



**SIMATIC**

**Process Control System PCS 7  
Released modules (V9.0)**

Offer overview

valid for PCS 7 as of V9.0

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## Legal information

### Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

#### DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

#### WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

#### CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

#### NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

### Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

### Proper use of Siemens products

Note the following:

#### WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

### Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

### Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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# Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines, and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions only form one element of such a concept.

Customer is responsible to prevent unauthorized access to its plants, systems, machines and networks. Systems, machines and components should only be connected to the enterprise network or the internet if and to the extent necessary and with appropriate security measures (e.g. use of firewalls and network segmentation) in place.

Additionally, Siemens' guidance on appropriate security measures should be taken into account. For more information about industrial security, please visit:

<http://www.siemens.com/industrialsecurity>.

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends to apply product updates as soon as available and to always use the latest product versions. Use of product versions that are no longer supported, and failure to apply latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under

<http://www.siemens.com/industrialsecurity>.



# ET 200SP HA

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## 2.1 AI

### AI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
AI-DI16/DQ16 x 24VDC HART HA	6DL1 133-6EW00-OPH1	Input/output module configured channel-by-channel AI-DI/DQ	W P	M O	C	
AI16 x 1 2-wire HART HA	6DL1 134-6TH00-OPH1	Analog input module 16 AI; 0/4 ... 20 mA, 0 ... 10 mA; 16-bit; with HART	W P	M O	C	
AI16 x TC/8xRTD 2-/3-/4-wire HA	6DL1 134-6JH00-OPH1	Analog input module 16 AI TC, 8 AI RTD; 16-bit	W P	M O	C	

## 2.2 AQ

### AQ

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
AQ8 x 1 HART HA	6DL1 135-6TF00-OPH1	Analog output module 8 AQ; 0/4 ... 20 mA, 0 ... 10 mA; 16-bit; with HART	W P	M O	C	

## 2.3 DI

### DI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DI16 x 24VDC HA	6DL1 131-6BH00-OPH1	Digital input module 16 DI; 24 V DC	W P	M O	C	
DI16 x NAMUR HA	6DL1 131-6TH00-OPH1	Digital input module 16 DI; 24 V DC; NAMUR	W P	M O	C	

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DI8 x 230VAC HA	6DL1 131-6GF00-0PK0	Digital input module 8 DI; electrically isolated; 230 V AC	W P	M O		
DI8 x 24...125VDC HA	6DL1 131-6DF00-0PK0	Digital input module 8 DI; electrically isolated; 24 ... 125 V DC	W P	M O		

## 2.4 DQ

## DQ

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DQ16 x 24VDC/0.5A HA	6DL1 132-6BH00-0PH1	Digital output module 16 DQ; 24 V DC	W P	M O	C	
RQ4 x 120VDC-230VAC/ 5A CO HA	6DL1 132-6HD50-0PK0	Digital output module 4 DQ; electrically isolated; 24 ... 120 V DC, 24 ... 230 V AC	W P	M O		

## 2.5 IM

## IM

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200SP HA IM155-6 PN	6DL1 155-6AU00-0PM0	PROFINET Interface Module IM155-6 PN operational with up to 56 I/O modules	W P	S	X	

## 2.6 BusAdapter

### BusAdapter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
BA 2xRJ45	6DL1 193-6AR00-0AA0	PROFINET BusAdapter with standard Ethernet sockets (BA 2xRJ45)	W P			
BA 2xFC	6DL1 193-6AF00-0AA0	PROFINET BusAdapter with Fast connect Ethernet connector (BA 2xFC)	W P			
BA 2xLC	6DL1 193-6AG00-0AA0	PROFINET BusAdapter with fiber-optic connection glass fiber (BA 2xLC)	W P			



### 3.1 IM

#### Approved combinations

See the "SIMATIC Distributed I/O Device ET 200M" manual for the approved combinations of interface modules and bus modules and for the available functions.

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200M-IM 153-1	6ES7 153-1AA02-0XB0	Bus interface for S7-300 SMs, FM 350 to FM 352, FM 355, CP 341, module replacement during operation	W	X		08/00
ET 200M-IM 153-1, extended environmental conditions	6ES7 153-1AA82-0XB0	Bus interface for S7-300 SMs, extended environmental conditions	W	X		10/05
ET 200M-IM 153-1	6ES7 153-1AA03-0XB0	Bus interface for S7-300 SMs, FM 350 to FM 352, FM 355, CP 341, module replacement during operation	W	X		
ET 200M-IM 153-1, extended environmental conditions	6ES7 153-1AA83-0XB0	Bus interface for S7-300 SMs, extended environmental conditions	W	X		11/03
ET 200M-IM 153-2	6ES7 153-2AA01-0XB0	Bus interface for S7-300 SMs, FMs (except FM 356-4), module replacement during operation	W	X		04/00
ET 200M-IM 153-2	6ES7 153-2AA02-0XB0	Bus interface for S7-300 SMs, FMs (except FM 356-4), module replacement during operation	W	X		06/04
ET 200M-IM 153-2	6ES7 153-2BA00-0XB0 V3.x	Bus interface for S7-300 SMs, FMs (except FM 356-4), module replacement during operation, extension of process control functions	W	S	X	07/06
ET 200M-IM 153-2	6ES7 153-2BA01-0XB0 V4.x	Bus interface for S7-300 SMs, FMs (except FM 356-4), module replacement during operation, extension of process control functions	W	S	X	10/09
ET 200M-IM 153-2	6ES7 153-2BA81-0XB0 V4.x	Bus interface for S7-300 SMs, (outdoor), FMs (except FM 356-4), module replacement during operation, extension of process control functions	W	S	X	12/10

## 3.2 Accessories

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200M-IM 153-2	6ES7 153-2BA02-0XB0 V5.x	Bus interface for S7-300 SMs, FMs (except FM 356-4), module replacement during operation, extension of process control functions, up to 12 I/O modules can be operated	W	S	X	
ET 200M-IM 153-2	6ES7 153-2BA82-0XB0 V5.x	Bus interface for S7-300 SMs, (outdoor), FMs (except FM 356-4), module replacement during operation, extension of process control functions, up to 12 I/O modules can be operated	W	S	X	
ET 200M-IM 153-2 FO	6ES7 153-2AB01-0XB0	Bus interface for S7-300 SMs, with fiber optics, FMs (except FM 356-4), module replacement during operation	W	X		01/ 03
ET 200M-IM 153-2 FO	6ES7 153-2BB00-0XB0 V3.x	Bus interface for S7-300 SMs, with fiber optics, FMs (except FM 356-4), module replacement during operation, extension of process control functions	W	S	X	10/ 06
ET 200M-IM 153-4 PN HF	6ES7 153-4BA00-0XB0 V4.x	Bus interface for S7-300 SMs, with PROFINET connection; supports failsafe and HART module, PN system redundancy	W P			
ET 200M-IM 153-2	6ES7 153-2BA70-0XB0	Bus interface for S7-300 SMs (Outdoor); FMs (except FM 356-4), module replacement during operation, up to 12 I/O modules can be operated	W	S	X	
ET 200M-IM 153-2	6ES7 153-2BA10-0XB0	Bus interface for S7-300 SMs, FMs (except FM356-4), module replacement during operation, extension of process control functions, up to 12 I/O modules can be operated	W	S	X	

## 3.2 Accessories

## Approved combinations

See the "SIMATIC Distributed I/O Device ET 200M" manual for the approved combinations of interface modules and bus modules and for the available functions.

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
Partition	6ES7 195-1KA00-0XA0	Ex partition for ET 200M				
Bus module	6ES7 195-7HA00-0XA0	Active bus module for ET 200M IM 153; PS/IM				

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
Bus module	6ES7 195-7HB00-0XA0	Active bus module for ET 200M IM 153; 2x 40 mm				
Bus module	6ES7 195-7HC00-0XA0	Active bus module for ET 200M IM 153; 1x 80 mm				
BM IM/IM	6ES7 195-7HD00-0XA0	Active bus module for ET 200M IM 153; IM/IM for redundant IM operation				07/ 04
BM IM/IM	6ES7 195-7HD10-0XA0	Active bus module for ET 200M IM 153; IM/IM for redundant IM operation				
F separator bus module	6ES7 195-7HG00-0XA0	F separator bus module for ET 200M				
F separator module	6ES7 195-7KF00-0XA0	F separator module for ET 200M				



# Compact field unit

## 4.1 Compact field unit

### Compact field unit

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
Compact field unit PA	6ES7 655-5PX11-0XX0	CFU PA Compact Field Unit <ul style="list-style-type: none"> <li>• 8 fieldbus connections for PA field devices</li> <li>• 8 freely configurable channels (digital inputs and outputs)</li> </ul> Connection via PROFINET, use up to Ex Zone 2; MRP; system redundancy S2	W P	X S		

## 4.2 BusAdapter

### BusAdapter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
BA 2xRJ45	6DL1 193-6AR00-0AA0	PROFINET BusAdapter with standard Ethernet sockets (BA 2xRJ45)	W P			
BA 2xFC	6DL1 193-6AF00-0AA0	PROFINET BusAdapter with Fast connect Ethernet connector (BA 2xFC)	W P			
BA 2xLC	6DL1 193-6AG00-0AA0	PROFINET BusAdapter with fiber-optic connection glass fiber (BA 2xLC)	W P			



# ET 200PA SMART

## 5.1 AI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
AI8 Diag	6ES7 650-8AK60-0AA0	Analog input module 8 AI; 16 Bit 0/4...20mA; with diagnostics	W SM	O	C	
AI8 Diag	6ES7 650-8AK60-1AA0	Analog input module 8 AI; 16 Bit 0/4...20mA; with diagnostics; version with protective coating	W SM	O	C	
AI16 Diag	6ES7 650-8AK70-0AA0	Analog input module 16 AI; 16 Bit 0/4...20mA; with diagnostics	W SM	O	C	
AI16 Diag	6ES7 650-8AK70-1AA0	Analog input module 16 AI; 16 Bit 0/4...20mA; with diagnostics; version with protective coating	W SM	O	C	
AI TC/RTD	6ES7 650-8AR60-0AA0	Analog input module 8 AI TC, 4 AI RTD; 16 Bit; with diagnostics	W SM	O	G	
AI TC/RTD	6ES7 650-8AR60-1AA0	Analog input module 8 AI TC, 4 AI RTD; 16 Bit; with diagnostics; version with protective coating	W SM	O	G	

## 5.2 AO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
AO8 Diag	6ES7 650-8BK60-0AA0	Analog output module 8 AO; with diagnostics	W SM	O	C	
AO8 Diag	6ES7 650-8BK60-1AA0	Analog output module 8 AO; with diagnostics; version with protective coating	W SM	O	C	

## 5.3 DI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DI32	6ES7 650-8DK80-0AA0	Digital input module 32 DI; DC 24 V	W SM	O	M	
DI32	6ES7 650-8DK80-1AA0	Digital input module 32 DI; DC 24 V; version with protective coating	W SM	O	M	
DI16	6ES7 650-8DK70-0AA0	Digital input module 16 DI; DC 24 V; with diagnostics	W SM	O	C	
DI16	6ES7 650-8DK70-1AA0	Digital input module 16 DI; DC 24 V; with diagnostics; version with protective coating	W SM	O	C	

## 5.4 DO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DO32	6ES7 650-8EK80-0AA0	Digital output module 32 DO; DC 24 V / 0.5 A	W SM	O	M	
DO32	6ES7 650-8EK80-1AA0	Digital output module 32 DO; DC 24 V / 0.5 A; version with protective coating	W SM	O	M	
DO16	6ES7 650-8EK70-0AA0	Digital output module 16 DO; DC 24 V / 0.5 A; with diagnostics	W SM	O	C	
DO16	6ES7 650-8EK70-1AA0	Digital output module 16 DO; DC 24 V / 0.5 A; with diagnostics; version with protective coating	W SM	O	C	

## 5.5 IM

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
IM 650-8	6ES7 650-8PH00-0AA0	Interface module connection for ET 200PA SMART	W	S	X	
IM 650-8	6ES7 650-8PH00-1AA0	Interface module connection for ET 200PA SMART; version with protective coating	W	S	X	

## 5.6 Accessories

### Accessories

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
Bus module PS/IM	6ES7 650-8PA00-0AA0	Backplane bus module for power supply and IM 650-8				
Bus module PS/IM	6ES7 650-8PA00-1AA0	Backplane bus module for power supply and IM 650-8 version with protective coating				
Bus module IM/IM	6ES7 650-8PB00-0AA0	Backplane bus module for 2 x IM 650-8 redundant				
Bus module IM/IM	6ES7 650-8PB00-1AA0	Backplane bus module for 2 x IM 650-8 redundant version with protective coating				
Bus module	6ES7 650-8PC00-0AA0	Backplane bus module for 2 x SMART electronic module				
Bus module	6ES7 650-8PC00-1AA0	Backplane bus module for 2 x SMART electronic module Version with protective coating				



## 6.1 AI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
2 AI 2 WIRE	6ES7 134-5RB00-0AB0	Analog input module 2 AI I; 2-wire measuring transducer; 0..20 mA / 12 bits + sign, 4 ... 20 mA / 12 bits	W			09/06
2 AI 4 WIRE	6ES7 134-5RB50-0AB0	Analog input module 2 AI I; 4-wire measuring transducer; 0..20 mA / 12 bits, 4 ... 20 mA / 12 bits	W			09/06
2 AI TC	6ES7 134-5SB00-0AB0	Analog input module 2 AI TC; 15 bits + sign; standard; thermocouples: E, N, J, K, L, S, R, B, T,U	W			09/06
2 AI RTD	6ES7 134-5SB50-0AB0	Analog input module 2 AI RTD; 15 bits + sign; standard; R: 600 Ohm; RTD: Pt 100, Ni 100:	W			09/06
2 AI 2 WIRE HART	6ES7 134-5TB00-0AB0	Analog input module 2 AI; 4 ... 20 mA, with HART communication for connecting 2-wire measuring transducers	W			09/06
2 AI 4 WIRE HART	6ES7 134-5TB50-0AB0	Analog input module 2 AI; 4 ... 20 mA, with HART communication for connecting 4-wire measuring transducers	W			09/06

## 6.2 AO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
2 AO 0/4-20mA	6ES7 135-5RB00-0AB0	Analog output module 2 AO; 0..20 mA / 12 bits + sign; 4..20 mA / 12 bits	W			09/06
2 AO HART	6ES7 135-5TB00-0AB0	Analog output module 2 AO; 4..20 mA; with HART communication	W			09/06

## 6.3 DI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
4 DI NAMUR	6ES7 131-5RD00-0AB0	Digital input module 4 DI NAMUR	W			09/ 06

## 6.4 DO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
2 DO	6ES7 132-5SB00-0AB0	Digital output module 2 DO; DC 25 V / 25 mA	W			09/ 06

## 6.5 IM

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200iS-IM 151-2	6ES7 151-2AA00-0AB0	Interface module for ET 200iS electronic modules for intrinsically safe PROFIBUS DP	W	X		09/ 06

## 6.6 PS

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
PS	6ES7 138-5EA00-0AA0	Power supply for ET 200iS				09/ 06

## 6.7 Terminal module

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
TM-E30S-44iS	6ES7 193-5CB00-0AA0	Terminal module for Ems; 4 rows; screw terminal				09/ 06
TM-E30C-44iS	6ES7 193-5CB10-0AA0	Terminal module for EMs; 4 rows; spring-loaded terminal				09/ 06
TM-PS-iS	6ES7 193-5DA00-0AA0	Terminal module for PS				09/ 06
TM-IM-iS	6ES7 193-5DB00-0AA0	Terminal module for IM 151-2				09/ 06



# ET 200iSP

## 7.1 AI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
4 AI I 2WIRE HART	6ES7 134-7TD00-0AB0	Analog input module 4 AI; 4 ... 20 mA; with HART communication for connecting 2-wire measuring transducers	W	M		
4 AI I 4WIRE HART	6ES7 134-7TD50-0AB0	Analog input module 4 AI; 4 ... 20 mA; with HART communication for connecting 4-wire measuring transducers	W	M		
4 AI TC	6ES7 134-7SD00-0AB0	Analog input module 4 AI TC	W	M		
4 AI RTD	6ES7 134-7SD50-0AB0	Analog input module 4 AI RTD	W	M		05/ 08
4 AI RTD	6ES7 134-7SD51-0AB0	Analog input module 4 AI RTD	W	M		

## 7.2 AI-F

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
4 AI 2WIRE HART	6ES7 138-7FA00-0AB0	Analog input module 4 AI; 0/4 ... 20 mA; safety-related, ex i; with HART communication for connecting 2-wire measuring transducers	W	M		

## 7.3 AO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
4 AO I HART	6ES7 135-7TD00-0AB0	Analog output module 4 AO; 4 ... 20 mA; with HART communication	W	M		

## 7.4 DI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
8 DI NAMUR	6ES7 131-7RF00-0AB0	Digital input module 8 DI NAMUR	W	M		

## 7.5 DI-F

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
8 DI NAMUR	6ES7 138-7FN00-0AB0	Digital input module F-DI 8 NAMUR, safety-related, ex i	W	M		

## 7.6 DO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
4 DO DC23,1V/20mA	6ES7 132-7RD00-0AB0	Digital output module 4 DO; DC 23.1 V / 20 mA	W	M		10/ 06
4 DO DC23,1V/20mA Shutdown "H"	6ES7 132-7RD01-0AB0	Digital output module 4 DO; DC 23.1 V / 20 mA; shutdown "H"	W	M		
4 DO DC17,4V/27mA	6ES7 132-7RD10-0AB0	Digital output module 4 DO; DC 17.4 V / 27 mA	W	M		10/ 06
4 DO DC17,4V/27mA Shutdown "H"	6ES7 132-7RD11-0AB0	Digital output module 4 DO; DC 17.4 V / 27 mA; shutdown "H"	W	M		
4 DO DC17,4V/40mA	6ES7 132-7RD20-0AB0	Digital output module 4 DO; DC 17.4 V / 40 mA	W	M		10/ 06
4 DO DC17,4V/40mA Shutdown "H""	6ES7 132-7RD21-0AB0	Digital output module 4 DO; DC 17.4 V / 40 mA; shutdown "H"	W	M		06/ 10
4 DO DC17,4V/40mA Shutdown "H"	6ES7 132-7RD22-0AB0	Digital output module 4 DO; DC 17.4 V / 40 mA; shutdown "H"	W	M		
4 DO DC23,1V/20mA Shutdown "L"	6ES7 132-7GD00-0AB0	Digital output module 4 DO; DC 23.1 V / 20 mA; shutdown "L"	W	M		
4 DO DC17,4V/ 27mA Shutdown "L"	6ES7 132-7GD10-0AB0	Digital output module 4 DO; DC 17.4 V / 27 mA; shutdown "L"	W	M		

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
4 DO DC17,4V/40mA Shutdown "L"	6ES7 132-7GD20-0AB0	Digital output module 4 DO; DC 17.4 V / 40 mA; shutdown "L"	W	M		06/ 10
4 DO DC17,4V/ 40mA Shutdown "L"	6ES7 132-7GD21-0AB0	Digital output module 4 DO; DC 17.4 V / 40 mA; shutdown "L"	W	M		
4 DO DC25,5V/22mA Shutdown "L"	6ES7 132-7GD30-0AB0	Digital output module 4 DO; DC 25.5 V / 22 mA; shutdown "L"	W	M		
2 DO Relais UC60V/ 2A	6ES7 132-7HB00-0AB0	Digital output module 2 DO relay; UC 60 V / 2 A	W	M		

## 7.7 DO-F

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
4 DO	6ES7 138-7FD00-0AB0	Digital output module 4 DO; DC 17.4 V / 40 mA; PP-switching, safety-related, ex i	W	M		

## 7.8 IM

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200iSP-IM 152-1	6ES7 152-1AA00-0AB0	Interface module for ET 200iSP electronic modules for intrinsically safe PROFIBUS DP	W	S		
ET 200iSP-IM 152-1	6ES7 152-1AA00-0AB0 V2.0	Interface module for ET 200iSP electronic modules for intrinsically safe PROFIBUS DP can be used for redundant operation in the H system	W	S		

## 7.12 Couplers

## 7.9 PS

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
PS DC 24V	6ES7 138-7EA00-0AA0	Power supply for ET 200iSP				07/ 06
PS DC 24V	6ES7 138-7EA01-0AA0	Power supply for ET 200iSP				
PS AC 120/230V	6ES7 138-7EC00-0AA0	Power supply for ET 200iSP				

## 7.10 EM

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
EM reserve module	6ES7 138-7AA00-0AA0	Reserve module for free slots				

## 7.11 Watchdog

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
Watchdog module	6ES7 138-7BB00-0AB0	Special module for station monitoring	W	M		

