-4HE30-0XB0

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### SIMATIC S7-1200 Starter Kits



### SIMATIC S7-1200 Starter Kit

CPU 1212C AC/DC/RLY,
Input Simulator,
SIMATIC STEP 7 Basic,
IE TP Cord 2 m,
Documentation Collection CD and more ...

6ES7 212-1BD30-4YB0



EE

### SIMATIC S7-1200 + KTP400 Basic Starter Kit

CPU 1212C AC/DC/RLY,
Input Simulator,
KTP400 Basic mono PN,
SIMATIC STEP 7 Basic,
IE TP Cord 2 m,
Documentation Collection CD and more ...

6AV6 651-7AA01-3AA0



### SIMATIC S7-1200 + KTP600 Basic Starter Kit

CPU 1212C AC/DC/RLY,
Input Simulator,
KTP600 Basic color PN,
SIMATIC STEP 7 Basic,
IE TP Cord 2 m,
Documentation Collection CD and more ...

6AV6 651-7DA01-3AA0



### Central processing units



	Article no.: *
CDU 1011C	
CPU 1211C	6EC7211 1 AE40 OVPO
CPU 1211C (6 DI 24V DC; 4 DO 24VDC; 2 AI), PS 24V DC	6ES7211-1AE40-0XB0
CPU 1211C (6 DI 24V DC; 4 DO Relay ; 2 AI), PS 230V AC	6ES7211-1BE40-0XB0
CPU 1211C (6 DI 24V DC; 4 DO Relay ; 2 AI), PS 24V DC	6ES7211-1HE40-0XB0
CPU 1212C	CECTO10 1 4 E 40 0VP0
CPU 1212C (8 DI 24V DC; 6 DO 24VDC; 2 AI), PS 24V DC	6ES7212-1AE40-0XB0
CPU 1212C (8 DI 24V DC; 6 DO Relay ; 2 AI), PS 230V AC	6ES7212-1BE40-0XB0
CPU 1212C (8 DI 24V DC; 6 DO Relay ; 2 AI), PS 24V DC	6ES7212-1HE40-0XB0
CPU 1212FC (DC/DC/DC)	6ES7212-1AF40-0XB0
CPU 1212FC (DC/DC/Rly)	6ES7212-1HF40-0XB0
SIPLUS S7-1200 CPU 1212 AC/DC/RLY	6AG1212-1BE40-4XB0
SIPLUS S7-1200 CPU 1212 AC/DC/RLY	6AG1212-1BE40-2XB0
SIPLUS S7-1200 CPU 1212C DC/DC/DC RAIL	6AG2212-1AE40-1XB0
SIPLUS S7-1200 CPU 1212 DC/DC/DC	6AG1212-1AE40-4XB0
SIPLUS S7-1200 CPU 1212 DC/DC/DC	6AG1212-1AE40-2XB0
SIPLUS S7-1200 CPU 1212 DC/DC/RLY	6AG1212-1HE40-2XB0
SIPLUS S7-1200 CPU 1212 DC/DC/RLY	6AG1212-1HE40-4XB0
CPU 1214C	
CPU 1214C (14 DI 24V DC; 10 DO 24VDC ; 2 AI), PS 24V DC	6ES7214-1AG40-0XB0
CPU 1214C (14 DI 24V DC; 10 DO Relay ; 2 AI), PS 230V AC	6ES7214-1BG40-0XB0
CPU 1214C (14 DI 24V DC; 10 DO Relay ; 2 AI), PS 24V DC	6ES7214-1HG40-0XB0
CPU 1214FC (DC/DC/DC)	6ES7214-1AF40-0XB0
CPU 1214FC (DC/DC/Rly)	6ES7214-1HF40-0XB0
SIPLUS S7-1200 CPU 1214 AC/DC/RLY	6AG1214-1BG40-4XB0
SIPLUS S7-1200 CPU 1214 AC/DC/RLY	6AG1214-1BG40-2XB0
SIPLUS S7-1200 CPU 1214 AC/DC/RLY	6AG1214-1BG40-5XB0
SIPLUS S7-1200 CPU 1214C DC/DC/DC RAIL	6AG2214-1AG40-1XB0
SIPLUS S7-1200 CPU 1214 DC/DC/DC	6AG1214-1AG40-4XB0
SIPLUS S7-1200 CPU 1214 DC/DC/DC	6AG1214-1AG40-2XB0
SIPLUS S7-1200 CPU 1214 DC/DC/DC	6AG1214-1AG40-5XB0
SIPLUS S7-1200 CPU 1214 DC/DC/RLY	6AG1214-1HG40-5XB0
SIPLUS S7-1200 CPU 1214 DC/DC/RLY	6AG1214-1HG40-2XB0
SIPLUS S7-1200 CPU 1214 DC/DC/RLY	6AG1214-1HG40-4XB0
SIPLUS S7-1200 CPU 1214FC DC/DC/DC	6AG1214-1AF40-5XB0
SIPLUS S7-1200 CPU 1214FC DC/DC/RLY	6AG1214-1HF40-5XB0
CPU 1215C	
CPU 1215C (14 DI 24V DC; 10 DO 24VDC; 2 AI; 2AO), PS 24V DC (2 PROFINET PORT)	6ES7215-1AG40-0XB0
CPU 1215C (14 DI 24V DC; 10 DO Relay; 2 AI, 2 AO), PS 230V	6ES7215-1BG40-0XB0
AC (2 PROFINET PORT)	
CPU 1215C (14 DI 24V DC; 10 DO Relay; 2 AI, 2AO), PS 24V DC (2 PROFINET PORT)	6ES7215-1HG40-0XB0
CPU 1215FC (DC/DC/DC)	6ES7215-1AF40-0XB0
CPU 1215FC (DC/DC/Rly)	6ES7215-1HF40-0XB0
SIPLUS S7-1200 CPU 1215 AC/DC/RLY	6AG1215-1BG40-4XB0
SIPLUS S7-1200 CPU 1215 AC/DC/RLY	6AG1215-1BG40-2XB0
SIPLUS S7-1200 CPU 1215C AC/DC/RLY	6AG1215-1BG40-5XB0
SIPLUS S7-1200 CPU 1215C DC/DC/DC	6AG1215-1AG40-5XB0
SIPLUS S7-1200 CPU 1215C DC/DC/RLY	6AG1215-1HG40-5XB0
SIPLUS S7-1200 CPU 1215 DC/DC/DC	6AG1215-1AG40-2XB0
SIPLUS S7-1200 CPU 1215 DC/DC/DC	6AG1215-1AG40-4XB0
SIPLUS S7-1200 CPU 1215 DC/DC/RLY	6AG1215-1HG40-2XB0
SIPLUS S7-1200 CPU 1215 DC/DC/RLY	6AG1215-1HG40-4XB0
SIPLUS S7-1200 CPU 1215FC DC/DC/DC	6AG1215-1AF40-5XB0

### : Safety-related component

**CPU 1217C** 

<sup>\*</sup> By clicking on the article number, you will be taken to the product in the TIA Selection Tool cloud.



### **Central processing units**

### Article no.: \*

Article no.: \*

CPU 1217C (10 DI 24V DC/4 DI 5V DC Diff; 6 DO 24VDC/4 DO 5V DC Diff; 2 AI, 2AO), PS 24V DC (2 PN)