## 7.12 Couplers

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
RS 485-IS coupler	6ES7 972-0AC80-0XA0	Fieldbus coupler between PROFIBUS DP and RS 485-IS; to control intrinsically safe PROFIBUS nodes; installation in Zone 2 possible; extended temperature range				

## 7.13 Terminal module

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
TM-EM/EM 60 S	6ES7 193-7CA00-0AA0	Terminal module for 2 EM; screw terminal				
TM-EM/EM 60 C	6ES7 193-7CA10-0AA0	Terminal module for 2 EM; spring-loaded terminal				
TM-EM/EM 60 S	6ES7 193-7CA20-0AA0	Terminal module for 2 EM; screw terminal				
TM-EM Relais C	6ES7 193-7CB00-0AA0	Terminal module for EM relay; screw terminal				
TM-IM/EM 60 S	6ES7 193-7AA00-0AA0	Terminal module for IM / EM; screw terminal				
TM-IM/EM 60 C	6ES7 193-7AA10-0AA0	Terminal module for IM / EM; spring-loaded terminal				
TM-IM/EM 60 S	6ES7 193-7AA20-0AA0	Terminal module for IM / EM; screw terminal				
TM-IM/IM	6ES7 193-7AB00-0AA0	Terminal module for redundant IM				
TM-PS-A	6ES7 193-7DA00-0AA0	Terminal module for power supply				07/ 06
TM-PS-B	6ES7 193-7DB00-0AA0	Terminal module for redundant power supply				07/ 06
TM-PS-A	6ES7 193-7DA10-0AA0	Terminal module for 24 V DC power supply				
TM-PS-B	6ES7 193-7DB10-0AA0	Terminal module for 24 V DC redundant power supply				
TM-PS-A	6ES7 193-7DA20-0AA0	Terminal module for 120/230 V AC power supply				
TM-PS-B	6ES7 193-7DB20-0AA0	Terminal module for 120/230 V AC redundant power supply				



## 8.1 AI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
2 AI U	6ES7 134-4FB00-0AB0	Analog input module 2 AI; (+/- 5 V, 1 ... 5 V, +/- 10 V) / 13 bits; standard	W Y			07/ 05
2 AI U	6ES7 134-4FB01-0AB0	Analog input module 2 AI; (+/- 5 V, 1 ... 5 V, +/- 10 V) / 13 bits; standard	W Y			
2 AI I 2DMU	6ES7 134-4GB00-0AB0	Analog input module 2 AI; 2-wire measuring transducer (4 ... 20 mA) / 13 bits; standard	W Y			04/ 05
2 AI I 2DMU	6ES7 134-4GB01-0AB0	Analog input module 2 AI; 2-wire measuring transducer (4 ... 20 mA) / 13 bits; standard	W Y			
2 AI I 4DMU	6ES7 134-4GB10-0AB0	Analog input module 2 AI; 4-wire measuring transducer (+/- 20 mA, 4 ... 20 mA) / 13 bits; standard	W Y			05/ 05
2 AI I 4DMU	6ES7 134-4GB11-0AB0	Analog input module 2 AI; 4-wire measuring transducer (+/- 20 mA, 4 ... 20 mA) / 13 bits; standard	W Y			
2 AI I TC	6ES7 134-4JB00-0AB0	Analog input module 2 AI TC; 15 bits; standard	W Y			09/ 08
2 AI I TC	6ES7 134-4JB01-0AB0	Analog input module 2 AI TC; 15 bits; standard	W Y			
2 AI I RTD	6ES7 134-4JB50-0AB0	Analog input module 2 AI RTD; 15 bits; standard	W Y			09/ 08
2 AI I RTD	6ES7 134-4JB51-0AB0	Analog input module 2 AI RTD; 15 bits; standard	W			
2 AI U	6ES7 134-4LB00-0AB0	Analog input module 2 AI; (1 ... 5 V, +/- 5 V, +/- 10 V) / 15 bits; high-resolution	W Y			06/ 06
2 AI U	6ES7 134-4LB02-0AB0	Analog input module 2 AI; (1 ... 5 V, +/- 5 V, +/- 10 V) / 15 bits; high-resolution	W Y			
2 AI I	6ES7 134-4MB00-0AB0	Analog input module 2 AI; (+/- 20 mA, 4 ... 20 mA) / 15 bits, high-resolution	W Y			06/ 06
2 AI I	6ES7 134-4MB02-0AB0	Analog input module 2 AI; (+/- 20 mA, 4 ... 20 mA) / 15 bits, high-resolution	W Y			
2 AI I TC High Feature	6ES7 134-4NB00-0AB0	Analog input module 2 AI TC; 15 bits; high feature	W Y			09/ 05

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
2 AI I TC High Feature	6ES7 134-4NB01-0AB0	Analog input module 2 AI TC; 15 bits; high feature	W Y			
2 AI I RTD High Feature	6ES7 134-4NB50-0AB0	Analog input module 2 AI RTD; 15 bits; high feature	W Y			11/ 05
2 AI I RTD High Feature	6ES7 134-4NB51-0AB0	Analog input module 2 AI RTD; 15 bits; high feature	W Y			

## 8.2 AO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
2 AO U	6ES7 135-4FB00-0AB0	Analog output module 2 AO; 1 ... 5 V / 12 Bit, +/-10 V / 13 bits; standard	W Y			05/ 05
2 AO U	6ES7 135-4FB01-0AB0	Analog output module 2 AO; 1 ... 5 V / 12 Bit, +/-10 V / 13 bits; standard	W Y			
2 AO I	6ES7 135-4GB00-0AB0	Analog output module 2 AO; (+/-20 mA, 4 ... 20 mA) / 13 bits; standard	W Y			05/ 05
2 AO I	6ES7 135-4GB01-0AB0	Analog output module 2 AO; (+/-20 mA, 4 ... 20 mA) / 13 bits; standard	W Y			
2 AO U	6ES7 135-4LB00-0AB0	Analog output module 2 AO; (1 ... 5 V, +/-10 V) / 15 bits; high-resolution	W Y			08/ 03
2 AO U	6ES7 135-4LB01-0AB0	Analog output module 2 AO; (1 ... 5 V, +/-10 V) / 15 bits; high-resolution, supports isochronous mode	W Y			06/ 06
2 AO U	6ES7 135-4LB02-0AB0	Analog output module 2 AO; (1 ... 5 V, +/-10 V) / 15 bits; high-resolution, supports isochronous mode	W Y			
2 AO I	6ES7 135-4MB00-0AB0	Analog output module 2 AO; (+/-20 mA, 4 ... 20 mA) / 15 bits; high-resolution	W Y			08/ 03
2 AO I	6ES7 135-4MB01-0AB0	Analog output module 2 AO; (+/-20 mA, 4 ... 20 mA) / 15 bits, high-resolution, supports isochronous mode	W Y			06/ 06
2 AO I	6ES7 135-4MB02-0AB0	Analog output module 2 AO; (+/-20 mA, 4 ... 20 mA) / 15 bits; high-resolution, supports isochronous mode	W Y			

## 8.3 DI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
2 DI DC24V	6ES7 131-4BB00-0AA0	Digital input module 2 DI; 24 V DC; standard	W Y			04/ 05
2 DI DC24V	6ES7 131-4BB01-0AA0	Digital input module 2 DI; 24 V DC; standard	W Y			
4 DI DC24V	6ES7 131-4BD00-0AA0	Digital input module 4 DI; 24 V DC; standard	W Y			04/ 05
4 DI DC24V	6ES7 131-4BD01-0AA0	Digital input module 4 DI; 24 V DC; standard	W Y			
2 DI DC24V High Feature	6ES7 131-4BB00-0AB0	Digital input module 2 DI; 24 V DC; High Feature; with diagnostics	W Y			06/ 05
2 DI DC24V High Feature	6ES7 131-4BB01-0AB0	Digital input module 2 DI; 24 V DC; High Feature; with diagnostics	W Y			
4 DI DC24V High Feature	6ES7 131-4BD00-0AB0	Digital input module 4 DI; 24 V DC; High Feature; with diagnostics	W Y			05/ 05
4 DI DC24V High Feature	6ES7 131-4BD01-0AB0	Digital input module 4 DI; 24 V DC; High Feature; with diagnostics	W Y			
8 DI DC24V High Speed	6ES7 131-4BF00-0AA0	Digital input module 8 DI; DC 24 V; supports isochronous mode	W Y			
4 DI	6ES7 131-4CD00-0AB0	Digital input module 4 DI; UC 24 ... 48 V; High Feature; with diagnostics	W Y			08/ 10
4 DI UC 24..48V HF	6ES7 131-4CD02-0AB0	Digital input module 4 DI; UC 24 ... 48 V; High Feature; with diagnostics	W Y			
2 DI AC 120V	6ES7 131-4EB00-0AB0	Digital input module 2 DI; 120 V AC	W Y			
2 DI AC 230V	6ES7 131-4FB00-0AB0	Digital input module 2 DI; 120 V AC	W Y			
4 DI NAMUR	6ES7 131-4RD00-0AB0	Digital input module 4 DI NAMUR; with diagnostics	W Y			10/ 10
4 DI NAMUR	6ES7 131-4RD02-0AB0	Digital input module 4 DI NAMUR; with diagnostics	W Y			
8 DI DC 24V	6ES7 138-4FA00-0AB0	Digital input module 4 / 8 DI; 24 V DC; 8 DI safety-related SIL-2 or 4 DI safety-related SIL-3, with diagnostics	W Y			06/ 04

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
8 DI DC 24V	6ES7 138-4FA01-0AB0	Digital input module 4 / 8 DI; 24 V DC; 8 DI safety-related SIL-2 or 4 DI safety-related SIL-3, with diagnostics	W Y			10/ 05
8 DI DC 24V	6ES7 138-4FA02-0AB0	Digital input module 4 / 8 DI; 24 V DC; 8 DI safety-related SIL-2 or 4 DI safety-related SIL-3, with diagnostics	W Y			01/ 07
8 DI DC 24V	6ES7 138-4FA03-0AB0	Digital input module 4 / 8 DI; 24 V DC; 8 DI safety-related SIL-2 or 4 DI safety-related SIL-3, with diagnostics	W Y			10/ 08
8 DI DC 24V	6ES7 138-4FA04-0AB0	Digital input module 4 / 8 DI; 24 V DC; 8 DI safety-related SIL-2 or 4 DI safety-related SIL-3, with diagnostics	W Y			
8 DI DC 24V	6ES7 138-4FA05-0AB0	Digital input module 4 / 8 DI; 24 V DC; 8 DI safety-related SIL-2 or 4 DI safety-related SIL-3, with diagnostics	W Y			

## 8.4 DO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
2 DO DC24V/0.5A	6ES7 132-4BB00-0AA0	Digital output module 2 DO; 24 V DC / 0.5 A; standard	W Y			04/ 05
2 DO DC24V/0.5A	6ES7 132-4BB01-0AA0	Digital output module 2 DO; 24 V DC / 0.5 A; standard	W Y			
2 DO DC24V/2A	6ES7 132-4BB30-0AA0	Digital output module 2 DO; 24 V DC / 2 A; standard	W Y			04/ 05
2 DO DC24V/2A	6ES7 132-4BB31-0AA0	Digital output module 2 DO; 24 V DC / 2 A; standard	W Y			
2 DO DC24V/0.5A High Feature	6ES7 132-4BB00-0AB0	Digital output module 2 DO; 24 V DC / 0.5 A; High Feature; with diagnostics	W Y			09/ 05
2 DO DC24V/0.5A High Feature	6ES7 132-4BB01-0AB0	Digital output module 2 DO; 24 V DC / 0.5 A; High Feature; with diagnostics	W Y			

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
2 DO DC24V/2A High Feature	6ES7 132-4BB30-0AB0	Digital output module 2 DO; 24 V DC / 2 A; High Feature; with diagnostics	W Y			07/ 05
2 DO DC24V/2A High Feature	6ES7 132-4BB31-0AB0	Digital output module 2 DO; 24 V DC / 2 A; High Feature; with diagnostics	W Y			
4 DO DC24V/0.5A	6ES7 132-4BD00-0AA0	Digital output module 4 DO; 24 V DC / 0.5 A; standard	W Y			05/ 05
4 DO DC24V/0.5A High Feature	6ES7 132-4BD00-0AB0	Digital output module 4 DO; 24 V DC / 0.5 A; High Feature; with diagnostics	W Y			
4 DO DC24V/0.5A	6ES7 132-4BD01-0AA0	Digital output module 4 DO; 24 V DC / 0.5 A; standard	W Y			10/ 10
4 DO DC24V/0.5A	6ES7 132-4BD02-0AA0	Digital output module 4 DO; 24 V DC / 0.5 A; standard	W Y			
4 DO DC24V/2A	6ES7 132-4BD30-0AA0	Digital output module 4 DO; 24 V DC / 2 A; standard	W Y			04/ 05
4 DO DC24V/2A High Feature	6ES7 132-4BD30-0AB0	Digital output module 4 DO; 24 V DC / 2 A; High Feature, with diagnostics	W Y			
4 DO DC24V/2A	6ES7 132-4BD31-0AA0	Digital output module 4 DO; 24 V DC / 2 A; standard	W Y			05/ 07
4 DO DC24V/2A	6ES7 132-4BD32-0AA0	Digital output module 4 DO; 24 V DC / 2 A; standard	W Y			
8 DO DC24V/0.5A High Speed	6ES7 132-4BF00-0AA0	Digital output module 8 DO; 24 V DC/ 0.5 A; supports isochronous mode	W Y			
8 DO DC24V/0.5A High Feature	6ES7 132-4BF00-0AB0	Digital output module 8 DO; 24 V DC/ 0.5 A; High Feature, with diagnostics, supports isochronous mode	W Y			
2 DO AC 120/230V/ 1A	6ES7 132-4FB00-0AB0	Digital output module 2 DO; 120 / 230 V, 1 A AC	W Y			01/ 07
2 DO AC 120/230V/ 1A	6ES7 132-4FB01-0AB0	Digital output module 2 DO; 120 / 230 V, 1 A AC	W Y			
2 DO Rel. 24..230V/5A	6ES7 132-4HB00-0AB0	Digital output module 2 relays; 24..230 V / 5 A UC	W Y			04/ 05
2 DO Rel. 24..230V/5A	6ES7 132-4HB01-0AB0	Digital output module 2 relays; 24..230 V / 5 A UC	W Y			
2 DO Rel. 24..230V/5A	6ES7 132-4HB10-0AB0	Digital output module 2 relays; form C; 24..230 V / 5 A UC	W Y			05/ 11
2 DO Rel. 24..230V/5A	6ES7 132-4HB12-0AB0	Digital output module 2 relays; form C; 24..230 V / 5 A UC	W Y			
4 DO DC 24V/2A	6ES7 138-4FB00-0AB0	Digital output module 4 DO; 24 V / 2 A; DC safety-related up to SIL-3, with diagnostics, PM-switching	W Y			06/ 04

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
4 DO DC 24V/2A	6ES7 138-4FB01-0AB0	Digital output module 4 DO; 24 V / 2 A; DC safety-related up to SIL-3, with diagnostics, PM-switching	W Y			10/ 05
4 DO DC 24V/2A	6ES7 138-4FB02-0AB0	Digital output module 4 DO; 24 V / 2 A; DC safety-related up to SIL-3, with diagnostics, PM-switching	W Y			10/ 08
4 DO DC 24V/2A	6ES7 138-4FB03-0AB0	Digital output module 4 DO; 24 V / 2 A; DC safety-related up to SIL-3, with diagnostics, PM-switching	W Y			
4 DO DC 24V/2A	6ES7 138-4FB04-0AB0	Digital output module 4 DO; 24 V / 2 A; DC safety related to SIL-3, with diagnostics, PM switching	W Y			

## 8.5 FM

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
Counter module, 24 V/100 kHz	6ES7 138-4DA04-0AB0	Counter module, 24 V / 100 kHz; for single, continuous and periodic counting, supports isochronous mode (only counting and measuring modes have been released for PCS 7)	W Y			

## 8.6 IM

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
IM 151-1	6ES7 151-1BA00-0AB0	Interface module IM 151-1 for ET 200S; high feature	W Y	X		10/ 05
IM 151-1	6ES7 151-1BA01-0AB0	Interface module IM 151-1 for ET 200S; high feature	W Y	X		03/ 07
IM 151-1	6ES7 151-1BA02-0AB0	Interface module IM 151-1 for ET 200S; high feature	W Y	X		

## 8.7 PS

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
PM-E DC24V	6ES7 138-4CA00-0AA0	Power supply, DC 24 V; with diagnostics	W Y			04/ 05
PM-E DC24V	6ES7 138-4CA01-0AA0	Power supply, DC 24 V; with diagnostics	W Y			
PM-E DC24V HF	6ES7 138-4CA60-0AB0	Power supply, DC 24 V; with diagnostics, high feature	W Y			
PM-E DC24V/ AC120/230V	6ES7 138-4CB10-0AB0	Power supply, DC 24 V; AC 120 V or 230 V; with diagnostics and fuse	W Y			11/ 06
PM-E DC24V..48/ AC24..230V	6ES7 138-4CB11-0AB0	Power supply, DC 24 ... 48 V, AC 24 ... 230 V; with diagnostics and fuse	W Y			
PM-E DC24V	6ES7 138-4CF00-0AB0	Power supply, DC 24 V; safety-related, with 2 DO 24V PM-switching; with diagnostics	W Y			06/ 04
PM-E DC24V	6ES7 138-4CF01-0AB0	Power supply, DC 24 V; safety-related, with 2 DO 24V PM-switching; with diagnostics	W Y			10/ 05
PM-E DC24V	6ES7 138-4CF02-0AB0	Power supply, DC 24 V; safety-related, with 2 DO 24V PM-switching; with diagnostics	W Y			10/ 08
PM-E DC24V	6ES7 138-4CF03-0AB0	Power supply, DC 24 V; safety-related, with 2 DO 24V PM-switching; with diagnostics	W Y			
PM-E DC24V	6ES7 138-4CF42-0AB0	Power supply, DC 24 V; safety-related, PP-switching; with diagnostics	W Y			
PM-D DC24V	3RK1 903-0BA00	Power supply, DC 24 V; 2 PM-D; DC 24 V	W Y			
PM-D F1 SIGUARD	3RK1 903-1BA00	Power supply; EMERGENCY OFF; monitored start-up; 2-channel	W Y			
PM-D F2 SIGUARD	3RK1 903-1BB00	Power supply; protective door; autostart; 2-channel	W Y			
PM-D F4 SIGUARD	3RK1 903-1BC00	Power supply; extension to F1/2 for additional potential group	W Y			

## 8.8 Terminal module

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
PM-D F3 SIGUARD	3RK1 903-1BD00	Power supply; extension to F1/2 for additional potential group; time-delayed	W Y			
PM-D F5 SIGUARD	3RK1 903-1BE00	Power supply; extension to PM-D F1 to PM-D F4; contact multiplier	W Y			
PM-X SIGUARD	3RK1 903-1CB00	Connection module for incoming feeder protection; external safety circuits	W Y			
PM-D F PROFIsafe	3RK1 903-3BA00	Power supply for 6 vector groups; safety-related	W Y			
PM-D F PROFIsafe	3RK1 903-3BA01	Power supply for 6 vector groups; safety-related	W Y			10/ 09
PM-D F PROFIsafe	3RK1 903-3BA02	Power supply for 6 vector groups; safety-related	W Y			
F-CM	3RK1 903-3CA00	Contact multiplier; extension to PM-D F PROFIsafe;	W Y			
PM-D F X1	3RK1 903-3DA00	Power supply/expansion module; overvoltage protection; for supplying external EMERGENCY OFF signals; for 6 vector groups	W Y			

## 8.8 Terminal module

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
TM-E15x26-A1	6ES7 193-4CAx0-0AA0	Terminal module for electronic modules; pass-through AUX rail to adjacent potential group on the left; access to AUX1 potential via terminals	Y			
TM-E15x24-A1	6ES7 193-4CAx0-0AA0	Terminal module for electronic modules; pass-through AUX rail to adjacent potential group on the left; access to AUX1 potential via terminals	Y			
TM-E15x24-01	6ES7 193-4CBx0-0AA0	Terminal module for electronic modules; pass-through AUX rail to adjacent potential group on the left; no access to AUX1 potential via terminals	Y			
TM-E15x23-01	6ES7 193-4CBx0-0AA0	Terminal module for electronic modules; pass-through AUX rail to adjacent potential group on the left; no access to AUX1 potential via terminals	Y			