6ES7217-1AG40-0XB0

### Signal boards



Digital inputs	
Signal board DI 4 x 24V DC 200KHZ	6ES7221-3BD30-0XB0
Signal board DI 4 x 5V DC 200KHZ	6ES7221-3AD30-0XB0
SIPLUS S7-1200 SB 1221 4DI 24VDC	6AG1221-3BD30-5XB0
SIPLUS S7-1200 SB 1221 4DI 5VDC	6AG1221-3AD30-5XB0
Digital outputs	
Signal board DO 4 x 24V DC 200KHZ	6ES7222-1BD30-0XB0
Signal board DO 4 x 5V DC 200KHZ	6ES7222-1AD30-0XB0
SIPLUS S7-1200 SB 1222 4DQ 24VDC	6AG1222-1BD30-5XB0
SIPLUS S7-1200 SB 1222 4DQ 5VDC	6AG1222-1AD30-5XB0
Digital inputs/outputs	
Signal board DI 2 x 24 V DC, DO 2 x 24 V DC	6ES7223-0BD30-0XB0
Signal board DI 2 x 24 V DC, DO 2 x 24 V DC, 0.1A	6ES7223-3BD30-0XB0
Signal board DI 2 x 5 V DC, DO 2 x 5 V DC, 0.1A	6ES7223-3AD30-0XB0
SIPLUS S7-1200 SB 1223 2DI/2DQ, 24VDC	6AG1223-0BD30-4XB0
SIPLUS S7-1200 SB 1223 2DI/2DQ, 24VDC	6AG1223-0BD30-5XB0
SIPLUS S7-1200 SB 1223 2DI/2DQ, 24VDC	6AG1223-3BD30-5XB0
SIPLUS S7-1200 SB1223 2DI/2DQ, 5VDC	6AG1223-3AD30-5XB0
SIPLUS S7-1200 SB 1223 2DI/2DQ RAIL	6AG2223-0BD30-1XB0
Analog inputs	
Signal board AI, 1x12-bit, +-10 V or 0-20 mA	6ES7231-4HA30-0XB0
Signal board AE, resistor, RTD 1x16-bit	6ES7231-5PA30-0XB0
Signal board AI, thermocouple, TC 1x16-bit	6ES7231-5QA30-0XB0
SIPLUS S7-1200 SB 1231 1AI RTD	6AG1231-5PA30-5XB0
Analog outputs	
Signal board AO 1x12-bit	6ES7232-4HA30-0XB0
SIPLUS S7-1200 SB 1232 1AQ	6AG1232-4HA30-4XB0
SIPLUS S7-1200 SB 1232 1AQ	6AG1232-4HA30-5XB0

### **Communication boards**





### Point-to-point

Communication board CB 1241 RS485	6ES7241-1CH30-1XB0
SIPLUS S7-1200 CB 1241 RS485	6AG1241-1CH30-5XB1
SIPLUS S7-1200 CB 1241 RS485 T1 RAIL	6AG2241-1CH30-1XB0

<sup>:</sup> Safety-related component

<sup>\*</sup> By clicking on the article number, you will be taken to the product in the TIA Selection Tool cloud.



### **Battery boards**

### Article no.: \*



Battery board for long-term buffering of real-time clock

6ES7297-0AX30-0XA0

### Digital modules

### Article no.: \*



Digital input SM 1221	
Digital input, 8 DI, 24V DC	6ES7221-1BF32-0XB0
Digital input, 16 DI, 24V DC	6ES7221-1BH32-0XB0
SIPLUS S7-1200 SM 1221 16DI	6AG1221-1BH32-4XB0
SIPLUS S7-1200 SM 1221 16DI	6AG1221-1BH32-2XB0
SIPLUS S7-1200 SM 1221 8DI	6AG1221-1BF32-2XB0
SIPLUS S7-1200 SM 1221 8DI	6AG1221-1BF32-4XB0
SIPLUS S7-1200 SM 1221 8DI RAIL	6AG2221-1BF32-1XB0