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
TM-E15x24-AT	6ES7 193-4CLx0-0AA0	Terminal module for electronic modules 2 AI TC HF; pass-through AUX rail to adjacent potential group on the left; no access to AUX1 potential via terminals	Y			
TM-E30x46-A1	6ES7 193-4CFx0-0AA0	Terminal module for electronic modules; pass-through AUX rail to adjacent potential group on the left; access to AUX1 potential via terminals	Y			
TM-E30x44-01	6ES7 193-4CGx0-0AA0	Terminal module for electronic modules; pass-through AUX rail to adjacent potential group on the left; no access to AUX1 potential via terminals	Y			
TM-P15x23-A1	6ES7 193-4CCx0-0AA0	Terminal module for power supply; pass-through AUX rail to adjacent potential group on the left; access to AUX1 potential via terminals	Y			
TM-P15x23-A0	6ES7 193-4CDx0-0AA0	Terminal module for power supply; interrupted AUX rail to adjacent potential group on the left; access to AUX1 potential via terminals	Y			
TM-P15x22-01	6ES7 193-4CEx0-0AA0	Terminal module for power supply; pass-through AUX rail to adjacent potential group on the left; no access to AUX1 potential via terminals	Y			
TM-P30x44-A0	6ES7 193-4CKx0-0AA0	Terminal module for fail-safe power supply PM-E F; interrupted AUX rail to adjacent potential group on the left; access to AUX1 potential via terminals	Y			
TM-P15S27-01	3RK1 903-0AA00	Terminal module for power supply PM-D; with end cover	Y			
TM-PF30S47-B1	3RK1 903-1AA00	Terminal module SIGUARD PM-D F 1,2; for potential group, supply U1, U2, sensor connection	Y			
TM-PF30S47-B0	3RK1 903-1AA10	Terminal module for SIGUARD PM-D F 1,2 for potential subgroup, sensor connection	Y			
TM-PF30S47-C1	3RK1 903-1AC00	Terminal module SIGUARD PM-D F 3,4 for potential group, supply U1, U2	Y			
TM-PF30S47-C0	3RK1 903-1AC10	Terminal module SIGUARD PM-D F 3,4 for potential subgroup, supply U2	Y			

## 8.9 Motor starter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
TM-PF30S47-D0	3RK1 903-1AD10	Terminal module SIGUARD PM-D F 5 for contact multipliers	Y			
TM-X15 S27-01	3RK1 903-1AB00	Terminal module for connection module PM-X connection unit for supply contactor	Y			
TM-PF30S47-F1	3RK1 903-3AA00	Terminal module for fail-safe power supply PM-D F; pass-through AUX rail to adjacent potential group on the left; no access to AUX1 potential via terminals	Y			
TM-FCM30S47-E0	3RK1 903-3AB10	Terminal module for F-CM; with bushing for U1	Y			
TM-PFX30S47-G1	3RK1 903-3AE00	Terminal module for PM-D F X1; for potential group; no supply from left for U1	Y			
TM-PFX30S47-G0	3RK1 903-3AE10	Terminal module for PM-D F X1; for potential group; with supply from left for U1	Y			

## 8.9 Motor starter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DS1e-x 0,3 - 3 A High Feature	3RK1 301-0AB10-0AA2	Direct starter DS 1e-x; 0.3 - 3 A; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A; Option: Brake control module, control module; high feature	W Y			05/ 04
DS1e-x 0,3 - 3 A High Feature	3RK1 301-0AB10-0AA3	Direct starter DS 1e-x; 0.3 - 3 A; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A; Option: Brake control module, control module; switch ES; high feature	W Y			

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DS1e-x 0,3 - 3 A High Feature	3RK1 301-0AB10-0AA4	Direct starter DS 1e-x; 0.3 - 3 A; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A; Option: Brake control module, control module; switch ES; high feature; circuit-breaker notification can be assigned	W Y			10/ 12
DS1e-x 2,4 - 8 A High Feature	3RK1 301-0BB10-0AA2	Direct starter DS 1e-x; 2,4 - 8 A; mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2,4 A to 8 A; Option: Brake control module, control module; high feature	W Y			05/ 04
DS1e-x 2,4 - 8 A High Feature	3RK1 301-0BB10-0AA3	Direct starter; DS 1e-x; 2,4 - 8 A; mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2,4 A to 8 A; Option: Brake control module, control module; switch ES; high feature	W Y			
DS1e-x 2,4 - 8 A High Feature	3RK1 301-0BB10-0AA4	Direct starter DS 1e-x; 2,4 - 8 A; mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2,4 A to 8 A; Option: Brake control module, control module; switch ES; high feature; circuit-breaker notification can be assigned	W Y			
DS1e-x 2,4 - 16 A High Feature	3RK1 301-0CB10-0AA2	Direct starter DS1e-x 2.4 - 16 A; mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2,4 A to 16 A; Option: Brake control module, control module; high feature	W Y			05/ 04
DS1e-x 2,4 - 16 A High Feature	3RK1 301-0CB10-0AA3	Direct starter DS 1e-x; 2,4 - 16 A; mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2,4 A to 16 A; Option: Brake control module, control module; switch ES; high feature	W Y			

## 8.9 Motor starter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DS1e-x 2,4 - 16 A High Feature	3RK1 301-0CB10-0AA4	Direct starter DS 1e-x; 2.4 - 16 A; mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2,4 A to 16 A;  Option: Brake control module, control module; switch ES; high feature; circuit-breaker notification can be assigned	W Y			
DSS1e-x 0,3 - 3 A High Feature	3RK1 301-0AB20-0AA2	Direct soft starter DSS 1e-x 0,3 - 3 A; electronic switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0,30 A to 3,00 A;  Option: Brake control module, control module; high feature	W Y			05/04
DSS1e-x 0,3 - 3 A High Feature	3RK1 301-0AB20-0AA3	Direct soft starter DSS 1e-x; 0.3 - 3 A; electronic switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A;  Option: Brake control module, control module; switch ES; high feature	W Y			
DSS1e-x 0,3 - 3 A High Feature	3RK1 301-0AB20-0AA4	Direct soft starter DSS 1e-x; 0.3 - 3 A; electronic switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A;  Option: Brake control module, control module; switch ES; high feature	W Y			
DSS1e-x 2,4 - 8 A High Feature	3RK1 301-0BB20-0AA2	Direct soft starter DSS 1 e-x; 2.4 - 8 A; electronic switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A;  Option: Brake control module, control module; high feature	W Y			05/04
DSS1e-x 2,4 - 8 A High Feature	3RK1 301-0BB20-0AA3	Direct soft starter DSS 1e-x; 2,4 - 8 A; electronic switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A;  Option: Brake control module, control module; switch ES; high feature	W Y			

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DSS1e-x 2,4 - 8 A High Feature	3RK1 301-0BB20-0AA4	Direct soft starter DSS 1e-x; 2.4 - 8 A; electronic switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A; Option: Brake control module, control module; switch ES; high feature	W Y			
DSS1e-x 2,4 - 16 A High Feature	3RK1 301-0CB20-0AA2	Direct soft starter DSS 1e-x; 2.4 - 16 A; electronic switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A; Option: Brake control module, control module; high feature	W Y			05/ 04
DSS1e-x 2,4 - 16 A High Feature	3RK1 301-0CB20-0AA3	Direct soft starter DSS 1e-x; 2.4 - 16 A; electronic switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A; Option: Brake control module, control module; switch ES; high feature	W Y			
DSS1e-x 2,4 - 16 A High Feature	3RK1 301-0CB20-0AA4	Direct soft starter DSS 1e-x 2.4 - 16 A; electronic switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A; Option: Brake control module, control module; switch ES; high feature	W Y			
RS1e-x (0,3 - 3A) High Feature	3RK1 301-0AB10-1AA2	Reversing starter RS 1e-x; 0.3 - 3 A; High Feature; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A; Option: Brake control module, control module; high feature	W Y			05/ 04
RS1e-x (0,3 - 3A) High Feature	3RK1 301-0AB10-1AA3	Reversing starter RS 1e-x; 0.3 - 3 A; High Feature; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A; Option: Brake control module, control module; switch ES; high feature	W Y			

## 8.9 Motor starter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
RS1e-x (0,3 - 3A) High Feature	3RK1 301-0AB10-1AA4	Reversing starter RS 1e-x; 0.3 - 3 A; High Feature; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A bis 3 A; Option: Brake control module, control module; switch ES; high feature; circuit-breaker notification can be assigned	W Y			
RS1e-x (2,4 - 8A) High Feature	3RK1 301-0BB10-1AA2	Reversing starter RS 1e-x; 2.4 - 8 A; High Feature; mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A; Option: Brake control module, control module; high feature	W Y			05/04
RS1e-x (2,4 - 8A) High Feature	3RK1 301-0BB10-1AA3	Reversing starter RS 1e-x; 2.4 - 8 A; High Feature; mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A; Option: Brake control module, control module; switch ES; high feature	W Y			
RS1e-x (2,4 - 8A) High Feature	3RK1 301-0BB10-1AA4	Reversing starter RS 1e-x; 2,4 - 8 A; High feature; mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A; Option: Brake control module, control module; switch ES; high feature; circuit-breaker notification can be assigned	W Y			
RS1e-x (2,4 - 16A) High Feature	3RK1 301-0CB10-1AA2	Reversing starter RS 1e-x; 2.4 - 16 A; High Feature; mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A; Option: Brake control module, control module; high feature	W Y			05/04

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
RS1e-x (2,4 - 16A) High Feature	3RK1 301-0CB10-1AA3	Reversing starter RS 1e-x; 2.4 - 16 A; High Feature; mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A; Option: Brake control module, control module; switch ES; high feature	W Y			
RS1e-x (2,4 - 16A) High Feature	3RK1 301-0CB10-1AA4	Reversing starter RS 1e-x; 2.4 - 16 A; High Feature; mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A; Option: Brake control module, control module; switch ES; high feature; circuit-breaker notification can be assigned	W Y			

## 8.10 F motor starter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
F-DS1e-x 0,3 - 3 A High Feature	3RK1 301-0AB13-0AA2	Safe direct starter F-DS 1e-x; 0.3 - 3 A; high feature; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A; Option: Brake control module, control module; high feature; for PM-D F PROFIsafe	W Y			
F-DS1e-x 0,3 - 3 A High Feature	3RK1 301-0AB13-0AA4	Safe direct starter F-DS 1e-x; 0.3 - 3 A; high feature; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A; Option: Brake control module, control module; high feature; for PM-D F PROFIsafe; circuit-breaker notification can be assigned	W Y			

## 8.10 F motor starter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
F-DS1e-x 2,4 - 8 A High Feature	3RK1 301-0BB13-0AA2	Safe direct starter F-DS 1e-x; 2.4 - 8 A; high feature; mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A;  Option: Brake control module, control module; high feature; for PM-D F PROFIsafe	W Y			
F-DS1e-x 2,4 - 8 A High Feature	3RK1 301-0BB13-0AA4	Safe direct starter F-DS 1e-x; 2,4 - 8 A; high feature; mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A;  Option: Brake control module, control module; high feature; for PM-D F PROFIsafe; circuit-breaker notification can be assigned	W Y			
F-DS1e-x 2,4 - 16 A High Feature	3RK1 301-0CB13-0AA2	Safe direct starter F-DS 1e-x; 2.4 - 16 A; high feature; mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A;  Option: Brake control module, control module; high feature; for PM-D F PROFIsafe	W Y			
F-DS1e-x 2,4 - 16 A High Feature	3RK1 301-0CB13-0AA4	Safe direct starter F-DS 1e-x; 2.4 - 16 A; high feature; mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A;  Option: Brake control module, control module; high feature; for PM-D F PROFIsafe; circuit-breaker notification can be assigned	W Y			
F-RS1e-x 0,3 - 3 A High Feature	3RK1 301-0AB13-1AA2	Safe reversing starter F-RS 1e-x; 0.3 - 3 A; high feature; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A;  Option: Brake control module, control module; high feature; for PM-D F PROFIsafe	W Y			

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
F-RS1e-x 0,3 - 3 A High Feature	3RK1 301-0AB13-1AA4	Safe reversing starter F-RS 1e-x; 0.3 - 3 A; high feature; mechanical switching; electronic UE protection; no fuse; up to 1.1 KW / 400 V; 0.3 A to 3 A; Option: Brake control module, control module; high feature; for PM-D F PROFIsafe; circuit-breaker notification can be assigned	W Y			
F-RS1e-x 2,4 - 8 A High Feature	3RK1 301-0BB13-1AA2	Safe reversing starter F-RS 1e-x; 2,4 - 8 A; high feature; mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A; Option: Brake control module, control module; high feature; for PM-D F PROFIsafe	W Y			
F-RS1e-x 2,4 - 8 A High Feature	3RK1 301-0BB13-1AA4	Safe reversing starter F-RS 1e-x; 2,4 - 8 A; high feature; mechanical switching; electronic UE protection; no fuse; up to 3 KW / 400 V; 2.4 A to 8 A; Option: Brake control module, control module; high feature; for PM-D F PROFIsafe; circuit-breaker notification can be assigned	W Y			
F-RS1e-x 2,4 - 16 A High Feature	3RK1 301-0CB13-1AA2	Safe reversing starter F-RS 1e-x; 2,4 - 16 A; high feature; mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A; Option: Brake control module, control module; high feature; for PM-D F PROFIsafe	W Y			
F-RS1e-x 2,4 - 16 A High Feature	3RK1 301-0CB13-1AA4	Safe reversing starter F-RS 1e-x; 2,4 - 16 A; high feature; mechanical switching; electronic UE protection; no fuse; up to 7.5 KW / 400 V; 2.4 A to 16 A; Option: Brake control module, control module; high feature; for PM-D F PROFIsafe; circuit-breaker notification can be assigned	W Y			

## 8.11 Motor starter accessories

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
xB3 DC24V/4A	3RK1 903-0CE00	Brake control module DC 24 V / 4 A; 2 DI; DC 24 V; local control	W Y			
xB4 DC500V/0,7A	3RK1 903-0CF00	Brake control module DC 500 V / 0.7 A; 2 DI; DC 24 V; local control	W Y			

## 8.12 TM motor starter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
TM-DS65-S32-01 FS L	3RK1 903-0AK00	Terminal module for DS 1e-x and DSS 1e-x; motor starters, with power bus supply, with caps	Y			
TM-DS65-S31-01 S	3RK1 903-0AK10	Terminal module for DS 1e-x and DSS 1e-x; motor starter, with power bus bushing	Y			
TM-RS130-S32-01 FS L	3RK1 903-0AL00	Terminal module for RS 1e-x; motor starter, with power bus supply, with caps	Y			
TM-RS130-S31-01 S	3RK1 903-0AL10	Terminal module for RS 1e-x; motor starter, with power bus bushing	Y			
TM-FDS65-S32-01 FS L	3RK1 903-0AC00	Terminal module for F-DS 1e-x; motor starter, with power bus supply, with caps	Y			
TM-FDS65-S32-01 FS L	3RK1 903-3AC00	Terminal module for F-DS 1e-x; motor starter, with power bus supply, with caps	Y			
TM-FDS65-S31-01 S	3RK1 903-0AC10	Terminal module for F-DS 1e-x; motor starter, with power bus bushing	Y			
TM-FDS65-S31-01 S	3RK1 903-3AC10	Terminal module for F-DS 1e-x; motor starter, with power bus bushing	Y			
TM-FRS130-S32-01 FS L	3RK1 903-0AD00	Terminal module for F-RS 1e-x; motor starter, with power bus supply, with caps	Y			
TM-FRS130-S32-01 FS L	3RK1 903-3AD00	Terminal module for F-RS 1e-x; motor starter, with power bus supply, with caps	Y			
TM-FRS130-S31-01 S	3RK1 903-0AD10	Terminal module for F-RS 1e-x; motor starter, with power bus bushing	Y			
TM-FRS130-S31-01 S	3RK1 903-3AD10	Terminal module for F-RS 1e-x; motor starter, with power bus bushing	Y			
TM-xB215 S24-01	3RK1 903-0AG01	Terminal module for brake control module xB3, xB4	Y			

## 9.1 AI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
AI 4 x I 2-/4-wire ST	6ES7134-6GD00-0BA1	Analog input module AI 4 x I 2-/4-wire standard module diagnostics, 16-bit, +/-0.3%	W P			
AI 4 x U/I 2-wire ST	6ES7134-6HD00-0BA1	Analog input module AI 4 x U/I 2-wire standard module diagnostics, 16-bit, +/-0.3%	W P			
AI 4 x RTD/TC 2-/3-/4- wire HF	6ES7134-6JD00-0CA1	Analog input module AI 4 x RTD/TC High Feature channel diagnostics, 16-BIT, +/-0.1%2-/3-/4-wire	W P			
AI EnergyMeter ST	6ES7134-6PA00-0BD0 <sup>1)</sup>	Analog input module AI Energy Meter ST, channel diagnostics	W P			01 / 17
AI EnergyMeter 480VAC ST	6ES7134-6PA20-0BD0	Analog input module AI Energy Meter 480V AC ST; channel diagnostics	W P			
AI 2 x U/I 2-,4-wire HF	6ES7134-6HB00-0CA1	Analog input module AI 2 x U/I 2-,4-wire High Feature channel diagnostics, 16-bit, +/-0.1%	W P			
AI 4 x I 2-wire HART	6ES7134-6TD00-0CA1 <sup>2)</sup>	Analog input module AI 4 x I 2-wire HART High Feature channel diagnostics, 16-BIT, +/-0.3%	W P			
AI 8 x RTD/TC 2-wire HF	6ES7134-6JF00-0CA1 <sup>2)</sup>	Analog input module AI 8 x RTD/TC 2-wire High Feature channel diagnostics, 16-bit, +/-0.1%	W P			

<sup>1)</sup> To use this module the interface module IM155-6 PN HF FW V3.1 and higher is required as of FW V2.0 and higher.

<sup>2)</sup> To use this module the interface module IM155-6 PN HF FW V3.1 and higher is required.

## 9.2 AO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
AQ 2xU/I HF	6ES7135-6HB00-0CA1	Analog output module AQ 2xU/I High Feature, module diagnostics, 16-BIT, +/-0.3%	W P			
AQ 4xU/I ST	6ES7135-6HD00-0BA1	Analog output module AQ 4xU/I standard, module diagnostics, 16-BIT, +/-0.3%	W P			

## 9.3 DI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DI 8x24VDC ST	6ES7131-6BF00-0BA0	Digital input module DI 8x 24VDC standard, module diagnostics	W P			
DI 16x24VDC ST	6ES7131-6BH00-0BA0	Digital input module DI 16x 24VDC standard, module diagnostics	W P			
DI 8x24VDC HF	6ES7131-6BF00-0CA0	Digital input module DI 8x 24VDC High Feature, channel diagnostics	W P			
DI 8x24VDC HF NAMUR	6ES7131-6TF00-0CA0	Digital input module DI 8x 24VDC NAMUR, High Feature, channel diagnostics	W P			

## 9.4 DO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DQ 4x24VDC 2A ST	6ES7132-6BD20-0BA0	Digital output module DQ 4x24VDC 2 A standard, module diagnostics	W P			
DQ 8x24VDC 0.5A ST	6ES7132-6BF00-0BA0	Digital output module DQ 8x24VDC 0.5 A standard, module diagnostics	W P			
DQ 8 DC24V 0.5A HF	6ES7132-6BF00-0CA0	Digital output module DQ 8x24VDC 0.5 A High Feature, channel diagnostics	W P			
DQ 16x24VDC 0.5A ST	6ES7132-6BH00-0BA0	Digital output module DQ 16x24VDC 0.5A standard, module diagnostics	W P			

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
RQ NO 4x120VDC..230VAC/5A ST	6ES7132-6HD00-0BB0	Digital output module RQ 4x120VDC..230VAC 5 A standard, relay module Normally Open, module diagnostics	W P			12/ 16
RQ NO 4x120VDC..230VAC/5A ST	6ES7132-6HD00-0BB1	Digital output module RQ 4x120VDC..230VAC 5 A standard, relay module Normally Open, module diagnostics	W P			

## 9.5 IM

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200SP IM155-6PN HF	6ES7155-6AU00-0CN0	PROFINET interface module IM155-6PN High Feature; max. 64 I/O modules, 0,25 ms isochronous mode, Multi Hot Swap, incl. server module	W P	X		

## 9.6 Server module

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SERVER MODULE	6ES7193-6PA00-0AA0	Spare part server module for ET 200SP	W P			

## 9.7 Bus adapter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
BA 2xRJ45	6ES7193-6AR00-0AA0	2x RJ45 connection for PROFINET	W P			
BA 2xFC	6ES7193-6AF00-0AA0 1)	2x FAST CONNECT (FC) connection for PROFINET	W P			
BA 2xSCRJ	6ES7193-6AP00-0AA0 1)	2x SCRJ FO connection for PROFINET	W P			

## 9.7 Bus adapter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
BA SCRJ/RJ45 <sup>1)</sup>	6ES7193-6AP20-0AA0	1x SCRJ FO connection and 1x RJ45 connection for PROFINET Media converter FOC - CU	W P			
BA SCRJ/FC <sup>1)</sup>	6ES7193-6AP40-0AA0	1x SCRJ FO connection and 1x FAST CONNECT (FC) connection for PROFINET Media converter FOC - CU	W P			