### Digital output SM 1222

- 19·100 - 10·10 - 10·	
Digital output, 8 DO relay	6ES7222-1HF32-0XB0
Digital output, 8 DA relay change-over contact	6ES7222-1XF32-0XB0
Digital output, 16 DO relay	6ES7222-1HH32-0XB0
Digital output, 8 DO, 24V DC	6ES7222-1BF32-0XB0
Digital output, 16 DO, 24V DC	6ES7222-1BH32-0XB0
SIPLUS S7-1200 SM 1222 16DQ	6AG1222-1BH32-4XB0
SIPLUS S7-1200 SM 1222 16DQ	6AG1222-1BH32-2XB0
SIPLUS S7-1200 SM 1222 16DQ RLY	6AG1222-1HH32-4XB0
SIPLUS S7-1200 SM 1222 16DQ RLY	6AG1222-1HH32-2XB0
SIPLUS S7-1200 SM 1222 8DQ	6AG1222-1BF32-4XB0
SIPLUS S7-1200 SM 1222 8DQ	6AG1222-1BF32-2XB0
SIPLUS S7-1200 SM 1222 8DQ RAIL	6AG2222-1BF32-1XB0
SIPLUS S7-1200 SM 1222 8DQ RLY	6AG1222-1HF32-2XB0
SIPLUS S7-1200 SM 1222 8DQ RLY	6AG1222-1XF32-4XB0
SIPLUS S7-1200 SM 1222 8DQ RLY	6AG1222-1XF32-2XB0
SIPLUS S7-1200 SM 1222 8DQ RLY	6AG1222-1HF32-4XB0
SIPLUS S7-1200 SM 1222 8DQ RLY RAIL	6AG2222-1HF32-1XB0
Digital I/O SM 1223	

Digital I/O SM 1223	
Digital I/O, 8 DI, 24V DC / 8 DO, 24V DC	6ES7223-1BH32-0XB0
Digital I/O, 16 DI, 24V DC / 16 DO, 24V DC	6ES7223-1BL32-0XB0
Digital I/O, 8 DI, 24V DC / 8 DO, relay	6ES7223-1PH32-0XB0
Digital I/O, 16 DI, 24V DC / 16 DO, relay	6ES7223-1PL32-0XB0
Digital I/O, 8 DI, 120/230 V AC / 8 DO, relay	6ES7223-1QH32-0XB0
SIPLUS S7-1200 SM 1223 16DI/16DQ	6AG1223-1BL32-4XB0
SIPLUS S7-1200 SM 1223 16DI/16DQ	6AG1223-1BL32-2XB0
SIPLUS S7-1200 SM 1223 16DI/16DQ RAIL	6AG2223-1PL32-1XB0
SIPLUS S7-1200 SM 1223 16DI/16DQ RLY	6AG1223-1PL32-4XB0
SIPLUS S7-1200 SM 1223 16DI/16DQ RLY	6AG1223-1PL32-2XB0
SIPLUS S7-1200 SM 1223 8DI/8DQ	6AG1223-1BH32-4XB0
SIPLUS S7-1200 SM 1223 8DI/8DQ	6AG1223-1BH32-2XB0
SIPLUS S7-1200 SM 1223 8DI/8DQ RAIL	6AG2223-1BH32-1XB0
SIPLUS S7-1200 SM 1223 8DI/8DQ RLY	6AG1223-1PH32-2XB0
SIPLUS S7-1200 SM 1223 8DI/8DQ RLY	6AG1223-1PH32-4XB0

<sup>:</sup> Safety-related component

<sup>\*</sup> By clicking on the article number, you will be taken to the product in the TIA Selection Tool cloud.



#### **Digital modules** Article no.: \* SIPLUS S7-1200 SM 1223 8DI AC/8DQ RLY 6AG1223-1QH32-4XB0 SIPLUS S7-1200 SM 1223 8DI AC/8DQ RLY 6AG1223-1QH32-2XB0 Fail-safe digital modules SM 1226 SM 1226 F-DI 16 x 24 VDC 6ES7226-6BA32-0XB0 SM 1226 F-DQ 4 x 24 VDC 6ES7226-6DA32-0XB0 SM 1226 F-DO 2 x relay 6ES7226-6RA32-0XB0 SIPLUS S7-1200 SM 1226 F-DI 16x24VDC 6AG1226-6BA32-5XB0 SIPLUS S7-1200 SM 1226 F-DQ 2xRelay 6AG1226-6RA32-5XB0 SIPLUS S7-1200 SM 1226 F-DQ 4x24VDC 6AG1226-6DA32-5XB0

### **Analog modules**

### Article no.: \*



SM 1231 analog input module	
Analog input 4 AI; 13-bit	6ES7231-4HD32-0XB0
Analog input 8 AI; 13-bit	6ES7231-4HF32-0XB0
Analog input 4 AI; 16-bit	6ES7231-5ND32-0XB0
Analog input 4 AI, resistor, RTD	6ES7231-5PD32-0XB0
Analog input 8 AI, resistor, RTD	6ES7231-5PF32-0XB0
Analog input 4 AI, thermocouple, TC	6ES7231-5QD32-0XB0
Analog input 8 AI, thermocouple, TC	6ES7231-5QF32-0XB0
Analog input, SM 1238 Energy Meter 480VAC	6ES7238-5XA32-0XB0
SIPLUS S7-1200 SM 1231 4AI 13Bit	6AG1231-4HD32-4XB0
SIPLUS S7-1200 SM 1231 4AI 16Bit	6AG1231-5ND32-4XB0
SIPLUS S7-1200 SM 1231 4AI RTD 16Bit	6AG1231-5PD32-2XB0
SIPLUS S7-1200 SM 1231 4AI RTD 16Bit	6AG1231-5PD32-4XB0
SIPLUS S7-1200 SM 1231 4AI TC 16Bit	6AG1231-5QD32-4XB0
SIPLUS S7-1200 SM 1231 8AI 13Bit	6AG1231-4HF32-4XB0
SIPLUS S7-1200 SM 1231 8AI RTD 16Bit	6AG1231-5PF32-4XB0
SIPLUS S7-1200 SM 1231 8AI RTD 16Bit	6AG1231-5PF32-2XB0
SIPLUS S7-1200 SM 1231 8AI TC 16Bit	6AG1231-5QF32-4XB0
SIPLUS S7-1200 SM 1231 RTD RAIL	6AG2231-5PD32-1XB0
SM 1232 analog output module	
Analog output 4 AO; 14-bit	6ES7232-4HD32-0XB0
Analog output 2 AO; 14-bit	6ES7232-4HB32-0XB0
SIPLUS S7-1200 SM 1232 2AQ 13Bit	6AG1232-4HB32-4XB0
SIPLUS S7-1200 SM 1232 4AQ 14Bit	6AG1232-4HD32-4XB0
SIPLUS S7-1200 SM 1232 4AQ 14Bit	6AG1232-4HD32-2XB0
SIPLUS S7-1200 SM 1232 4AQ RAIL	6AG2232-4HD32-1XB0
SM 1234 analog input/output module	
Analog I/O 4 AI, 2 AO	6ES7234-4HE32-0XB0
SIPLUS S7-1200 SM 1234 4AI/2AQ 13Bit	6AG1234-4HE32-2XB0
SIPLUS S7-1200 SM 1234 4AI/2AQ 13Bit	6AG1234-4HE32-4XB0
SIPLUS S7-1200 SM 1234 4AI/2AQ RAIL	6AG2234-4HE32-1XB1

<sup>:</sup> Safety-related component

<sup>\*</sup> By clicking on the article number, you will be taken to the product in the TIA Selection Tool cloud.



### **Simulation modules**

### Article no.: \*

Article no.: \*



Simulator module for use with S7-1211C / S7-1212C, 8 inputs 6ES7274-1XF30-0XA0

Simulator module for use with S7-1214C / S7-1215C , 14  $\,$  6ES7274-1XH30-0XA0 inputs DC  $\,$ 

Simulator module for use with S7-1217C, 10 inputs 24V DC /  $\,$  6ES7274-1XK30-0XA0 4 inputs 5V DC