<sup>1)</sup> To use this module the interface module IM155-6 PN HF HW V3 and higher and FW V3.1 and higher is required. Additional information is available in the respective manual:  
[support.industry.siemens.com/cs \(https://support.industry.siemens.com/cs/us/en/view/73184046\)](https://support.industry.siemens.com/cs/us/en/view/73184046)

## 10.1 AI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200X EM 144 AI 2x U	6ES7 144-1FB31-0XB0	Expansion module 2 AI; +/-10 V; diagnostics	W			10/ 08
ET 200X EM 144 AI 2x I	6ES7 144-1GB31-0XB0	Expansion module 2 AI; +/-20 mA, 4 ... 20 mA; 4-wire measuring transducer; diagnostics	W			10/ 08
ET 200X EM 144 AI 2x I	6ES7 144-1GB41-0XB0	Expansion module 2 AI; 4 ... 20 mA; 2-wire measuring transducer; diagnostics	W			10/ 08
ET 200X EM 144 AI 2x RTD	6ES7 144-1JB31-0XB0	Expansion module 2 AI RTD; Pt 100; diagnostics	W			10/ 08

## 10.2 AO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200X EM 145 AO 2x U	6ES7 145-1FB31-0XB0	Expansion module 2 AO; +/-10 V; diagnostics	W			10/0 8
ET 200X EM 145 AO 2x I	6ES7 145-1GB31-0XB0	Expansion module 2 AO; +/-20 mA, 4 ... 20 mA; diagnostics	W			10/0 8

## 10.3 BM\_DI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200X BM 141 DI 8xDC24V	6ES7 141-1BF11-0XB0	Basic module ET 200X; 8 DI; DC 24 V, can be expanded with analog EMs	W	X		05/ 03

## 10.4 BM\_DO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200X BM 142 DO 4xDC24V/2A	6ES7 142-1BD21-0XB0	Basic module ET 200X; 4 DO; DC 24 V / 2 A; can be expanded with analog EMs	W	X		11/ 02

## 10.5 DI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200X EM 141 DI 8xDC24V	6ES7 141-1BF30-0XA0	Expansion module 8 DI; DC 24 V	W			05/ 03
ET 200X EM 141 DI 8xDC24V	6ES7 141-1BF40-0XA0	Expansion module 8 DI; DC 24 V	W			05/ 03

## 10.6 DO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200X EM 142 DO 4xDC24V/2A	6ES7 142-1BD40-0XB0	Expansion module 4 DO; 24 V / 2 A DC; diagnostics	W			10/ 08
ET 200X EM 142 DO 8xDC24V/1.3A	6ES7 142-1BF30-0XA0	Expansion module 8 DO; DC 24 V / 1.3 A	W			10/ 08

## 10.7 PS

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200X PM 148	6ES7 148-1CA00-0XB0	Power supply for ET 200X; 4 DO; DC 24 V / 2 A; with load voltage supply; diagnostics by channel	W			10/ 08

## 10.8 Valve

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200X EM 148-P DO 16xP/CPV10	6ES7 148-1EH01-0XA0	Expansion module 16 DO P (coupling module for valve terminal CPV 10)	W			10/ 08
ET 200X EM 148-P DO 16xP/CPV14	6ES7 148-1EH11-0XA0	Expansion module 16 DO P (coupling module for valve terminal CPV 14)	W			10/ 08



# ET 200pro

## 11.1 AI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200PRO EM 144 AI 4 x U	6ES7 144-4FF00-0AB0	Analog input module 4 AI; ±10 V, ±5 V; 1 ... 5 V; 0 ... 10 V	W Y			
ET 200PRO EM 144 AI 4 x I	6ES7 144-4GF00-0AB0	Analog input module 4 AI; ±20 mA; 0 ... 20 mA; 4 ... 20 mA	W Y			
ET 200PRO EM 144 AI 4 x RTD	6ES7 144-4JF00-0AB0	Analog input module 4 AI RTD	W Y			
ET 200PRO EM 144 AI 4 x TC HF	6ES7 144-4PF00-0AB0	Analog input module 4 AI TC; high feature	W Y			

## 11.2 AO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200PRO EM 145 AO 4 x U	6ES7 145-4FF00-0AB0	Analog output module 4 AO; ±10 V; 1 ... 5 V; 0 ... 10 V	W Y			
ET 200PRO EM 145 AO 4 x I	6ES7 145-4GF00-0AB0	Analog output module 4 AO; ±20 mA; 0 ... 20 mA; 4 ... 20 mA	W Y			

## 11.3 DI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200PRO EM 141 DI 8xDC 24V	6ES7 141-4BF00-0AB0	Digital input module 8 DI; 24 V DC; high feature	W Y			

## 11.4 DO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200PRO EM 142 DO 4xDC 24V/2A	6ES7 142-4BD00-0AB0	Digital output module 4 DO; 24 V / 2A DC; high feature	W Y			

## 11.5 F\_DI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200PRO EM 148 F-DI 8/16xDC 24V	6ES7 148-4FA00-0AB0	Digital input module 8 / 16 DI; DC 24 V; PROFIsafe V2, safety-related	W Y			

## 11.6 F\_DI/DO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200PRO EM 148 F-DI 4/8xDC 24V F-DO 4xDC24V/2A	6ES7 148-4FC00-0AB0	Digital input/output module 4 / 8 DI; 4 DODC 24 V / 2 A; PROFIsafe V2, safety-related	W Y			

## 11.7 IM

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200PRO IM154-2 DP HF	6ES7 154-2AA00-0AB0	PROFIBUS DP Interface module for ET 200pro; high feature; including termination module	W	X		05/ 10
ET 200PRO IM154-2 DP HF	6ES7 154-2AA01-0AB0	PROFIBUS DP Interface module for ET 200pro; high feature; including termination module	W Y	X		

## 11.8 PS

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
ET 200PRO PM-E DC24V	6ES7 148-4CA00-0AA0	Power supply for ET 200pro; DC 24 V	W Y			
ET 200PRO PS 24 V/ 8 A	6ES7 148-4PC00-0HA0	SIMATIC ET 200PRO PS, IP67; Input: 3 AC 400-480 V output: DC 24 V/8 A				

## 11.9 Connection modules

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
CM IM DP ECOFAST	6ES7 194-4AA00-0AA0	Connection module CM for IM ECOFAST CU DP	Y			
CM IM DP Direkt	6ES7 194-4AC00-0AA0	Connection module CM for IM DP direct	Y			
CM IM DP M12 / 7/8"	6ES7 194-4AD00-0AA0	Connection module CM for IM DP M12 / 7 / 8"	Y			
CM PM ECOFAST	6ES7 194-4BA00-0AA0	Connection module CM for PM ECOFAST	Y			
CM PM Direkt	6ES7 194-4BC00-0AA0	Connection module CM for PM direct	Y			
CM PM 7/8"	6ES7 194-4BD00-0AA0	Connection module CM for PM 7 / 8"	Y			
CM IO 4 x M12	6ES7 194-4CA00-0AA0	Connection module CM for 4 IO M12	Y			
CM IO 8 x M12	6ES7 194-4CB00-0AA0	Connection module CM for 8 IO M12	Y			
CM 12×M12 für 4/8 F-DI/4 F-DO	6ES7 194-4DC00-0AA0	Connection module CM for the F-DI / DO-EM; 4 / 8 F-DI / 4 F-DO; DC 24 V / 2 A	Y			
CM 16×M12 für 8/16 F-DI	6ES7 194-4DD00-0AA0	Connection module CM for the F-DI EM 8 / 16 F-DI; DC 24 V / 2 A	Y			



# Gateway

## 12.1 IE/PB Link

### Approved combinations

See *SIMATIC Net; S7-CPs for Industrial Ethernet; Manual, Part BL 1* for the approved combinations of interface modules, couplers and bus modules as well as for the available functions.

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
IE/PB Link PN IO	6GK1 411-5AB00	IE/PB link PROFINET IO proxy including real-time; gateway between Industrial Ethernet and Profibus; S7 routing; data record gateway; S7 slaves; DPV1 slaves; 10/100 Mbps Fast Ethernet; 9.6 Kbps to 12 Mbps PROFIBUS	W P			04/ 17
IE/PB Link PN IO	6GK1 411-5AB10	IE/PB link PROFINET IO proxy with real-time communication, S7 routing, data record routing, S7 slaves, DPV1 slaves; 10/100 Mbps Fast Ethernet; MRP; 9.6 Kbps to 12 Mbps PROFIBUS	W P			

## 12.2 Y switch

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
Scalance XF204-2BA DNA	6GK5 204-2AA00-2YF2	Managed Switch; 2x bus adapter interface; PROFINET IO device	W P			

## 12.3 PA Link

### Approved combinations

See *SIMATIC Bus links DP/PA coupler, active field distributor, PA Link and Y Link* documentation for the approved combinations of interface modules, couplers and bus modules and for the available functions.

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
IM 157	6ES7 157-0AA80-0XA0	Interface module for PROFIBUS PA; extended temperature range -25 ... 60 °C	W	X		06/ 00
IM 157	6ES7 157-0AA81-0XA0	Interface module for PROFIBUS PA; extended temperature range -25 ... 60 °C	W	X		12/ 03
IM 157	6ES7 157-0AA82-0XA0 V4.x	Interface module for PA Link, DP V1 to DP and PA; module replacement during operation, information function, FW update via bus, extension of process control functions	W	S		06/ 06
IM 153-2 HF	6ES7 153-2BA01-0XB0 V4.x	PA Link, DP V1 to DP and PA; module replacement during operation, information function, FW update via bus, extension of process control functions	W	S		10/ 09
IM 153-2 Outdoor	6ES7 153-2BA81-0XB0 V4.x	PA Link, Outdoor, DP V1 to DP and PA; module replacement during operation, information function, FW update via bus, extension of process control functions	W	S		10/ 07
IM 153-2 HF	6ES7 153-2BA02-0XB0 V5.x	PA Link, DP V1 to DP and PA; module replacement during operation, information function, FW update via bus, extension of process control functions	W	S		01/ 16
IM 153-2 HF Outdoor	6ES7 153-2BA82-0XB0 V5.x	PA Link, Outdoor, DP V1 to DP and PA; module replacement during operation, information function, FW update via bus, extension of process control functions	W	S		10/ 16
IM 153-2 HF Outdoor	6ES7 153-2BA70-0XB0	PA Link, DP V1 to DP and PA; module replacement during operation, information function, FW update via bus, extension of process control functions, PA Link with extended field bus diagnostics	W	S		
IM 153-2 HF	6ES7 153-2BA10-0XB0	PA Link, DP V1 to DP and PA; module replacement during operation, information function, FW update via bus, extension of process control functions	W	S		

## 12.4 FF Link

### Approved combinations

See *SIMATIC Bus links FF Link bus link* documentation for the approved combinations of interface modules, couplers and bus modules and for the available functions.

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
IM 153-2 FF Outdoor	6ES7 153-2DA80-0XB0	Interface module for SIMATIC FF Link, capable of redundant operation; FOUNDATION Fieldbus Link Master, extended temperature range	W			
FDC 157	6ES7 157-0AC84-0XA0	Interface module for SIMATIC FF Link; physical interface for FOUNDATION Fieldbus H1, capable of redundant operation, with integrated bus supply up to 1 A; integrated diagnostics	W	S		10/ 16
FDC 157	6ES7 157-0AC85-0XA0	DP/FF coupler; Interface module for SIMATIC FF Link; physical interface for FOUNDATION Fieldbus H1, capable of redundant operation, with integrated bus supply up to 1 A; integrated diagnostics	W	S		

## 12.5 Compact FF Link

### Approved combinations

You can find additional information in the *SIMATIC Bus links; Compact FF Link bus link* documentation.

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
Compact FF Link	6ES7 655-5BA00-0AB0	Interface for FOUNDATION Fieldbus; FOUNDATION Fieldbus Link Master; for redundant operation; integrated diagnostics  extended temperature range; with integrated bus supply up to 0.5 A	W			

## 12.6 Y Link

### Approved combinations

See *SIMATIC Bus links DP/PA coupler, active field distributor, PA Link and Y Link* documentation for the approved combinations of interface modules, couplers and bus modules and for the available functions.

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
Y coupler	6ES7 654-0YK00-0AB0	Y coupler; star connection for connection of single-channel I/O to H system; single interface module				10/ 06
Y coupler	6ES7 197-1LB00-0XA0	Y coupler; star connection for connection of single-channel I/O to H system; single interface module with integrated RS 485 repeater				
Y Link	6ES7 197-1LA12-0XA0	Y Link for connecting single-channel DP slaves to S7-400H and AS 410H	W			

## 12.7 DP/PA coupler

### Approved combinations

See *SIMATIC Bus links DP/PA coupler, active field distributor, PA Link and Y-Link* documentation for the approved combinations of interface modules, couplers and bus modules and for the available functions.

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DP/PA coupler	6ES7 157-0AC00-0XA0	DP/PA coupler				04/ 00
DP/PA coupler	6ES7 157-0AC80-0XA0	DP/PA coupler, non-ex; (outdoor); 400 mA				05/ 04
DP/PA coupler	6ES7 157-0AC81-0XA0	DP/PA coupler, non-ex; (outdoor); 400 mA				04/ 05
DP/PA coupler	6ES7 157-0AC82-0XA0	DP/PA coupler, non-ex; (outdoor); 1000 mA, 31 V				07/ 07
DP/PA coupler	6ES7 157-0AC83-0XA0	DP/PA coupler, non-ex; (outdoor); for redundant operation			A	10/ 16
DP/PA coupler	6ES7 157-0AC85-0XA0	DP/PA coupler, non-ex; (outdoor); for redundant operation; extended field bus diagnostics			A	
DP/PA coupler	6ES7 157-0AD00-0XA0	DP/PA coupler, ex(i)				07/ 01

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
DP/PA coupler	6ES7 157-0AD80-0XA0	DP/PA coupler, ex(ib); extended environmental conditions				12/03
DP/PA coupler, ex	6ES7 157-0AD81-0XA0	DP/PA coupler; extended environmental conditions (ia), FM certification				05/04
DP/PA coupler, ex	6ES7 157-0AD82-0XA0	DP/PA coupler; extended environmental conditions (ia), FM certification, dust type certification				

## 12.8 Optical link module

### Approved combinations

See the *SIMATIC*

*Bus Links DP/PA Coupler, Active Field Distributors, PA Link and Y-Link* manual for the approved combinations of interface modules, couplers and bus modules and for the available functions.

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
PROFIBUS OLM P11	6GK1 503-2CA00 V4.x	Optical Link Module; 1 RS 485 1 fiber-optic interface (2 BFOC - POF/PCF); signal contact and measurement output, including 2 BFOC connectors				
PROFIBUS OLM P12	6GK1 503-3CA00 V4.x	Optical Link Module; 1 RS 485 2 fiber-optic interfaces (4 BFOC - POF/PCF); signal contact and measurement output, including 4 BFOC connectors				
PROFIBUS OLM G11	6GK1 503-2CB00 V4.x	Optical Link Module; 1 RS 485 1 fiber-optic interface (2 BFOC - multimode fiber-optic cable); signal contact and measurement output				
PROFIBUS OLM G12	6GK1 503-3CB00 V4.x	Optical Link Module; 1 RS 485 1 fiber-optic interface (2 BFOC - multimode fiber-optic cable); signal contact and measurement output				

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
PROFIBUS OLM G12-EEC	6GK1 503-3CD00 V4.x	Optical Link Module; 1 RS 485 2 fiber-optic interface (4 BFOC - multimode fiber-optic cable); signal contact and measurement output, extended temperature range -20 ... +60 °C				
PROFIBUS OLM G11-1300	6GK1 503-2CC00 V4.x	Optical Link Module; 1 RS 485 1 fiber-optic interface (2 BFOC - single-mode fiber-optic cable) wavelength 1300 nm for large distances, signal contact and measurement output				
PROFIBUS OLM G12-1300	6GK1 503-3CC00 V4.x	Optical Link Module; 1 RS 485 2 fiber-optic interface (4 BFOC - single-mode fiber-optic cable) wavelength 1300 nm for large distances, signal contact and measurement output				
PROFIBUS OLM G22	6GK1 503-4CB00 V4.x	Optical Link Module; 2 RS 485 2 fiber-optic interface (2 BFOC) signal contact and measurement output				

## 12.9 Active field distributors

### Approved combinations

See *SIMATIC*

*Bus links DP/PA coupler, active field distributor, PA Link and Y-Link* documentation for the approved combinations of interface modules, couplers and bus modules and for the available functions.

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
Active field distributor AFS	6ES7 157-0AG80-0XA0	Active field distributor AFS for PROFIBUS PA and FOUNDATION Fieldbus H1; coupler redundancy				
Active field distributor AFD4	6ES7 157-0AG81-0XA0	Active field distributor AFD4 for PROFIBUS PA and FOUNDATION Fieldbus H1; ring redundancy; 4 spur lines				
Active field distributor AFD8	6ES7 157-0AG82-0XA0	Active field distributor AFD8 for PROFIBUS PA and FOUNDATION Fieldbus H1; ring redundancy; 8 spur lines				
Active field distributor AFD4 FM	6ES7 655-5DX40-1AA1	Active field distributor AFD4 FM for PROFIBUS PA and FOUNDATION Fieldbus H1; ring redundancy; 4 spur lines				

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
Active field distributor AFD4 RAILMOUNT	6ES7 655-5DX40-2AA0	Active field distributor AFD4 RAILMOUNT for PROFIBUS PA and FOUNDATION Fieldbus H1; ring redundancy; 4 spur lines; mounting on DIN mounting rail				
Active field distributor AFDiSD	6ES7 655-5DX60-1BB0	Active field distributor AFDiSD with diagnostics for PROFIBUS PA and FOUNDATION Fieldbus H1; ring redundancy; 6 spur lines				
Active field distributor AFDiS	6ES7 157-0AG83-0XA0	Active field distributor AFDiS for PROFIBUS PA and FOUNDATION Fieldbus H1; Zone 1; ring redundancy; 6 spur lines				

## 12.10 Accessories

### Approved combinations

See the corresponding manuals for the approved combinations of interface modules and bus modules and for the available functions.

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
BM PS/IM SIPLUS extreme	6AG1 195-7HA00-2XA0	Bus module for IM 153-2 High Feature / IM 153-2 FF Active bus module for 1 load power supply and 1 module; for "hot swap in runtime" function, extended temperature range -25 to +70 °C				
BM PS/IM	6ES7 195-7HA00-0XA0	Bus module for IM 153 Active bus module for 1 power supply and 1 module				
BM IM/IM	6ES7 195-7HD80-0XA0	Bus module for IM 157 / IM 153-2 High Feature / IM 153-2 FF Active bus module for 2 modules; for redundant and non-redundant configuration; "hot swap in runtime" function, extended temperature range -25 to +60 °C				
BM IM/IM	6ES7 195-7HD10-0XA0	Bus module for IM 153-2 Bus module for redundant IM mode; "hot swap in runtime" function				
BM	6ES7 195-7HE80-0XA0	Bus module for IM 157 Bus module for redundant configuration of the IM 157 and module hot swap in runtime; temperature range -25 to +60 °C				
BM FDC	6ES7 195-7HF80-0XA0	Bus module for 1 DP/PA coupler Ex(i) / FDC 157-0 / 1 field device coupler Active bus module for "hot swap in runtime" function, extended temperature range -25 to +60 °C				

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
BM FDC/FDC	6ES7 195-7HG80-0XA0	Bus module for 2 DP/PA couplers / 2 field device couplers  Active bus module for redundant configuration; for "hot swap in runtime" function, extended temperature range -25 to +60 °C				
BM	6ES7 654-7HY00-0XA0	Bus module for Y coupler				
BM Compact FF Link	6ES7655-5EF00-0AA0	Bus module for Compact FF Link  Active bus module for 2 modules; for redundant and non-redundant configuration; "hot swap in runtime" function, extended temperature range -25 ... +60 °C				

# Repeater

## 13.1 Repeater

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
Diagnostic Repeater	6ES7 972-0AB00-0XA0	Diagnostic repeater for line diagnostics on the PROFIBUS-DP (RS 485); IP 20, to 12 Mbps, DP V0-Slave	W	X		02/ 03
Diagnostic Repeater	6ES7 972-0AB01-0XA0	Diagnostic repeater for line diagnostics on the PROFIBUS-DP (RS 485); IP 20, to 12 Mbps, DP V1-Slave	W Y	X		
RS 485 repeater	6ES7 972-0AA01-0XA0	RS 485 repeater; for connecting PROFIBUS/MPI bus systems to a max. of 31 nodes. Max. transmission rate 12 Mbps; IP 20 degree of protection				05/ 11
RS 485 repeater	6ES7 972-0AA02-0XA0	RS 485 repeater; for connecting PROFIBUS/MPI bus systems to a max. of 31 nodes. Max. transmission rate 12 Mbps; IP 20 degree of protection				



# Network Components

## 14.1 IE OSM - ESM

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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## 14.2 SCALANCE XB-000

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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## 14.3 SCALANCE X100

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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## 14.4 SCALANCE XC-100

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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## 14.5 SCALANCE X200

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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### Note

Has been released for PROFINET as of firmware V4.0.