SIMATIC S7-1200, analog simulator SIM 1274, 2 6ES7274-1XA30-0XA0

potentiometer inputs

### **Communication modules**

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SM 1278 IO-Link Master	6ES7278-4BD32-0XB0
Communication module CM 1241, RS232	6ES7241-1AH32-0XB0
Communication module CM 1241, RS422/485	6ES7241-1CH32-0XB0
Communication module CM 1242-5 PROFIBUS DP slave	6GK7242-5DX30-0XE0
Communication module CM 1243-2 (AS-I V3.0)	3RK7243-2AA30-0XB0
Communication module CM 1243-5 PROFIBUS DP master	6GK7243-5DX30-0XE0
Communication module RF120C (S7-1200)	6GT2002-0LA00
Communications processor CP 1242-7 GPRS	6GK7242-7KX31-0XE0
Communications processor CP 1243-1	6GK7243-1BX30-0XE0
Communication processor CP 1243-7 LTE (EU models)	6GK7243-7KX30-0XE0
Communication processor CP 1243-7 LTE (US models)	6GK7243-7SX30-0XE0
Communications processor CP 1243-8 IRC	6GK7243-8RX30-0XE0
DCM 1271 (AS-I data decoupling)	3RK7271-1AA30-0AA0
Compact Switch Module CSM 1277	6GK7277-1AA10-0AA0
SIPLUS	
SIPLUS NET CP 1242-7 V2	6AG1242-7KX31-7XE0
SIPLUS NET CSM 1277	6AG1277-1AA10-4AA0
SIPLUS S7-1200 CM1241 RS232	6AG1241-1AH32-2XB0
SIPLUS S7-1200 CM 1241 RS232	6AG1241-1AH32-4XB0
SIPLUS S7-1200 CM1241 RS232 RAIL	6AG2241-1AH32-1XB0
SIPLUS S7-1200 CM 1241 RS422/485	6AG1241-1CH32-4XB0
SIPLUS S7-1200 CM 1241 RS422/485	6AG1241-1CH32-2XB0
SIPLUS S7-1200 CM1241 RS422/485 RAIL	6AG2241-1CH32-1XB0
SIPLUS S7-1200 CM 1242-5	6AG1242-5DX30-2XE0
SIPLUS S7-1200 CM 1242-5 RAIL	6AG2242-5DX30-1XE0
SIPLUS S7-1200 CM 1243-2	6AG1243-2AA30-7XB0
SIPLUS S7-1200 CM 1243-5	6AG1243-5DX30-2XE0
SIPLUS S7-1200 CM 1243-5 RAIL	6AG2243-5DX30-1XE0
SIPLUS S7-1200 CP 1243-1	6AG1243-1BX30-2AX0
SIPLUS S7-1200 CP 1243-1 RAIL	6AG2243-1BX30-1XE0
SIPLUS S7-1200 SM 1278 IO-Link Master	6AG1278-4BD32-2XB0
SIPLUS S7-1200 SM 1278 IO-Link Master	6AG1278-4BD32-4XB0

<sup>:</sup> Safety-related component

<sup>\*</sup> By clicking on the article number, you will be taken to the product in the TIA Selection Tool cloud.



### Technology modules



# Weighing module SIWAREX WP231 for platform and container scales Weighing module SIWAREX WP241 for belt scales Weighing module SIWAREX WP241 for automatically dosing 7MH4960-4AA01 Weighing module SIWAREX WP251 for automatically dosing scales SIPLUS CMS1200 SM 1281 Condition Monitoring 6AT8007-1AA10-0AA0

Article no.: \*

		Article no.: *
	Power supply PM1207, 120/230V AC, output: 24V DC	6EP1332-1SH71
	SIPLUS	A
100	SIPLUS S7-1200 PM 1207	6AG1332-1SH71-4AA0
4	SIPLUS S7-1200 PM 1207	6AG1332-1SH71-7AA0

Accessories		
		Article no.: *
	Memory card	
	Manuals	
	System manual for S7-1200, German	6ES7298-8FA30-8AH0
	System manual for S7-1200, German  System manual for S7-1200, English	6ES7298-8FA30-8BH0
	System manual for S7-1200, English System manual for S7-1200, French	6ES7298-8FA30-8CH0
	System manual for S7-1200, Spanish	6ES7298-8FA30-8DH0
	System manual for S7-1200, Italian	6ES7298-8FA30-8EH0
	System manual for S7-1200, Chinese	6ES7298-8FA30-8KH0
	Easy Book for S7-1200, German	6ES7298-8FA30-8AQ0
	Easy Book for S7-1200, English	6ES7298-8FA30-8BQ0
	Easy Book for S7-1200, French	6ES7298-8FA30-8CQ0
	Easy Book for S7-1200, Spanish	6ES7298-8FA30-8DQ0
	Easy Book for S7-1200, Italian	6ES7298-8FA30-8EQ0
	Easy Book for S7-1200, Chinese	6ES7298-8FA30-8KQ0
	Terminal block	
	I/O terminal block, galvanized, 8 or 16 channel signal modules (4 pcs.)	6ES7292-1AG30-0XA0
	I/O terminal block, galvanized, CPU1211C/1212C output end (4 pcs.)	6ES7292-1AH30-0XA0
	I/O terminal block, galvanized, 32 channel signal modules (4 pcs.)	6ES7292-1AL30-0XA0
	I/O terminal block, galvanized, CPU1214C output end (4 pcs.)	6ES7292-1AM30-0XA0
	I/O terminal block, galvanized, CPU1211C/1212C input end (4 pcs.)	6ES7292-1AP30-0XA0
	I/O terminal block, galvanized, CPU1214C input end (4 pcs.)	6ES7292-1AV30-0XA0
	I/O terminal block, gold-plated, analog CPU inputs (4 pcs.)	6ES7292-1BC30-0XA0
	I/O terminal block, gold-plated, signal board (4 pcs.)	6ES7292-1BF30-0XA0

<sup>:</sup> Safety-related component

<sup>\*</sup> By clicking on the article number, you will be taken to the product in the TIA Selection Tool cloud.



### Accessories

	Article no.: *
I/O terminal block gold plated 9 or 16 shappel apples signs	L6557202 1BC20 0VA0
I/O terminal block, gold-plated, 8 or 16 channel analog signa modules (4 pcs.)	1 0E2/292-1DG30-0XA0
I/O terminal block for analog signals CPU 1215C (4 pcs.)	6ES7292-1BF30-0XB0
I/O terminal block, gold-plated, 32-channel analog signal modules (4 pcs.)	6ES7292-1BL30-0XA0
TeleService	
TeleService Adapter IE Basic	6ES7972-0EB00-0XA0
TeleService Adapter IE Advanced	6ES7972-0EA00-0XA0
TeleService module modem	6ES7972-0MM00-0XA0
TeleService module ISDN	6ES7972-0MD00-0XA0
TeleService module RS232	6ES7972-0MS00-0XA0
Quad-band GSM antenna ANT 794-4MR	6NH9860-1AA00
Tri-band GSM antenna ANT 794-3M	6NH9870-1AA00
Strain relief	
S7-1200 SINGLE PORT RJ45 STRAIN RELIEF	6ES7290-3AA30-0XA0
S7-1200 DUAL PORT RJ45 STRAIN RELIEF	6ES7290-3AB30-0XA0
Expansion cable for signal modules, two-tier configuration, 2 m	6ES7290-6AA30-0XA0
SIMATIC PD, RS485 repeater for connecting PROFIBUS DP/MPI bus systems with max. 31 nodes. Max. baud rate 12 Mbps, IP20 degree of protection, improved user handling	6ES7972-0AA02-0XA0
SIMATIC S7, diagnostic repeater for PROFIBUS DP, for online diagnostics of the PROFIBUS line, DP-NORM SLAVE up to 12 Mbps, IP20 degree of protection, FAST-CONNECT connection system	
SIPLUS	
SIPLUS DP diagnostic repeater	6AG1972-0AB01-4XA0
SIPLUS DP RS485-Repeater	6AG1972-0AA02-7XA0

<sup>:</sup> Safety-related component

<sup>\*</sup> By clicking on the article number, you will be taken to the product in the TIA Selection Tool cloud.