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## 14.6 SCALANCE XB200

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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### Note

Has been released for PROFINET as of firmware V1.2.

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## 14.7 SCALANCE XP200

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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### Note

Recommended for use in PROFINET.

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## 14.8 SCALANCE XF200

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**Note**

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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**Note**

Recommended for use in PROFINET.

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## 14.9 SCALANCE XC200

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**Note**

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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**Note**

Recommended for use in PROFINET.

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## 14.10 SCALANCE X300

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**Note**

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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**Note**

Has been released for PROFINET as of firmware V3.0.

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## 14.11 SCALANCE XR300 Modular

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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## 14.12 SCALANCE X400

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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### Note

Has been released for PROFINET as of firmware V3.0.

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## 14.13 SCALANCE XM400

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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## 14.14 SCALANCE XR500 Modular

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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## 14.15 SCALANCE S600 (Industrial Security Module)

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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## 14.16 SCALANCE W700 (WLAN)

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### Note

All product types, modules, and accessories of SIMATIC NET released for this product family can also be used for PCS 7.

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## 15.1 CP Ethernet

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
CP 1613 A2	6GK1 161-3AA01	SIMATIC NET CP 1613 Industrial Ethernet; Iso, TCP/IP, S7 connections, programming device functions, PCI network card; RJ45 connection				
CP 1623	6GK1 162-3AA00	SIMATIC NET CP 1623 Industrial Ethernet; Iso, TCP/IP, S7 connections, programming device functions, PCI-E (Express) network card; 2-port switch; RJ45 port				
CP 1628	6GK1 162-8AA00	SIMATIC NET CP 1628 Industrial Ethernet; Iso, TCP/IP, S7 connections, programming device functions, PCI-E (Express) X1; 2-port switch; RJ45 connector; Integrated Security				
CP 1512	6GK1 151-2AA00	SIMATIC NET CP 1512 Industrial Ethernet; Iso, TCP/IP, S7 connections, programming device functions, PCMCIA <b>only in connection with PCS 7 ES</b>				07/ 06
CP 1612	6GK1 161-2AA00	SIMATIC NET CP 1612 Industrial Ethernet; Iso, TCP/IP, S7 connections, programming device functions, PCI network card ; RJ45 port				06/ 06

## 15.2 CP PROFIBUS

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
CP 5611	6GK1 561-1AA00	SIMATIC NET CP 5611 PROFIBUS; PCI bus, <b>Only in combination with SIMATIC PDM !</b>	W			07/ 05
CP 5611 A2	6GK1 561-1AA01	SIMATIC NET CP 5611 A2 PROFIBUS; PCI bus V2.2, <b>Only in combination with SIMATIC PDM !</b>	W			

## 15.4 Network adapter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
CP 5613	6GK1 561-3AA00	SIMATIC NET CP 5613 PROFIBUS; PCI bus, DP master for DP-V0 /-V1	W			01/ 06
CP 5613 A2	6GK1 561-3AA01	SIMATIC NET CP 5613 A2 PROFIBUS; PCI bus V2.2, DP master for DP-V0 /-V1	W			

## 15.3 CP IWLAN

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
CP 7515	6GK1 751-5AA00	SIMATIC NET CP 7515 Industrial WLAN PCMCIA				07/ 06

## 15.4 Network adapter

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
Server adapter network card PCI-E	A5E01579487	Server adapter network card for BCE; Intel PCI-E (Express) network card for connecting to Industrial Ethernet (10/100/1000 Mbps); RJ45 port; replacement part for redundant terminal bus				
Desktop adapter network card PCI-E	A5E01579552	Desktop adapter network card for BCE; Intel PCI-E (Express) network card for connecting to Industrial Ethernet (10/100/1000 Mbps); RJ45 port; replacement part for redundant terminal bus				
Redundant terminal bus adapter PCI-E	6ES7 652-0XX01-1XF1	Redundant terminal bus adapter package; <ul style="list-style-type: none"> <li>• each with 1x server adapter network card PCI-E</li> <li>• each with 1x desktop adapter network card PCI-E</li> </ul> for connection to Industrial Ethernet (10/100/1000 Mbps); RJ45 connector				

## 15.5 Graphics cards

Graphics cards are products of third-party manufacturers.

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
	6ES7 652-0XX04-1XE0	M9120 Plus LP PCIe x16 multi-monitor graphics card "2 Screens"				
	6ES7 652-0XX04-1XE1	M9140 LP PCIe x16 multi-monitor graphics card "4 Screens"				

## 15.6 Signal modules

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
	6DS1 916-8RR	Signal module, PCI card for installation in an operator station				

## 15.7 Printers

Printers are products of third-party manufacturers.

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
	3P7217B00APF01	MicroLaser 170 laser printer; rapid laser printer (monochrome), with Centronics interface, optional network card, 12 MB RAM				
	3P74C4B00APQ01	MicroLaser C4 laser printer; high-resolution, network-ready color laser printer; network card, 24 MB RAM, GNC:				

## 15.8 Chip card reader

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
	6ES7 652-0XX01-1XC0	Smart card reader, desktop version, V.24 connection, PS/2 power supply with 1.8 m cable, operating instructions, software for user administrator and process control; one required for each OS operator station				10/ 07
	6ES7 652-0XX02-1XC0	Smart card reader, desktop version, V2.0 smart card reader, USB port,				

## PC-based automation

### 16.1 Controller

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
PCS 7 AS mEC RTX 2010	6ES7 654-0MC23-0XX0 V1.2	SIMATIC S7 modular embedded controller; EC31; 1GB RAM, 4GB flash disk; SDK ports: Port 1: 2X PROFINET, Port 2: 1X FAST ETHERNET, Port 3: 2 X USB, MMC SLOT	W P			

### 16.2 PCS 7 BOX RTX

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
PCS 7 BOX RTX 2010	6ES7 650-4B...-....	Based on BOX PC 627D; WinAC RTX 2010 software CPU; 1x CP 5622compatible, 1x CP 1616compatible	W			
PCS 7 BOX RTX 2010	6ES7 650-4A...-....	Based on BOX PC 627C; 2.53 GHz; 2 GB RAM; SATA 250 GB; DVD +-RW; 2 RJ45 ports; WinAC RTX 2010 software CPU; 1x CP 5611-compatible port	W			
PCS 7 BOX RTX 2008	6ES7 650-2Q...-0YX0	Based on BOX PC 627B; 2.16 GHz; 2 GB RAM; SATA 160 GB; DVD +-RW; 2 RJ45 ports onboard; WinAC RTX 2008 software CPU; 1x CP 5613 A2	W			03/ 11

## 16.3 PCS 7 AS RTX

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
PCS 7 AS RTX 2008	6ES7 654-0UE12-0XX0	Based on Microbox 427B; 1.4 GHz; 1GB RAM; 4GB flash drive; CP 5611 onboard; WinAC RTX 2008 software CPU; preinstalled for PCS 7 operation (may be used from PCS 7 V7.0 SP3 ); AS Runtime license (PO250)	W			11/ 10
PCS 7 AS RTX 2010	6ES7 654-0UE13-0XX0	Based on Microbox 427C; Core2 Duo 1.2 GHz; 2GB DDR3 RAM; 4GB CompactFlash; CP 5611 onboard; WinAC RTX 2010 software CPU; preinstalled for PCS 7 operation (may be used from PCS 7 V7.1 SP2); AS Runtime license (PO100)	W			02/ 16
PCS 7 AS RTX 2010	6ES7 654-0UE23-0XX1	Based on Microbox 427D; 1x CP 5622 onboard; PROFIBUS; WinAC RTX 2010 software CPU;	W			
PCS 7 AS RTX 2010	6ES7 654-0UE23-0XX2	Based on Microbox 427D; 1x CP 1616 onboard (3 ports); PROFINET; WinAC RTX 2010 software CPU;	W P			

# PCS 7 partner modules

## 17.1 SICLOCK

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
	2XV9 450-1AR13	WinGPS for Windows 95 / NT; GPS receiver for time synchronization suitable for global use, assembly material included				
	2XV9 450-1AR14	DCFRS for Windows 95 / NT; DCF 77 receiver for time synchronization in Europe, assembly material included				
SICLOCK TC400	2XV9 450-2AR01	SICLOCK TC400; time transmitter  Synchronization of the nodes connected via Industrial Ethernet <ul style="list-style-type: none"><li>• 4 independent Ethernet ports</li><li>• 3 outputs for point-to-point connections with TTY/24 V and RS 422/5 V</li><li>• Terminal for radio controlled clocks, outputs and alarm</li><li>• 19" RACK for SICLOCK TC400 (2XV9450-2AR81)</li></ul>				
SICLOCK TC400	2XV9 450-2AR10	SICLOCK TC400; time transmitter, complete package with SICLOCK GPS1000 radio controlled clock; 24 V to 110 V DC;  Synchronization of the nodes connected via Industrial Ethernet <ul style="list-style-type: none"><li>• 4 independent Ethernet ports</li><li>• 3 outputs for point-to-point connections with TTY/24 V and RS 422/5 V</li><li>• Terminal for radio controlled clocks, outputs and alarm</li><li>• 19" RACK for SICLOCK TC400 (2XV9450-2AR81)</li></ul>				

## 17.1 SICLOCK

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SICLOCK TC400	2XV9 450-2AR20	<p>SICLOCK TC400; time transmitter DCFRS; complete package with radio clock SICLOCK DCFRS; 24 V to 110 V DC;</p> <p>Synchronization of the nodes connected via Industrial Ethernet</p> <ul style="list-style-type: none"> <li>• 4 independent Ethernet ports</li> <li>• 3 outputs for point-to-point connections with TTY/24 V and RS 422/5 V</li> <li>• Terminal for radio controlled clocks, outputs and alarm</li> <li>• 19" RACK for SICLOCK TC400 (2XV9450-2AR81)</li> </ul>				
SICLOCK TC100	2XV9 450-2AR22	<p>SICLOCK TC100; time transmitter 24 V DC;</p> <p>Synchronization of the nodes connected via Industrial Ethernet</p> <ul style="list-style-type: none"> <li>• 1 Ethernet port 10/100 Mbps, autonegotiation</li> <li>• Radio controlled clock input, relay outputs</li> </ul>				
SICLOCK TC100	2XV9 450-2AR26	<p>SICLOCK TC100 and DCF77 time receiver, consisting of master system clock TC100, DCFRS radio receiver 24 V DC;</p> <p>Synchronization of the nodes connected via Industrial Ethernet</p> <ul style="list-style-type: none"> <li>• 1 Ethernet port 10/100 Mbps, autonegotiation</li> <li>• Radio controlled clock input, relay outputs</li> </ul>				
SICLOCK TC100	2XV9 450-2AR50	<p>SICLOCK TC100 and GPS radio receiver and lightning protection, consisting of master system clock TC100, GPS1000 radio receiver; 24 V DC;</p> <p>Synchronization of the nodes connected via Industrial Ethernet</p> <ul style="list-style-type: none"> <li>• 1 Ethernet port 10/100 Mbps, autonegotiation</li> <li>• Radio controlled clock input, relay outputs</li> </ul>				
SICLOCK TM	2XV9 450-1AR24	<p>SICLOCK TM time transmitter; complete package GPS; 24 V to 110 V DC; for synchronizing the nodes connected via Industrial Ethernet</p>				
SICLOCK TM	2XV9 450-1AR25	<p>SICLOCK TM time transmitter; GPS complete package; 90 V to 240 V AC/DC, for synchronizing the nodes connected via Industrial Ethernet</p>				

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SICLOCK TM	2XV9 450-1AR26	SICLOCK TM time transmitter; complete package DCF77; 24 V to 110 V DC; for synchronizing the nodes connected via Industrial Ethernet				
SICLOCK TM	2XV9 450-1AR27	SICLOCK TM time transmitter, complete package DCF77; 90 V to 240 V; AC/DC; for synchronizing the nodes connected via Industrial Ethernet				

## 17.2 SITOP

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### Note

PCS 7 supports SITOP products.

You will find additional information on the PCS 7 Add-on catalog.

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## 17.3 SIMOCODE

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### Note

PCS 7 supports SIMOCODE products.

You will find additional information on the PCS 7 Add-on catalog.

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## 17.4 SIMODRIVE

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### Note

PCS 7 supports SIMODRIVE products.

You will find additional information on the PCS 7 Add-on catalog.

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## 17.5 SINAMICS

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### Note

PCS 7 supports SINAMICS products.

You will find additional information on the PCS 7 Add-on catalog.

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## 18.1 CP PtP

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
CP341-1A	6ES7 341-1AH01-0AE0	Com. processor, RS 232 interface, rechargeable drivers	W	M		12/ 08
CP341-1A	6ES7 341-1AH02-0AE0	Com. processor, RS 232 interface, rechargeable drivers; frame length 4 KB, data transmission rate 115 Kbps, printer driver	W P SM	M		
CP341-1B	6ES7 341-1BH01-0AE0	Com. processor, TTY interface, rechargeable drivers	W	M		12/ 08
CP341-1B	6ES7 341-1BH02-0AE0	Com. processor, TTY interface, rechargeable drivers; frame length 4 KB, data transmission rate 115 Kbps, printer driver	W P SM	M		
CP341-1C	6ES7 341-1CH01-0AE0	Com. processor, RS 422 interface, rechargeable drivers	W	M		12/ 08
CP341-1C	6ES7 341-1CH02-0AE0	Com. processor, RS 422 interface, rechargeable drivers; frame length 4 KB, data transmission rate 115 Kbps, printer driver	W P SM	M		

## 18.2 FM

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
FM350-1 COUNTER	6ES7 350-1AH03-0AE0 V1.0.2	Counter module, 1 channel; can also be installed with active bus modules, supports isochronous mode	W P SM	M		
FM350-2 COUNTER	6ES7 350-2AH00-0AE0	Counter module, 8 channels	W	M		10/ 08
FM350-2 COUNTER	6ES7 350-2AH01-0AE0	Counter module, 8 channels	W P	M		
FM355 C PID Control	6ES7 355-0VH10-0AE0	Control module. 4 channels; (continuous) 4 AI + 8 DI + 4 AO; V2.0	W P	M		

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
FM355 S PID Control	6ES7 355-1VH10-0AE0	Control module 4 channels; (step and pulse) 4 AI + 8 DI + 8 DO; V2.0	W P	M		
FM355-2 C	6ES7 355-2CH00-0AE0	Control module 4 channels; temperature controller	W P	M		
FM355-2 S	6ES7 355-2SH00-0AE0	Control module 4 channels; temperature controller	W P	M		

## 18.3 PS

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
PS307 2A	6ES7 307-1BA00-0AA0	Power supply AC 120 / 230 V; DC 24 V / 2 A				08/ 10
PS307 2A	6ES7 307-1BA01-0AA0	Power supply AC 120 / 230 V; DC 24 V / 2 A				
PS305 2A	6ES7 305-1BA80-0AA0	Power supply AC 24 / 110 V; DC 24 V / 2 A				
PS307 5A	6ES7 307-1EA00-0AA0	Power supply AC 120 / 230 V; DC 24 V / 5 A				08/ 10
PS307 5A	6ES7 307-1EA01-0AA0	Power supply AC 120 / 230 V; DC 24 V / 5 A				
PS307 5A	6ES7 307-1EA80-0AA0	Power supply AC 120 / 230 V; DC 24 V / 5 A				
PS307 10A	6ES7 307-1KA00-0AA0	Power supply AC 120 / 230 V; DC 24 V / 10 A				04/ 03
PS307 10A	6ES7 307-1KA01-0AA0	Power supply AC 120 / 230 V; DC 24 V / 10 A				08/ 10
PS307 10A	6ES7 307-1KA02-0AA0	Power supply AC 120 / 230 V; DC 24 V / 10 A				

## 18.4 SM DI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM321 DI 16xDC24V	6ES7 321-1BH01-0AA0	Digital input module 16 DI; DC 24 V; grouping 16	W	M		10/ 04
SM321 DI 16xDC24V	6ES7 321-1BH02-0AA0	Digital input module 16 DI; DC 24 V; grouping 16	W P E	M	M	
SM321 DI 16xDC24V	6ES7 321-1BH10-0AA0	Digital input module 16 DI; 24 V DC; grouping 16, high speed, supports isochronous mode	W P	M		
SM321 DI 16xDC24V	6ES7 321-1BH50-0AA0	Digital input module 16 DI; DC 24 V; grouping 16, active low	W P	M		
SM321 DI 16xDC24V	6ES7 321-1BH81-0AA0	Digital input module 16 DI; DC 24 V; extended environmental conditions	W	M		10/ 00
SM321 DI 16xDC24V	6ES7 321-1BH82-0AA0	Digital input module 16 DI; DC 24 V; extended environmental conditions	W	M		11/ 03
SM321 DI 32xDC24V	6ES7 321-1BL00-0AA0	Digital input module 32 DI; DC 24 V; grouping 32	W P E	M	M	
SM321 DI 32xDC24V	6ES7 321-1BL80-0AA0	Digital input module 32 DI; DC 24 V; extended environmental conditions	W	M		11/ 03
SM321 DI 64xDC24V	6ES7 321-1BP00-0AA0	Digital input module 64 DI; DC 24 V; grouping 16, active high or active low	W P	M		
SM321 DI 16xAC/DC24..48V	6ES7 321-1CH00-0AA0	Digital input module 16 DI; AC / DC 24 ...48 V; grouping 1	W P E SM	M		
SM321 DI 16xDC48..120V	6ES7 321-1CH20-0AA0	Digital input module 16 DI; DC 48 ...120 V; grouping 8	W P E SM	M		
SM321 DI 16xDC48..120V	6ES7 321-1CH80-0AA0	Digital input module 16 DI; DC 48 ...120 V; grouping 8, extended environmental conditions	W	M		11/ 03
SM321 DI 16xAC120V	6ES7 321-1EH01-0AA0	Digital input module 16 DI; AC 120 V; grouping 4	W	M		09/ 01
SM321 DI 32xAC120V	6ES7 321-1EL00-0AA0	Digital input module 32 DI; AC 120 V; 32 Pt 120 V AC input - IEC Type II - 8 Pts/Comm	W P SM	M		

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM321 DI 8xAC230V	6ES7 321-1FF01-0AA0	Digital input module 8 DI; AC 120 V ... 230 V; grouping 2	W P E SM	M	M	
SM321 DI 8xAC120/230V	6ES7 321-1FF10-0AA0	Digital input module 8 DI; AC 120 / 230 V; 8 DI; AC Iso.; grouping 1	W P SM	M		
SM321 DI 8xAC120/230V	6ES7 321-1FF81-0AA0	Digital input module 8 DI; AC 120 / 230 V; extended environmental conditions	W	M		11/ 03
SM321 DI 16xAC120V/230V	6ES7 321-1FH00-0AA0	Digital input module 16 DI; AC 120 / 230 V; grouping 4	W P E SM	M		
SM321 DI 16xDC24V, Alarm	6ES7 321-7BH00-0AB0	Digital input module 16 DI; DC 24 V; with hardware and diagnostic interrupt, grouping 16	W	O	M	
SM321 DI 16xDC24V, Alarm	6ES7 321-7BH01-0AB0	Digital input module 16 DI; DC 24 V; with hardware interrupt and diagnostic interrupt, grouping 16, supports isochronous mode	W E	O	G	
SM321 DI 16xDC24V, Alarm; High Feature	6ES7 321-7BH01-0AB0 ES 6 (revision)	Digital input module 16 DI; DC 24 V; with hardware interrupt and diagnostic interrupt, grouping 16, supports isochronous mode; High Feature	W P	O	C	
SM321 DI 16xDC24V, Alarm	6ES7 321-7BH80-0AB0	Digital input module 16 DI; DC 24 V; with hardware interrupt and diagnostic interrupt, grouping 16, extended environmental conditions	W	O		08/ 03
SM321 DI 16xDC24-125V	6ES7 321-7EH00-0AB0	Digital input module 16 DI; DC 24-125V; with hardware and diagnostic interrupt, grouping 16	W P SM	O		
SM321 DI 4xNAMUR, Ex	6ES7 321-7RD00-0AB0	Digital input module 4 DI NAMUR; with hardware and diagnostic interrupt, grouping 1, [EEx ib]	W P SM	O	C	
SM321 DI 16xNAMUR	6ES7 321-7TH00-0AB0	Digital input module 16 DI NAMUR; with diagnostics and value status	W P SM	O	C	

## 18.5 SM DO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM322 DO 8xDC24V/2A	6ES7 322-1BF01-0AA0	Digital output module 8 DO; DC 24 V / 2 A; grouping 4	W P E SM	M	C	
SM322 DO 16xDC24V/0.5A	6ES7 322-1BH01-0AA0	Digital output module 16 DO; DC 24 V / 0.5 A; grouping 8	W P E	M		
SM322 DO 16xDC24V/0.5A	6ES7 322-1BH10-0AA0	Digital output module 16 DO; DC 24 V / 0.5 A; grouping8, high speed, supports isochronous mode	W P	M		
SM322 DO 16xDC24V/0.5A	6ES7 322-1BH81-0AA0	Digital output module 16 DO; DC 24 V / 0.5 A; extended environmental conditions	W	M		11/ 03
SM322 DO 32xDC24V/0.5A	6ES7 322-1BL00-0AA0	Digital output module 32 DO; DC 24 V / 0.5 A; grouping 8	W P E	M	M	
SM322 DO 64xDC24V/0.3A	6ES7 322-1BP00-0AA0	Digital output module 64 DO; DC 24 V / 0.3 A; grouping 16, P-switching	W P	M		
SM322 DO 64xDC24V/0.3A	6ES7 322-1BP50-0AA0	Digital output module 64 DO; DC 24 V / 0.3 A; grouping 16, M-switching	W P	M		
SM322 DO 8xDC48..120V/1.5A	6ES7 322-1CF00-0AA0	Digital output module 8 DO; DC 48 ...120 V / 1.5 A; grouping 4	W P SM	M		
SM322 DO 8xDC48..120V/1.5A	6ES7 322-1CF80-0AA0	Digital output module 8 DO; DC 48 ...120 V / 1.5 A; grouping 4, extended environmental conditions	W	M		11/ 03
SM322 DO 16xAC120V/0.5A	6ES7 322-1EH01-0AA0	Digital output module 16 DO; AC 120 V / 0.5 A; grouping 8	W	M		01/ 02
SM322 DO 32xAC120V/1A	6ES7 322-1EL00-0AA0	Digital output module 32 DO; AC 120 V / 1 A; grouping 8	W	M		10/ 04
SM322 DO 8xAC230V/2A	6ES7 322-1FF01-0AA0	Digital output module 8 DO; AC 230 V / 1 A; grouping 4, Si.	W P E SM	M	M	
SM322 DO 8xAC120/230V/1A	6ES7 322-1FF81-0AA0	Digital output module 8 DO; AC 120 / 230 V / 1 A; extended environmental conditions	W	M		10/ 03

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM322 DO 16xAC120V/230V/0.5A	6ES7 322-1FH00-0AA0	Digital output module 16 DO; AC 120 / 230 V / 0.5 A; grouping 8	W P E SM	M		
SM322 DO 32xAC120V/230V/1A	6ES7 322-1FL00-0AA0	Digital output module 32 DO; AC 120 / 230 V / 1 A; grouping 8	W P SM	M		
SM322 DO 8xRel. AC230V	6ES7 322-1HF01-0AA0	Digital output module 8 DO relay; DC 24 V / 2 A, AC 230 V / 2 A; grouping 2	W P E SM	M		
SM322 DO 8xRel. AC 230V/5A	6ES7 322-1HF10-0AA0	Digital output module 8 DO relays; AC 230 V / 8 A; grouping 1	W P E SM	M		
SM322 DO 8xRel. AC 24V/5A	6ES7 322-1HF20-0AA0	Digital output module 8 DO relay; DC 24 V / 5 A, AC 230 V / 5 A; grouping 1, with overvoltage protective element	W	M		07/ 02
SM322 DO 8xRel. DC24V/AC230V/5A	6ES7 322-1HF80-0AA0	Digital output module 8 DO relays; AC 230 V / 5 A; grouping 1, extended environmental conditions	W	M		11/ 03
SM322 DO 16xRel. AC120V	6ES7 322-1HH00-0AA0	Digital output module 16 DO relays; DC 24 V / 2 A, AC 120 V / 2 A; grouping 16	W	M		07/ 02
SM322 DO 16xRel. AC120V/230V	6ES7 322-1HH01-0AA0	Digital output module 16 DO relays; DC 24 V / 2 A, AC 120 V / 2 A; 230 V / 2 A; grouping 16	W P E SM	M		
SM322 DO 8xAC120/230V/2A	6ES7 322-5FF00-0AB0	Digital output module 8 DO; AC 120 / 230 V / 2 A, with substitute value switching	W P SM	O		
SM322 DO 16xUC24/48V	6ES7 322-5GH00-0AB0	Digital output module 16 DO; UC 24 / 48 V; diagnostic interrupt, grouping 1,	W P SM	M		
SM322 DO 8xRel AC230V	6ES7 322-5HF00-0AB0	Digital output module 8 DO; AC 230 V / 5 A	W P SM	O		
SM322 DO 4xDC15V/20mA, Ex	6ES7 322-5RD00-0AB0	Digital output module 4 DO; DC 15 V / 20 mA; diagnostic interrupt, grouping 1, [EEx ib]	W P SM	O		
SM322 DO 4xDC24V/10mA, Ex	6ES7 322-5SD00-0AB0	Digital output module 4 DO; DC 24 V / 10 mA; diagnostic interrupt, grouping 1, [EEx ib]	W P SM	O	C	

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM322 DO 8xDC24V/0,5A	6ES7 322-8BF00-0AB0	Digital output module 8 DO; DC 24 V / 0.5 mA; diagnostic interrupt, grouping 8	W P SM	O	M	
SM322 DO 8xDC24V/0,5A	6ES7 322-8BF80-0AB0	Digital output module 8 DO; DC 24 V / 0.5 A; with diagnostics, extended environmental conditions	W	O		11/ 03
SM322 DO 16xDC24V/0,5A	6ES7 322-8BH00-0AB0	Digital output module 16 DO; DC 24 V / 0.5 A; with diagnostics	W	O	M	12/ 03
SM322 DO 16xDC24V/0,5A	6ES7 322-8BH01-0AB0	Digital output module 16 DO; DC 24 V / 0.5 A; with diagnostics	W	O	M	
SM322 DO 16xDC24V/0,5A	6ES7 322-8BH10-0AB0	Digital output module 16 DO; DC 24 V / 0.5 A; with diagnostics	W P	O	M	

## 18.6 SM DI/DO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM323 DI 8/DO 8 x DC24V/0.5A	6ES7 323-1BH01-0AA0	Digital input/output module 8 DI / 8 DO; DC 24 V / 0,5 A	W P E SM	M		
SM323 DI 8/DO 8 x DC24V/0.5A	6ES7 323-1BH81-0AA0	Digital input/output module; 8 DI / 8 DO; DC 24 V / 0.5 A; (Outdoor)	W	M		11/ 03

## 18.7 SM DI-F

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM 326 DI 24x24VDC	6ES7 326-1BK00-0AB0	Digital input module 24 DI; DC 24 V; safety-related	W	OS	C	04/ 06
SM 326 DI 24xDC24V	6ES7 326-1BK01-0AB0	Digital input module 24 DI; DC 24 V; safety-related, with diagnostic interrupt	W	OS	C	
SM 326 DI 24xDC24V	6ES7 326-1BK02-0AB0	Digital input module 24 DI; DC 24 V; safety-related, with diagnostic interrupt	W P	OS	C	

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM 326 DI 8xNAMUR, Ex(i)	6ES7 326-1RF00-0AB0	Digital input module 8 DI NAMUR; Ex(i), safety-related	W	OS	C	05/ 14
SM 326 DI 8xNAMUR, Ex(i)	6ES7 326-1RF01-0AB0	Digital input module 8 DI NAMUR; Ex(i), safety-related	W	OS	C	

## 18.8 SM DO-F

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM 326 DO 10x24VDC/2A	6ES7 326-2BF00-0AB0	Digital output module, 10 DO; DC 24 V / 2 A; safety-related,	W	OS	C	04/ 03
SM326 DO 10xDC24V/2A	6ES7 326-2BF01-0AB0	Digital output module, 10 DO; DC 24 V / 2 A; safety-related, P-switching, with diagnostic interrupt	W	OS	C <sup>1)</sup>	
SM326 DO 10xDC24V/2A	6ES7 326-2BF10-0AB0	Digital output module, 10 DO; DC 24 V / 2 A; safety-related, P-switching, with diagnostic interrupt  PROFIBUS DP and PROFINET with PROFIsafe V2	W P	M	C	
SM 326F DO 8xDC24V/2A	6ES7 326-2BF40-0AB0	Digital output module 8 DO; DC 24 V / 2 A; safety-related, P-M-switching, with diagnostic interrupt	W	M		09/ 09
SM 326F DO 8xDC24V/2A	6ES7 326-2BF41-0AB0	Digital output module 8 DO; DC 24 V / 2 A; safety-related, P-M-switching, with diagnostic interrupt	W P	M		

<sup>1)</sup> = Firmware 2.0.9 or later / previous version only by module

## 18.9 SM AI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM331 AI 8x13Bit	6ES7 331-1KF00-0AB0	Analog input module 8 AI; 13 Bit	W	O		10/ 03
SM331 AI 8x13Bit	6ES7 331-1KF01-0AB0	Analog input module 8 AI; 13 Bit	W	O		01/ 10
SM331 AI 8x13Bit	6ES7 331-1KF02-0AB0	Analog input module 8 AI; 13 Bit	W P	O		
SM331 AI 8x14Bit	6ES7 331-7HF01-0AB0	Analog input module 8 AI; 14 Bit; high speed, supports isochronous mode	W P	O		
SM331 AI 2x12Bit	6ES7 331-7KB01-0AB0	Analog input module 2 AI; 12 ... 14 Bit	W	O		10/ 04
SM331 AI 2x12Bit	6ES7 331-7KB02-0AB0	Analog input module 2 AI; 12 ... 14 Bit	W P SM	O		
SM331 AI 2x12Bit	6ES7 331-7KB81-0AB0	Analog input module 2 AI; 12 ... 14 Bit; extended environmental conditions	W	O		05/ 01
SM331 AI 2x12Bit	6ES7 331-7KB82-0AB0	Analog input module 2 AI; 12 ... 14 Bit; (Outdoor)	W	O		11/ 03
SM331 AI 8x12Bit	6ES7 331-7KF01-0AB0	Analog input module 8 AI; 12 ... 14 Bit	W	O		02/ 05
SM331 AI 8x12Bit	6ES7 331-7KF02-0AB0	Analog input module 8 AI; 12 ... 14 Bit	W P E SM	O	M	
SM331 AI 8x16Bit	6ES7 331-7NF00-0AB0	Analog input module 8 AI; 16 Bit; 1 ... 5 V, +/- 5 V, +/- 10 V; 0 ... 20 mA, 4 ... 20 mA, +/- 20 mA	W P E	O	C	
SM331 AI 8x16Bit	6ES7 331-7NF10-0AB0	Analog input module 8 AI; 16 Bit; 1 ... 5 V, +/- 5 V, +/- 10 V; 0 ... 20 mA, 4 ... 20 mA, +/- 20 mA	W P E SM	O	C	
SM331 AI 6xTC	6ES7 331-7PE10-0AB0	Analog input module 6 AI TC; 16 Bit; iso. can be used for redundancy by channel	W P SM	O	C	
SM331 AI 8xRTD	6ES7 331-7PF00-0AB0	Analog input module 8 AI RTD; 16 Bit (internally 24 Bit according to the Sigma-Delta procedure); RTD: Pt 100, Pt 200, Pt 500, Pt 1000, Ni 100, Ni 120, Ni 1000, Cu 10	W	O		04/ 05

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM331 AI 8xRTD	6ES7 331-7PF01-0AB0	Analog input module 8 AI RTD; 16 Bit (internally 24 Bit according to the Sigma-Delta procedure); RTD: Pt 100, Pt 200, Pt 500, Pt 1000, Ni 100, Ni 120, Ni 1000, Cu 10	W P E	O		
SM331 AI 8xTC	6ES7 331-7PF10-0AB0	Analog input module 8 AI TC; 16 Bit (internally 24 Bit according to the Sigma-Delta procedure); Thermocouples: B, E, J, K, L, N, R, S, T	W	O		07/ 05
SM331 AI 8xTC	6ES7 331-7PF11-0AB0	Analog input module 8 AI TC; 16 Bit (internally 24 Bit according to the Sigma-Delta procedure); Thermocouples: B, E, J, K, L, N, R, S, T	W P E	O		
SM331 AI 4x0/4...20mA, Ex	6ES7 331-7RD00-0AB0	Analog input module 4 AI; 0/4 ... 20 mA; 15 Bit, [EEx ib]	W P SM	O	C	
SM331 AI 8xTC/4xRTD, Ex	6ES7 331-7SF00-0AB0	Analog input module 8 AI TC, 4 AI RTD; 15 Bit, [EEx ib]	W P SM	O		
SM331 AI 2x0/4..20mA HART, Ex	6ES7 331-7TB00-0AB0	Analog input module 2 AI; 0/4 ... 20 mA, with HART communication, [EEx ib]	W P SM	O		
SM331 AI 2x0/4..20mA HART, Ex	6ES7 331-7TB10-0AB0	Analog input module 2 AI; 0/4...20mA; with HART communication, [EEx ib]	W P SM	O		
SM331 AI 8x0/4...20mA HART	6ES7 331-7TF00-0AB0	Analog input module 8 AI; 0/4 ... 20 mA, +/-20 mA with HART communication,	W	O		10/ 07
SM331 AI 8x0/4...20mA HART	6ES7 331-7TF01-0AB0 to V2.x	Analog input module 8 AI; 0/4 ... 20 mA, +/-20 mA with HART communication,	W	O	C	
SM331 AI 8x0/4...20mA HART	6ES7 331-7TF01-0AB0 as of V3.x	Analog input module 8 AI; 0/4 ... 20 mA, +/-20 mA with HART communication,	W P SM	O	C	

## 18.10 SM AO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM332 AO 2x12Bit	6ES7 332-5HB01-0AB0	Analog output module 2 AO; 12 Bit	W P SM	O		
SM332 AO 2x12Bit	6ES7 332-5HB81-0AB0	Analog output module 2 AO; 12 ... 14 Bit, extended environmental conditions	W	O		11/ 03
SM332 AO 4x12Bit	6ES7 332-5HD01-0AB0	Analog output module 4 AO; 11 ... 12 Bit	W P E SM	O	C	
SM332 AO 8x12Bit	6ES7 332-5HF00-0AB0	Analog output module 8 AO; 12 Bit	W P E	O	C	
SM332 AO 4x0/4...20mA, Ex	6ES7 332-5RD00-0AB0	Analog output module 4 AO; 0/4 ... 20 mA; 15Bit, [EEx ib]	W P SM	O	C	
SM332 AO 2x0/4...20mA, HART, Ex	6ES7 332-5TB00-0AB0	Analog output module 2 AO; 0/4 ... 20 mA; with HART communication, [EEx ib]	W P SM	O		
SM332 AO 2x0/4...20mA, HART; Ex	6ES7 332-5TB10-0AB0	Analog output module 2 AO; 0/4..20mA; with HART communication, [EEX ib]	W P SM	O		
SM332 AO 4x16Bit	6ES7 332-7ND00-0AB0	Analog output module 4 AO; 16 Bit	W	O		10/ 04
SM332 AO 4x16Bit	6ES7 332-7ND01-0AB0	Analog output module 4 AO; 16 Bit; supports isochronous mode	W	O		01/ 05
SM332 AO 4x16Bit	6ES7 332-7ND02-0AB0	Analog output module 4 AO; 16 Bit; supports isochronous mode	W P E SM	O		
SM332 AO 8x0/4...20mA HART	6ES7 332-8TF00-0AB0	Analog output module 8 AO; 16 Bit, 0/4 ... 20 mA; with HART communication	W	O		11/ 07
SM332 AO 8x0/4...20mA HART	6ES7 332-8TF01-0AB0 to V2.x	Analog output module 8 AO; 16 Bit, 0/4 ... 20 mA; with HART communication	W	O	C	
SM332 AO 8x0/4...20mA HART	6ES7 332-8TF01-0AB0 as of V3.x	Analog output module 8 AO; 16 Bit, 0/4 ... 20 mA; with HART communication	W P SM	O	C	

## 18.11 SM AI-F

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM336 AI 6x13Bit	6ES7 336-1HE00-0AB0	Analog input module 6 AI; 13 Bit; with diagnostics, safety-related to SIL-3,	W	OS	C	10/ 08
SM336 AI 6 HART	6ES7 336-4GE00-0AB0	Analog input module 6 AI; 0/4 ... 20 mA; HART, PROFIsafe V2, safety-related, with diagnostic interrupt, with HART communica- tion, FW update, redundancy	W P	M	C	

## 18.12 SM MTA

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
MTA 16 channels DI standard	6ES7 650-1AC10-3XX0	MTA for 16 DI; DC 24 V; for 6ES7 321-7BH01-0AB0 (product version 2 and higher)				02/ 08
MTA 16 channels DI standard	6ES7 650-1AC11-3XX0	MTA for 16 DI; DC 24 V; for 6ES7 321-7BH01-0AB0 (product version 2 and higher)				
MTA 8 channels AI standard	6ES7 650-1AA50-2XX0	MTA for 8 AI; 1 ... 5 V / 0/4 ... 20 mA; for 6ES7 331-7NF00-0AB0 (product version 5 and higher)				02/ 08
MTA 8 channels AI standard	6ES7 650-1AA51-2XX0	MTA for 8 AI; 1 ... 5 V / 0/4 ... 20 mA; for 6ES7 331-7NF00-0AB0 (product version 5 and higher)				
MTA 8 channels AI standard	6ES7 650-1AA52-2XX0	MTA for 8 AI; 1 ... 5 V / 0/4 ... 20 mA; for 6ES7 331-7NF00-0AB0 (product version 5 and higher) and 6ES7 331-7NF10-0AB0 (product version 8 and higher)				
MTA 8 channels AI-HART standard	6ES7 650-1AA61-2XX0	MTA for 8 AI; 4 ... 20 mA; for 6ES7 331-7TF01-0AB0				
MTA 8 channels AO standard	6ES7 650-1AB50-2XX0	MTA for 8 AO; 4 ... 20 mA; for 6ES7 332-5HF00-0AB0 (product version 3 and higher)				02/ 08
MTA 8 channels AO standard	6ES7 650-1AB51-2XX0	MTA for 8 AO; 4 ... 20 mA; for 6ES7 332-5HF00-0AB0 (product version 3 and higher)				
MTA 8 channels AO-HART standard	6ES7 650-1AB61-2XX0	MTA for 8 AO; 0/4 ... 20 mA; for 6ES7 332-8TF01-0AB0				

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
MTA 8 channels TC standard	6ES7 650-1AF50-2XX0	MTA for 8 TC; for 6ES7 331-7PF10-0AB0 (product version 4 and higher) and 6ES7 331-7PF11-0AB0				02/08
MTA 8 channels TC standard	6ES7 650-1AF51-2XX0	MTA for 8 TC; for 6ES7 331-7PF10-0AB0 (product version 4 and higher) and 6ES7 331-7PF11-0AB0				
MTA 8 channels RTD standard	6ES7 650-1AG50-2XX0	MTA for 8 RTD; for 6ES7 331-7PF00-0AB0 (product version 8 and higher) and 6ES7 331-7PF01-0AB0				02/08
MTA 8 channels RTD standard	6ES7 650-1AG51-2XX0	MTA for 8 RTD; for 6ES7 331-7PF00-0AB0 (product version 8 and higher) and 6ES7 331-7PF01-0AB0				
MTA 24 channels F-DI (fail-safe)	6ES7 650-1AK10-7XX0	MTA for 24 F- DI; DC 24 V; for 6ES7 326-1BK00-0AB0 and 6ES7 326-1BK01-0AB0 (product version 1 and higher)				02/08
MTA 24 channels F-DI (fail-safe)	6ES7 650-1AK11-7XX0	MTA for 24 F- DI; DC 24 V; for 6ES7 326-1BK00-0AB0 and 6ES7 326-1BK01-0AB0 (product version 1 and higher)				
MTA 16 channels DO standard	6ES7 650-1AD10-2XX0	MTA for 16 DO; DC 24 V / 0.5 A; for 6ES7322-8BH01-0AB0				
MTA 10 channels F-DO (fail-safe)	6ES7 650-1AL10-6XX0	MTA for 10 F-DO; DC 24 V / 2 A; for 6ES7 326-2BF01-0AB0 (product version 2 and higher)				02/08
MTA 10 channels F-DO (fail-safe)	6ES7 650-1AL11-6XX0	MTA for 10 F-DO; DC 24 V / 2 A; for 6ES7 326-2BF01-0AB0 (product version 2 and higher)				
MTA 16 channels DO (relay)	6ES7 650-1AM30-3XX0	MTA for 16 DO relays; AC 120-230 V / 5 A; DC 24 V / 5 A; for 6ES7 322-8BH01-0AB0 (product version 1 and higher)				
MTA 10 channels DO (relay)	6ES7 650-1AM30-6XX0	MTA for 10 DO relays; AC 110-220 V / 5 A; DC 24 V / 5 A; for 6ES7 326-2BF01-0AB0 (product version 2 and higher)				11/07
MTA 10 channels F-DO (fail-safe, relay)	6ES7 650-1AM31-6XX0	MTA for 10 F-DO relays; AC 120-230 V / 5 A; DC 24 V / 5 A; for 6ES7 326-2BF01-0AB0 (product version 2 and higher)				
MTA 6 channels F-AI (fail-safe)	6ES7 650-1AH50-5XX0	MTA for 6 F-AI; 4 ... 20 mA; for 6ES7336-1HE00-0AB0 (product version 6 and higher)				02/08

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
MTA 6 channels F-AI (fail-safe)	6ES7 650-1AH51-5XX0	MTA for 6 F-AI; 4 ... 20 mA; for 6ES7 336-1HE00-0AB0 (product version 6 and higher)				02/ 08
MTA 6 channels F-AI (fail-safe)	6ES7 650-1AH61-5XX0	MTA for 6 F-AI; 4 ... 20 mA; for 6ES7 336-1HE00-0AB0 (product version 6 and higher) for 6ES7 336-4GE00-0AB0				
MTA 6 channels F-AI (fail-safe)	6ES7 650-1AH62-5XX0	MTA for 6 F-AI; 4 ... 20 mA; for 6ES7 336-4GE00-0AB0				
Redundant power monitor	6ES7 650-1BA01-0XX0	Monitoring module for redundant power supply				05/ 08
Redundant power monitor	6ES7 650-1BA02-0XX0	Monitoring module for redundant power supply				
5.6 V Zener diode board	6ES7 650-1BB51-0XX0	5.6 V Zener diode daughter board for F-AI MTA				
6.2 V Zener diode board	6ES7 650-1BC51-0XX0	6.2 V Zener diode daughter board for F-AI MTA				
FET switch adapter	6ES7 650-1BD51-0XX0	FET switch adapter				

## 19.1 CP Ethernet

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CP 443-1	6GK7 443-1BX00-0XE0	S7 CP for Industrial Ethernet; with SEND-RECEIVE interface, S7 communication				02/ 03
CP 443-1 ISO	6GK7 443-1BX01-0XE0	S7 CP for Industrial Ethernet; with SEND-RECEIVE interface, S7 communication, routing, module replacement without programming device				02/ 03
CP 443-1 TCP	6GK7 443-1EX01-0XE0	S7 CP for Industrial Ethernet; with TCP/IP, with SEND-RECEIVE interface, S7 communication, routing, module replacement without programming device				02/ 03
CP 443-1	6GK7 443-1EX02-0XE0 V5.2	S7 CP for Industrial Ethernet; ISO and TCP/IP; with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing, module replacement without programming device				02/ 03
CP 443-1	6GK7 443-1EX10-0XE0 V1.0	S7 CP for Industrial Ethernet; ISO and TCP/IP; with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing, module replacement without programming device, 10/100 MBit fast send/receive				01/ 01
CP 443-1	6GK7 443-1EX10-0XE0 V2.x	S7 CP for Industrial Ethernet; ISO and TCP/IP; with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing, module replacement without programming device, 10/100 MBit fast send/receive				01/ 01
CP 443-1	6GK7 443-1EX11-0XE0 V1.1	S7 CP for Industrial Ethernet; ISO and TCP/IP; with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing, module replacement without programming device, 10/100 MBit				10/ 09
CP 443-1	6GK7 443-1EX11-0XE0 V2.x	S7 CP for Industrial Ethernet ISO and TCP/IP; with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing, module replacement without programming device, 10/100 MBit, NTP, fixed MAC address				10/ 09
CP 443-1	6GK7 443-1EX20-0XE0 V2.x	S7 CP for Industrial Ethernet ISO and TCP/IP; 2-port switch with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing, module replacement without programming device, 10/100 MBit, NTP, fixed MAC address	W			

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CP 443-1	6GK7 443-1EX30-0XE0 V3.x	S7 CP for Industrial Ethernet ISO and TCP/IP; Profinet IO controller; 2-port switch with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing, module replacement without programming device, 10/100 MBit, NTP, fixed MAC address	W P			
CP 443-1 Advanced	6GK7 443-1GX30-0XE0 V3.x	S7 CP for Industrial Ethernet ISO and TCP/IP; 5-port switch with SEND-RECEIVE and FETCH-WRITE interface, long data, UDP, TCP, S7 functions, routing, module replacement without programming device, 10/100/1000 MBit, NTP, fixed MAC address	W			

## 19.2 CP PROFIBUS

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CP 443-5 Extended	6GK7 443-5DX01-0XE0	PROFIBUS CP with PROFIBUS DP; SEND-RECEIVE interface, FMS and S7 communication; sync/freeze				10/ 01
CP 443-5 Extended	6GK7 443-5DX02-0XE0 V3.x	PROFIBUS CP: DP master; with sync/freeze and redundancy, slave internode communication, constant bus cycle, SEND-RECEIVE interface, S7 functions, time, programming device routing, data record routing				08/ 01
CP 443-5 Extended	6GK7 443-5DX03-0XE0 V4.0	PROFIBUS CP: DP master; with sync/freeze and redundancy, direct data exchange, constant bus cycle, SEND-RECEIVE interface, S7 functions, clock synchronization, routing, data record routing, DP V1				05/ 05
CP 443-5 Extended	6GK7 443-5DX03-0XE0 V5.x	PROFIBUS CP: DP master; with sync/freeze and redundancy, direct data exchange, constant bus cycle, SEND-RECEIVE interface, S7 functions, clock synchronization, routing, data record routing, DP V1, CiR	X			05/ 05

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CP 443-5 Extended	6GK7 443-5DX04-0XE0 V6.x	PROFIBUS CP: DP master; with sync/freeze and redundancy, direct data exchange, constant bus cycle, SEND-RECEIVE interface, S7 communication, clock synchronization, routing, data record routing, DP V1, CiR	W	X		
CP 443-5 Extended	6GK7 443-5DX05-0XE0 V7.x	PROFIBUS CP: DP master; with sync/freeze and redundancy, direct data exchange, constant bus cycle, SEND-RECEIVE interface, S7 communication, clock synchronization, routing, data record routing, DP V1, CiR	W	X		

## 19.3 FM

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			W	C	R	T
FM458-1 DP	6DD1 607-0AA2 V2.x	Application module for SIMATIC S7-400: high-performance and freely configurable closed-loop control tasks. 1DP connection, 60 MB user program memory, OEM know-how protection				
EXM 438-1	6DD1 607-0CA1	I/O expansion module for FM458				
EXM 448-2	6DD1 607-0EA2	Communication expansion module for FM458				

## 19.4 CPU prior to 04/99 (up to PCS 7 V4.02)

### Note

CPUs of this generation are only supported by driver designs up to PCS 7 V4.02.  
Upgrading to driver designs of PCS 7 V5.0 or later is not possible.

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 414-2 DP	6ES7 414-2XJ00-0AB0	S7 CPU; 384 KB work memory, 0.1 ms/kA, 8 KB DI/O, 32 connections, MPI and PROFIBUS DP connection	W			04/ 98
CPU 414-2 DP	6ES7 414-2XJ01-0AB0	S7 CPU; work memory 384 KB, 0.1 ms/kA, 8 KB DI/O, 32 connections, MPI and PROFIBUS DP connection	W			03/ 00
CPU 416-2 DP	6ES7 416-2XK00-0AB0	S7 CPU; work memory 0.8 MB, 0.08 ms/kA, 16 KB DI/O, 64 connections, MPI and PROFIBUS DP connection	W			04/ 98
CPU 416-2 DP	6ES7 416-2XK01-0AB0	S7 CPU; work memory 0.8 MB, 0.08 ms/kA, 16 KB DI/O, 64 connections, MPI and PROFIBUS DP connection	W			02/ 01
CPU 416-2 DP	6ES7 416-2XL00-0AB0	S7 CPU; work memory 1.6 MB, 0.08 ms/kA, 16 KB DI/O, 64 connections, MPI and PROFIBUS DP connection	W			05/ 98
CPU 416-2 DP	6ES7 416-2XL01-0AB0	S7 CPU; work memory 1.6 MB, 0.08 ms/kA, 16 KB DI/O, 64 connections, MPI and PROFIBUS DP connection	W			02/ 01

## 19.5 CPU as of 04/99 (as of PCS 7 V5.0)

### Note

The extended driver design (PCS 7 V5.2) can be used with FW V3.0 and higher.

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 414-3	6ES7 414-3XJ00-0AB0 V1.1	S7 CPU; work memory 384 KB code and 384 KB data; 0.1 ms/kA; 8 KB DI/O; 32 connections; 2 DP / MPI and 1 slot for IF modules; constant bus cycle	W			01/ 05
CPU 414-3	6ES7 414-3XJ00-0AB0 V1.2	S7 CPU; work memory 384 KB code and 384 KB data, 0.1 ms/kA; 8 KB DI/O; 32 connections, 2 DP / MPI and 1 slot for IF modules; constant bus cycle, direct data exchange; routing	W			01/ 05

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 414-3	6ES7 414-3XJ00-0AB0 V3.0	S7 CPU; work memory 384 KB code and 384 KB data, 0.1 ms/kA; 8 KB DI/O; 32 connections; 2 DP / MPI and 1 slot for IF modules; direct data exchange, constant bus cycle; routing; DP V1	W			01/ 05
CPU 414-3	6ES7 414-3XJ00-0AB0 V3.1	S7 CPU; work memory 384 KB code and 384 KB data; 0.1 ms/kA; 8 KB DI/O; 32 connections; 2 DP / MPI and 1 slot for IF modules; direct data exchange, constant bus cycle; routing; DP V1	W	X		01/ 05
CPU 416-2	6ES7 416-2XK02-0AB0 V1.1	S7 CPU; work memory 0.8 MB code and 0.8 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI; constant bus cycle	W			01/ 05
CPU 416-2	6ES7 416-2XK02-0AB0 V1.2	S7 CPU; work memory 0.8 MB code and 0.8 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI; constant bus cycle, direct data exchange; routing	W			01/ 05
CPU 416-2	6ES7 416-2XK02-0AB0 V3.0	S7 CPU; work memory 0.8 MB code and 0.8 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP/MPI; direct data exchange, constant bus cycle; routing; DPV1	W			01/ 05
CPU 416-2	6ES7 416-2XK02-0AB0 V3.1	S7 CPU; work memory 0.8 MB code and 0.8 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI direct data exchange, constant bus cycle; routing; DPV1	W	X		01/ 05
CPU 416-3	6ES7 416-3XL00-0AB0 V1.1	S7 CPU; work memory 1.6 MB code and 1.6 MB data, 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 1 slot for IF modules; constant bus cycle	W			01/ 05
CPU 416-3	6ES7 416-3XL00-0AB0 V1.2	S7 CPU; work memory 1.6 MB code and 1.6 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 1 slot for IF modules; constant bus cycle, direct data exchange; routing	W			01/ 05
CPU 416-3	6ES7 416-3XL00-0AB0 V3.0	S7 CPU; work memory 1.6 MB code and 1.6 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 1 slot for IF modules; direct data exchange, constant bus cycle; routing; DP V1	W			01/ 05
CPU 416-3	6ES7 416-3XL00-0AB0 V3.1	S7 CPU; work memory 1.6 MB code and 1.6 MB data; 0.08 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 1 slot for IF modules; direct data exchange, constant bus cycle; routing; DP V1	W	X		01/ 05

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 417-4	6ES7 417-4XL00-0AB0 V1.1	S7 CPU; work memory 2 MB code and 2 MB data, (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for IF modules; receive capability for direct data exchange; constant bus cycle; routing	W			01/ 05
CPU 417-4	6ES7 417-4XL00-0AB0 V1.2.0	S7 CPU; work memory 2 MB code and 2 MB data, (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for IF modules; constant bus cycle/direct data exchange; routing	W			01/ 05
CPU 417-4	6ES7 417-4XL00-0AB0 V3.0	S7 CPU; work memory 2 MB code and 2 MB data, (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for IF modules; receive capability for direct data exchange, constant bus cycle, routing, DP V1	W			01/ 05
CPU 417-4	6ES7 417-4XL00-0AB0 V3.1	S7 CPU; work memory 2 MB code and 2 MB data, (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for IF modules; receive capability for direct data exchange, constant bus cycle, routing, DP V1	W	X		01/ 05

## 19.6 H-CPU as of 04/99 (as of PCS 7 V5.0)

### Note

The extended driver design (PCS 7 V5.2) can be used with FW V3.0 and higher.

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 414-4H	6ES7 414-4HJ00-0AB0 V2.1.1; V2.1.2	S7 CPU; high availability; F-capability, work memory 384 KB code and 384 KB data; 0.1 ms/kA; 8 KB DI/O; 32 connections; 2 DP / MPI and 2 slots for H-sync modules	W			01/ 06
CPU 414-4H	6ES7 414-4HJ00-0AB0 V3.0	S7 CPU; high availability; F-capability, work memory 384 KB code and 384 KB data; 0.1 ms/kA; 8 KB DI/O; 32 connections; 2 DP / MPI and 2 slots for H-sync modules, direct data exchange, DP V1	W			01/ 06

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 414-4H	6ES7 414-4HJ00-0AB0 V3.1	S7 CPU; high availability; F-capability, work memory 384 KB code and 384 KB data; 0.1 ms/kA; 8 KB DI/O; 32 connections; 2 DP / MPI and 2 slots for H-sync modules, direct data exchange, DP V1	W	X		01/ 06
CPU 417-4H	6ES7 417-4HL00-0AB0 V2.0; V2.1.x	S7 CPU; high availability, work memory 2 MB code and 2 MB data; (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP MPI and 2 slots for IF modules, routing	W			09/ 00
CPU 417-4H	6ES7 417-4HL01-0AB0 V2.1	S7 CPU; high availability, work memory 2 MB code and 2 MB data; (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for H-sync modules, routing	W			01/ 06
CPU 417-4H	6ES7 417-4HL01-0AB0 V2.1.1; V2.1.2	S7 CPU; high availability, work memory 2 MB code and 2 MB data; (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for H-sync modules, routing	W			01/ 06
CPU 417-4H	6ES7 417-4HL01-0AB0 V3.0	S7 CPU; high availability, F-capability, work memory 2 MB code and 2 MB data; (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for H-sync modules, direct data exchange, routing, DP V1	W			01/ 06
CPU 417-4H	6ES7 417-4HL01-0AB0 V3.1	S7 CPU; high availability, F-capability, work memory 2 MB code and 2 MB data; (can be extended to up to 20 MB); 0.1 ms/kA; 16 KB DI/O; 64 connections; 2 DP / MPI and 2 slots for H-sync modules, direct data exchange, routing, DP V1	W	X		01/ 06

## 19.7 CPU as of 08/04 (as of PCS 7 V6.1)

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 414-3	6ES7 414-3XJ04-0AB0 V4.x	S7 CPU; work memory 0.7 MB code and 0.7 MB data; 0.06 ms/1000 instructions.; 8 KB DI/O; 32 connections; 1 DP / MPI, 1 DP and 1 slot for IF-modules; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing	W	X		03/07
CPU 416-2	6ES7 416-2XK04-0AB0 V4.x	S7 CPU; work memory 1.4 MB code and 1.4 MB data; 0.04 ms/1000 instructions; 16 KB DI/O; 64 connections; 1 DP / MPI, 1 DP; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing	W	X		03/07
CPU 416-3	6ES7 416-3XL04-0AB0 V4.x	S7 CPU; work memory 2.8 MB code and 2.8 MB data; 0.04 ms/1000 instructions; 16 KB DI/O; 64 connections; 1 DP / MPI, 1 DP and 1 slot for IF-modules; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing	W	X		03/07
CPU 417-4	6ES7 417-4XL04-0AB0 V4.x	S7 CPU; work memory 10 MB code and 10 MB data; 0.03 ms/1000 instructions; 16 KB DI/O; 64 connections; 1 DP / MPI, 1 DP and 2 slots for IF-modules; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing	W	X		03/07

## 19.8 H-CPU as of 08/04 (as of PCS 7 V6.1)

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 414-4H	6ES7 414-4HJ04-0AB0 V4.x	S7 CPU; high availability and fail-safe capability; work memory 0.7 MB code and 0.7 MB data; 0.08 ms/1000 instructions; 8 KB DI/O; 32 connections; 1 DP / MPI, 1 DP and 2 slots for H-sync modules	W	X		01/ 10
CPU 417-4H	6ES7 417-4HL04-0AB0 V4.x	S7 CPU; high availability and fail-safe capability; work memory 10 MB code and 10 MB data; 0.03 ms/1000 instructions; 16 KB DI/O; 64 connections; 1 DP / MPI, 1 DP and 2 slots for H-sync modules	W	X		01/ 10

## 19.9 CPU as of 12/06 (as of PCS 7 V7.0)

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 414-3 DP	6ES7 414-3XM05-0AB0 V5.0	S7 CPU; work memory 1.4 MB code and 1.4 MB data; 0.045 ms/1000 instructions; 8 KB DI/O; 32 connections; 1 DP / MPI, 1 DP and 1 slot for IF-modules; send and receive capability for direct data ex- change; constant bus cycle time and isochronous process- ing; routing	W	X		
CPU 414-3 DP	6ES7 414-3XM05-0AB0 V5.1 .. V5.3.x	S7 CPU; work memory 1.4 MB code and 1.4 MB data; 0.045 ms/1000 instructions; 8 KB DI/O; 32 connections; 1 DP / MPI, 1 DP and 1 slot for IF-modules; send and receive capability for direct data ex- change; constant bus cycle time and isochronous process- ing; routing; integrated data record gateway	W	X		

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 414-3 PN/DP	6ES7 414-3EM05-0AB0 V5.0 1)	S7 CPU; work memory 1.4 MB code and 1.4 MB data; 0.045 ms/1000 instructions; 8 KB DI/O; 32 connections; 1 DP / MPI, 1 PN and 1 slot for IF-modules; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing	W	X		
CPU 414-3 PN/DP	6ES7 414-3EM05-0AB0 V5.1 .. V5.3.x 1)	S7 CPU; work memory 1.4 MB code and 1.4 MB data; 0.045 ms/1000 instructions; 8 KB DI/O; 32 connections; 1 DP / MPI, 1 PN and 1 slot for IF-modules; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing; integrated data record gateway	W	X		
CPU 416-2 DP	6ES7 416-2XN05-0AB0 V5.0	S7 CPU; work memory 2.8 MB code and 2.8 MB data; 0.030 ms/1000 instructions; 16 KB DI/O; 64 connections; 1 DP / MPI, 1 DP; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing	W	X		
CPU 416-2 DP	6ES7 416-2XN05-0AB0 V5.1 .. V5.3.x	S7 CPU; work memory 2.8 MB code and 2.8 MB data; 0.030 ms/1000 instructions; 16 KB DI/O; 64 connections; 1 DP / MPI, 1 DP; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing; integrated data record gateway	W	X		
CPU 416-3 DP	6ES7 416-3XR05-0AB0 V5.0	S7 CPU; work memory 5.6 MB code and 5.6 MB data; 0.030 ms/1000 instructions; 16 KBDI/O; 64 connections; 1 DP / MPI, 1 DP; and 1 slot for IF-modules; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing	W	X		

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 416-3 DP	6ES7 416-3XR05-0AB0 V5.1 .. V5.3.x	S7 CPU; work memory 5.6 MB code and 5.6 MB data; 0.030 ms/1000 instructions; 16 KB DI/O; 64 connections; 1 DP / MPI, 1 DP; and 1 slot for IF-modules; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing; integrated data record gateway	W	X		
CPU 416-3 PN/DP	6ES7 416-3ER05-0AB0 V5.0 1)	S7 CPU; work memory 5.6 MB code and 5.6 MB data; 0.030 ms/1000 instructions; 16 KBDI/O; 64 connections; 1 DP / MPI, 1 PN and 1 slot for IF-modules; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing	W	X		
CPU 416-3 PN/DP	6ES7 416-3ER05-0AB0 V5.1 .. V5.3.x 1)	S7 CPU; work memory 5.6 MB code and 5.6 MB data; 0.030 ms/1000 instructions; 16 KB DI/O; 64 connections; 1 DP / MPI, 1 PN and 1 slot for IF-modules; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing; integrated data record gateway	W	X		
CPU 417-4 DP	6ES7 417-4XT05-0AB0 V5.0	S7 CPU; work memory 15 MB code and 15 MB data; 0.018 ms/1000 instructions; 16 KBDI/O; 64 connections; 1 DP / MPI, 1 DP and 2 slots for IF-modules; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing	W	X		
CPU 417-4 DP	6ES7 417-4XT05-0AB0 V5.1 .. V5.3.x	S7 CPU; work memory 15 MB code and 15 MB data; 0.018 ms/1000 instructions; 16 KB DI/O; 64 connections; 1 DP / MPI, 1 DP and 2 slots for IF-modules; send and receive capability for direct data exchange; constant bus cycle time and isochronous processing; routing; integrated data record gateway	W	X		

<sup>1)</sup> The internal PROFINET interface is not released for use with PCS 7.

## 19.10 H-CPU as of 09/07 (as of PCS 7 V7.0.1)

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 412-3H	6ES7 412-3HJ14-0AB0 V4.5	S7 CPU; fault-tolerant and fail-safe capability; work memory 0.5 MB code and 0.25 MB data; 0.075 ms/1000 instructions; 8 KB DI/O; 16 connections; 1 DP / MPI, 1 DP and 2 slots for H-sync modules;	W	X		
CPU 414-4H	6ES7 414-4HM14-0AB0 V4.5	S7 CPU; fault-tolerant and fail-safe capability; work memory 1.4 MB code and 1.4 MB data; 0.045 ms/1000 instructions; 8 KB DI/O; 32 connections; 1 DP / MPI, 1 DP and 2 slots for H-sync modules;	W	X		
CPU 417-4H	6ES7 417-4HT14-0AB0 V4.5	S7 CPU; fault-tolerant and fail-safe capability; work memory 15 MB code and 15 MB data; 0.018 ms/1000 instructions; 16 KB DI/O; 64 connections; 1 DP / MPI, 1 DP and 2 slots for H-sync modules;	W	X		

## 19.11 CPU as of 08/10 (as of PCS 7 V7.1.2)

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 414-3 PN/DP	6ES7 414-3EM06-0AB0 V6.x	S7 CPU; work memory 2.0 MB code and 2.0 MB data; 0.045 ms/1000 instructions; 8KB DI/O; 64 connections; 1*DP/MPI, 1*PN and 1 slot for IF-modules; send and receive capability for direct data ex- change; constant bus cycle time and isochronous process- ing; routing; integrated data record gateway;	W P	X		
CPU 416-3 PN/DP	6ES7 416-3ES06-0AB0 V6.x	S7 CPU; work memory 8.0 MB code and 8.0 MB data; 0.030 ms/1000 instructions; 16KB DI/O; 96 connections; 1*DP/MPI, 1*PN and 1 slot for IF-modules; send and receive capability for direct data ex- change; constant bus cycle time and isochronous process- ing; routing; integrated data record gateway;	W P	X		

## 19.12 H-CPU as of 12/11 (as of PCS 7 V8.0)

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 412-5H PN/DP	6ES7 412-5HK06-0AB0 V6.x	S7 CPU; fault-tolerant and fail-safe capability; work memory 0.5 MB code and 0.5 MB data; 0.031 ms/1000 instructions; 8 KB DI/O; 48 connections; 1 DP / MPI, 1 DP, 1 PN and 2 slots for H-sync modules;	W P	X		
CPU 414-5H PN/DP	6ES7 414-5HM06-0AB0 V6.x	S7 CPU; fault-tolerant and fail-safe capability; work memory 2 MB code and 2 MB data; 0.019 ms/1000 instructions; 8 KB DI/O; 64 connections; 1 DP / MPI, 1 DP, 1 PN and 2 slots for H-sync modules;	W P	X		
CPU 416-5H PN/DP	6ES7 416-5HS06-0AB0 V6.x	S7 CPU; fault-tolerant and fail-safe capability; work memory 6 MB code and 10 MB data; 0.012 ms/1000 instructions; 16 KB DI/O; 96 connections; 1 DP / MPI, 1 DP, 1 PN and 2 slots for H-sync modules;	W P	X		
CPU 417-5H PN/DP	6ES7 417-5HT06-0AB0 V6.x	S7 CPU; fault-tolerant and fail-safe capability; work memory 16 MB code and 16 MB data; 0.0075 ms/1000 instructions; 16 KB DI/O; 120 connections; 1 DP / MPI, 1 DP, 1PN and 2 slots for H-sync modules;	W P	X		

## 19.13 CPU as of 06/13 (as of PCS 7 V8.0.2)

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 410-5H process automation	6ES7 410-5HX08-0AB0 V8.0.x	S7 CPU; fault-tolerant and fail-safe capability; controller for all sectors of the process industry, 48 MB integrated load memory, work memory 16 MB code and 16 MB data; PROFINET IO controller, PROFINET interface and 2 ports; Average processing time of the PCS 7 typicals 110 µs; 16 KB DI/O; 120 connections; 1 PN, 1 DP, 2 for sync-modules and 1 service;	W P	X		

## 19.14 CPU as of 09/14 (as of PCS 7 V8.1)

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 410-5H process automation	6ES7 410-5HX08-0AB0 V8.1.x	S7 CPU; fault-tolerant and fail-safe capability; controller for all sectors of the process industry, 48 MB integrated load memory, work memory 16 MB code and 16 MB data; PROFINET IO controller, 2 PROFINET interfaces and 2 ports each; average processing time of the PCS 7 typicals 110 µs; 16 KB DI/O; 120 connections; 2x PN, 1x DP, 2x for sync-modules and 1x service;	W P	X		
CPU 410 SMART process automation	6ES7 410-5HN08-0AB0 V8.1.x	S7 CPU; fault-tolerant; controller for all sectors of the process industry, 48 MB integrated load memory, work memory 4 MB code and 4 MB data; PROFINET IO controller, 2 PROFINET interfaces and 2 ports each; average processing time of the PCS 7 typicals 110 µs; 16 KB DI/O; 120 connections; 2x PN, 1x DP, 2x for sync-modules and 1x service;	W P	X		

## 19.15 CPU as of 02/16 (as of PCS 7 V8.2)

### Core statement

Product name	Article no. Firmware version	Brief description	Properties (Page 129)			
			F	C	R	T
CPU 414-3 PN/DP	6ES7 414-3EM07-0AB0 V7.0	S7 CPU; RAM 2 MB code and 2 MB data; 18.75 µs/kAW; 8KB DI/O; 64 connections; 1*DP/MPI, 1*PN and 1 slot for IF modules; routing; data record routing; PROFINET IO controller; PROFINET interface and 2 ports;	W P	X		
CPU 416-3 PN/DP	6ES7 416-3ES07-0AB0 V7.0	S7 CPU; RAM 8 MB code and 8 MB data; 12.5 µs/kAW; 16KB DI/O; 96 connections; 1*DP/MPI, 1*PN and 1 slot for IF modules; routing; data record routing; PROFINET IO controller; PROFINET interface and 2 ports;	W P	X		
CPU 417-4	6ES7 417-4XT07-0AB0 V7.0	S7 CPU; Ram 16 MB code and 16 MB data; 7.5 µs/kAW; 16 KB DI/O; 120 connections; 1*DP/MPI, 1*DP and 2 slots for IF modules; Routing; data record routing;	W	X		

## 19.16 CPU as of 05/17 (as of PCS 7 V9.0)

### CPU

Product name	Article no.	Brief description	Properties			
			F	C	R	T
CPU 410-5H Process automation	6ES7 410-5HX08-0AB0 V8.2	S7 CPU; fault-tolerant and fail-safe capability; controller for all sectors of the process industry, 48 MB integrated load memory, work memory 16 MB code and 16 MB data; PROFINET IO controller, 2 PROFINET interfaces and 2 ports each; average processing time of the PCS 7 typicals 110 µs; 2x PN, 1x DP, 2x for sync-modules and 1x service;	W P	X		
CPU 410 SMART process automation	6ES7 410-5HN08-0AB0 V8.2	S7 CPU; fault-tolerant; controller for all sectors of the process industry, 48 MB integrated load memory, work memory 4 MB code and 4 MB data; PROFINET IO controller, 2 PROFINET interfaces and 2 ports each; average processing time of the PCS 7 typicals 110 µs; 2x PN, 1x DP, 2x for sync-modules and 1x service;	W P	X		
CPU 410E Process automation	6ES7 410-5HM08-0AB0 V8.2	S7 CPU; fault-tolerant and fail-safe capability; controller for all sectors of the process industry, up to 200 PO or 1-4 MB work memory; PROFINET IO controller, 2 PROFINET interfaces and 2 ports each; average processing time of the PCS 7 typicals 110 µs; 2x PN, 1x DP, 2x for sync-modules and 1x service;	W P	X		

## 19.17 IM

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
IM 460-0	6ES7 460-0AA00-0AB0	Send interface module, 3 m, without voltage transmission, with K bus				12/ 01
IM 460-0	6ES7 460-0AA01-0AB0	Send interface module for central coupling up to 3 m, without 5 V voltage transmission, with K bus	W			

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
IM 460-1	6ES7 460-1BA00-0AB0	Send interface module, 1.5 m; with voltage transmission, without K bus				12/01
IM 460-1	6ES7 460-1BA01-0AB0	Send interface module for central coupling up to 1.5 m; with voltage transmission, without K bus	W			
IM 460-3	6ES7 460-3AA00-0AB0	Send interface module, 100 m; without voltage transmission, with K bus				12/01
IM 460-3	6ES7 460-3AA01-0AB0	Send interface module, 100 m; without voltage transmission, with K bus	W			
IM 460-4	6ES7 460-4AA01-0AB0	Send interface module, 600 m; without voltage transmission, without K bus	W			
IM 461-0	6ES7 461-0AA00-0AA0	Receive interface module for central coupling up to 3 m; without voltage transmission, with K bus				12/01
IM 461-0	6ES7 461-0AA01-0AA0	Receive interface module for central coupling up to 3 m; without voltage transmission, with K bus	W			
IM 461-1	6ES7 461-1BA00-0AA0	Receive interface module, 1.5 m; with 5V voltage transmission, without K bus				12/01
IM 461-1	6ES7 461-1BA01-0AA0	Receive interface module for central coupling up to 1.5 m; with voltage transmission, without K bus	W			
IM 461-3	6ES7 461-3AA00-0AA0	Receive interface module, 100 m; without voltage transmission, with K bus				12/01
IM 461-3	6ES7 461-3AA01-0AA0	Receive interface module, 100 m; without voltage transmission, with K bus	W			
IM 461-4	6ES7 461-4AA01-0AA0	Receive interface module, 600 m; without voltage transmission, without K bus	W			
IM 463-2	6ES7 463-2AA00-0AA0	Send interface module, 600 m; for connecting S5 expansion unit with IM 314				

## 19.18 PS

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
PS 405 10A	6ES7 405-0KA00-0AA0	Power supply DC 24 V / 10 A	W			02/01
PS 405 10A	6ES7 405-0KA01-0AA0	Power supply DC 24 V / 10 A	W			03/05
PS 405 10A	6ES7 405-0KA02-0AA0	Power supply DC 24 V / 10 A; ATEX certification	W			
PS 405 20A	6ES7 405-0RA01-0AA0	Power supply DC 24 V / 10 A	W			10/07

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
PS 405 20A	6ES7 405-0RA02-0AA0	Power supply DC 24 V / 10 A; ATEX certification	W			
PS 405 10A	6ES7 405-0KR00-0AA0	Power supply DC 24 V / 10 A; redundant power supply	W			09/ 06
PS 405 10A	6ES7 405-0KR02-0AA0	Power supply DC 24 V / 10 A; redundant power supply, ATEX certification	W			
PS 405 10A	6ES7 405-0KR02-0AA1	Power supply DC 24 V / 10 A; redundant power supply, ATEX certification, variant with protective coating	W			
PS 405 4A	6ES7 405-0DA02-0AA0	Power supply DC 24/48/60 V, DC 5 V / 4 A, ATEX certification	W			
PS 405 4A	6ES7 405-0DA02-0AA1	Power supply DC 24/48/60 V; DC 5 V / 4 A, ATEX certification, variant with protective coating	W			
PS 407 10A	6ES7 407-0KA00-0AA0	Power supply AC 120 / 230 V / 10 A	W			03/ 99
PS 407 10A	6ES7 407-0KA01-0AA0	Power supply AC 120 / 230 V / 10 A	W			02/ 07
PS 407 10A	6ES7 407-0KA02-0AA0	Power supply AC 120 / 230 V / 10 A	W			
PS 407 20A	6ES7 407-0RA01-0AA0	Power supply AC 120 / 230 V / 20 A	W			09/ 06
PS 407 20A	6ES7 407-0RA02-0AA0	Power supply AC 120 / 230 V / 20 A	W			
PS 407 10A	6ES7 407-0KR00-0AA0	Power supply AC 120 / 230 V / 10 A; redundant power supply	W			09/ 06
PS 407 10A	6ES7 407-0KR02-0AA0	Power supply AC 120 / 230 V / 10 A; redundant power supply	W			
PS 407 10A	6ES7 407-0KR02-0AA1	Power supply AC 120 / 230 V / 10 A; redundant power supply, variant with protective coating	W			
PS 407 4A	6ES7 407-0DA02-0AA0	Power supply 4 A, UC 120/230 V, DC 5 V/4 A	W			
PS 407 4A	6ES7 407-0DA02-0AA1	Power supply 4 A, UC 120/230 V, DC 5 V/4 A; variant with protective coating	W			

## 19.19 Racks

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
UR2	6ES7 400-1JA00-0AA0	Universal rack; 9 slots, not suitable for power supply modules in redundant operation	W			01/ 98
UR2	6ES7 400-1JA01-0AA0	Universal rack; 9 slots	W			

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
UR2 ALU	6ES7 400-1JA11-0AA0	Universal aluminum rack; 9 slots	W			
UR2 ALU	6ES7 400-1JA11-0AA1	Universal aluminum rack; 9 slots, variant with protective coating	W			
UR1	6ES7 400-1TA00-0AA0	Universal rack; 18 slots, not suitable for power supply modules in redundant operation	W			08/ 98
UR1	6ES7 400-1TA01-0AA0	Universal rack; 18 slots	W			
UR1 ALU	6ES7 400-1TA11-0AA0	Universal aluminum rack; 18 slots	W			
UR2-H	6ES7 400-2JA00-0AA0	Central rack; 18 slots, 2 segments (9 + 9), mainly for H-systems	W			
UR2-H ALU	6ES7 400-2JA10-0AA0	Central aluminum rack; 18 slots, 2 segments (9 + 9), mainly for H systems	W			
UR2-H ALU	6ES7 400-2JA10-0AA1	Central aluminum rack; 18 slots, 2 segments (9 + 9), mainly for H systems, variant with protective coating	W			
CR3	6ES7 401-1DA01-0AA0	Central rack; 4 slots	W			
CR3	6ES7 401-1DA01-0AA1	Central rack; 4 slots, variant with protective coating	W			

## 19.20 SM DI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM 421 DI 32xDC 24V	6ES7 421-1BL00-0AA0	Digital input module 32 DI; DC 24 V; grouping 32	W			10/ 04
SM 421 DI 32xDC 24V	6ES7 421-1BL01-0AA0	Digital input module 32 DI; DC 24 V; grouping 32	W			
SM 421 DI 32xAC 120V	6ES7 421-1EL00-0AA0	Digital input module 32 DI; UC 120 V; grouping 8	W			
SM 421 DI 16xUC 120/230V	6ES7 421-1FH00-0AA0	Digital input module 16 DI; UC 120 / 230 V; grouping 4	W			08/ 02

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM 421 DI 16xUC 120/230V	6ES7 421-1FH20-0AA0	Digital input module 16 DI; UC 120 / 230 V; grouping 4, input characteristic curve according to IEC 1131, type 2	W			
SM 421 DI 16xDC 24V	6ES7 421-7BH00-0AB0	Digital input module 16 DI; DC 24 V; grouping 1, hardware and diagnostic interrupts, as- signable substitute values	W		10/ 04	
SM 421 DI 16xDC 24V	6ES7 421-7BH01-0AB0	Digital input module 16 DI; DC 24 V; grouping 8, hardware and diagnostic interrupts, as- signable substitute values	W			
SM421 DI 16xUC 24/60V Alarm	6ES7 421-7DH00-0AB0	Digital input module 16 DI; UC 24 ... 60V; grouping 1, hardware and diagnostic interrupts	W			
SM421 DI 16xAC 120V	6ES7 421-5EH00-0AA0	Digital input module 16 DI; AC 120 V; grouping 1, input characteristic curve according to IEC 1131, type 2	W		10/ 04	

## 19.21 SM DO

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM 422 DO 16x DC 24V/2A	6ES7 422-1BH10-0AA0	Digital output module 16 DO; DC 24 V / 2 A; grouping 8	W		10/ 04	
SM 422 DO 16x DC 24V/2A	6ES7 422-1BH11-0AA0	Digital output module 16 DO; DC 24 V / 2 A; grouping 8	W			
SM 422 DO 32x DC 24V/0,5A	6ES7 422-1BL00-0AA0	Digital output module 32 DO; DC 24 V / 0.5 A; grouping 32	W			
SM 422 DO 8x AC 120/230/5A	6ES7 422-1FF00-0AA0	Digital output module 8 DO; AC 120 / 230 V / 5 A; grouping 1	W		10/ 04	
SM 422 DO 16x AC 120/230/2A	6ES7 422-1FH00-0AA0	Digital output module 16 DO; AC 120 / 230 V / 2 A; grouping 4	W			
SM 422 DO 16x AC 230V/5A Rel.	6ES7 422-1HH00-0AA0	Digital output module 16 DO relays; AC 230 V, DC 60 V / 5 A; grouping 4	W			

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM 422 DO 32x DC 24V/0.5A	6ES7 422-7BL00-0AB0	Digital output module 32 DO; DC 24 V / 0.5 A; grouping8, diagnostics, assignable substitute values	W			
SM 422 DO 16x AC 120V/2A	6ES7 422-5EH00-0AB0	Digital output module 16 DO; AC 120 V / 2 A; diagnostics	W			10/ 04
SM 422 DO 16x DC 20-125V/1.5A	6ES7 422-5EH10-0AB0	Digital output module 16 DO; DC 20 ... 125 V / 1.5 A; grouping 8, diagnostics	W			10/ 04

## 19.22 SM AI

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM 431 AI 16x13Bit	6ES7 431-0HH00-0AB0	Analog input module 16 AI; 13 Bit; integration time 16.7 / 20 ms	W			
SM 431 AI 8 x 13Bit	6ES7 431-1KF00-0AB0	Analog input module 8 AI; 12 + 1 Bit; integration time 16.7 / 20 ms	W			
SM 431 AI 8 x 14Bit	6ES7 431-1KF10-0AB0	Analog input module 8 AI; 13 + 1 Bit; integration time 16.7 / 20 ms; linearization (RTD / TC)	W			
SM 431 AI 8 x 14Bit	6ES7 431-1KF20-0AB0	Analog input module 8 AI; 13 + 1 Bit; conversion time 10 µs	W			
SM 431 AI 16 x 16Bit	6ES7 431-7QH00-0AB0	Analog input module 16 AI; 15 + 1 Bit; integration time 16.7 / 20 ms; linearization (RTD / TC), diagnostics	W			
SM 431 AI 8 x 16Bit	6ES7 431-7KF00-0AB0	Analog input module 8 "TC / U" by channel Isol.	W			
SM 431 AI 8 x 16Bit	6ES7 431-7KF10-0AB0	Analog input module 8 "RTD"; 16 -bit	W			

**19.23      SM AO**

Product name	Article no.	Brief description	Properties (Page 129)			
			F	C	R	T
SM432 AO 8 x 13Bit	6ES7 432-1HF00-0AB0	Analog output module 8 AO; 13 Bit; conversion time 420 µs, 0 ... 10 V / 0 ... 20 mA	W			

# SIPLUS modules

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You can find compatible SIPLUS versions of the modules which have been released for PCS 7 in this documentation.

## Engineering note

You will not find any SIPLUS modules in the PCS 7 hardware catalog.

- Configure the modules available in the hardware catalog.
- Install the compatible SIPLUS versions of the modules available in the hardware catalog.



# Appendix

A

## A.1 Properties

### Properties in the module list

Column	Meaning of column	Identifier	Meanings
F	Functions	P	Component has been released for PROFINET
		W	Module wizard is supported
		E	Component is released for central use with PCS 7 AS mEC RTX
		Y	Component can be installed behind the Y-Link
		SM	Component is released for use behind the IM 650-8
C	CiR support	X	Station can be installed and removed with CiR
		S	Station can be reconfigured "Online"
		M	Module can be installed and removed with CiR
		O	Module parameters can be changed "online"
		OS	Module parameters can be changed "online" only in standard mode
R	Redundant I/O	X	Component is supported
		A	Redundant connection is possible
		M	By module
		G	By group
		C	By channel
T	Discontinuation		On specified date (month/year)

