

# SIEMENS



ENGINEERED WITH LOGO! SOFT COMFORT

## Simply ingenious for small automation tasks

## کنترلر منطقی LOGO! زیمنس

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹  
تلفن: ۰۲۱-۸۸۶۴۱۴۹۳-۵ ۰۲۱-۴۱۹۰۷



## Ordering data

Designation	Description Power supply	Digital inputs	Digital outputs	Analog inputs	Outputs	Article No.
<b>LOGO! 8 basic units</b>						
<b>LOGO! 8 Basic with 6-line LCD display and cursor keys, Ethernet interface</b>						
LOGO! 24 CE	24 V DC	8, of which 4 can be used as AI (0...10 V)	4	Up to 4 (0...10 V)	0.3 A transistor	6ED1052-1CC08-0BA1
LOGO! 12/24 RCE	12...24 V DC	8, of which 4 can be used as AI (0...10 V)	4	Up to 4 (0...10 V)	10 A relay	6ED1052-1MD08-0BA1
LOGO! 24 RCE	24 V AC/DC	8	4	–	10 A relay	6ED1052-1HB08-0BA1
LOGO! 230 RCE	115...230 V AC/DC	8	4	–	10 A relay	6ED1052-1FB08-0BA1



## Ordering data

Designation	Description Power supply	Digital inputs	Digital outputs	Analog inputs	Outputs	Article No.
<b>LOGO! 8 basic units</b>						
<b>LOGO! 8 Pure without LCD display and without cursor keys, Ethernet interface</b>						
LOGO! 24 CEo	24 V DC	8, of which 4 can be used as AI (0...10 V)	4	Up to 4 (0...10 V)	0.3 A transistor	6ED1052-2CC08-0BA1
LOGO! 12/24 RCEo	12...24 V DC	8, of which 4 can be used as AI (0...10 V)	4	Up to 4 (0...10 V)	10 A relay	6ED1052-2MD08-0BA1
LOGO! 24 RCEo	24 V AC/DC	8	4	–	10 A relay	6ED1052-2HB08-0BA1
LOGO! 230 RCEo	115...230 V AC/DC	8	4	–	10 A relay	6ED1052-2FB08-0BA1

## Ordering data

	Operating range	SIPLUS Article No.	Based on Article No.
<b>LOGO! 8 SIPLUS basic devices</b>			
SIPLUS LOGO! 24 CE	–20...+70 °C Start-up temperature up to –20 °C with conformal coating	6AG1052-1CC08-7BA0	6ED1052-1CC08-0BA0
SIPLUS LOGO! 12/24 RCE		6AG1052-1MD08-7BA0	6ED1052-1MD08-0BA0
SIPLUS LOGO! 24 RCE		6AG1052-1HB08-7BA0	6ED1052-1HB08-0BA0
SIPLUS LOGO! 230 RCE		6AG1052-1FB08-7BA0	6ED1052-1FB08-0BA0

## Ordering data

Designation	Description Power supply	Digital inputs	Digital outputs	Analog inputs	Outputs	Article No.
<b>LOGO! 8 expansion modules</b>						
<b>Digital I/O expansion modules</b>						
LOGO! DM8 24, Transistor DA	24 V DC	4	4	–	0.3 A	6ED1055-1CB00-0BA2 <sup>1)</sup>
LOGO! DM8 12/24 R	12...24 V DC	4	4	–	5 A relay	6ED1055-1MB00-0BA2 <sup>1)</sup>
LOGO! DM8 24 R	24 V AC/DC	4	4	–	5 A relay	6ED1055-1HB00-0BA2 <sup>1)</sup>
LOGO! DM8 230 R	115...230 V AC/DC	4	4	–	5 A relay	6ED1055-1FB00-0BA2 <sup>1)</sup>
LOGO! DM16 24, Transistor DA	24 V DC	8	8	–	0.3 A	6ED1055-1CB10-0BA2
LOGO! DM16 24 R	24 V DC	8	8	–	5 A relay	6ED1055-1NB10-0BA2 <sup>1)</sup>
LOGO! DM16 230 R	115...230 V AC/DC	8	8	–	5 A relay	6ED1055-1FB10-0BA2



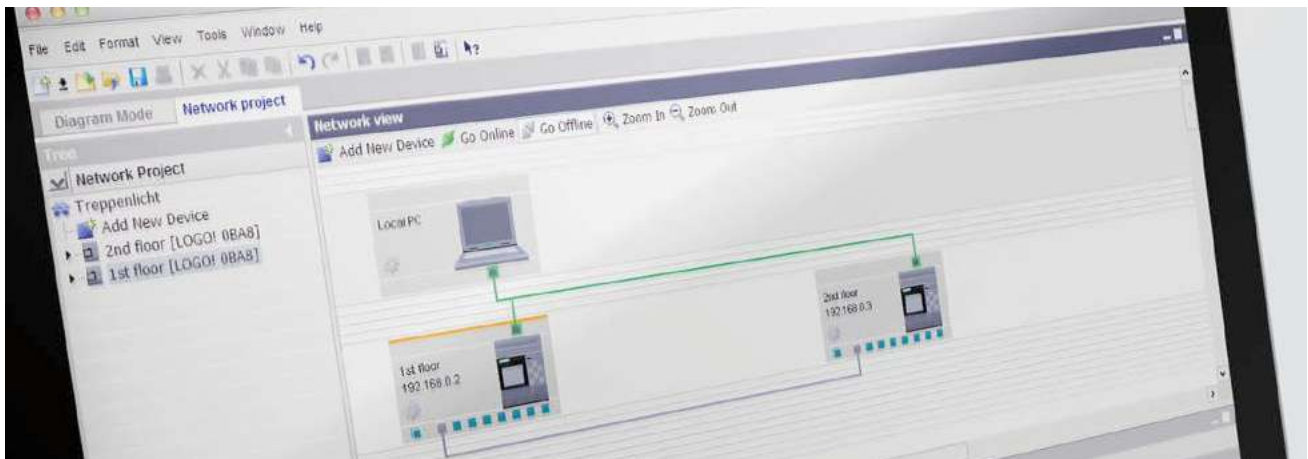
## Ordering data

Designation	Description Power supply	Digital inputs	Digital outputs	Analog inputs	Outputs	Article No.
<b>LOGO! 8 expansion modules</b>						
<b>Analog expansion modules</b>						
LOGO! AM2 0...10 V or 0/4...20 mA	12...24 V DC	10-bit resolution	–	2	–	6ED1055-1MA00-0BA2 <sup>1)</sup>
LOGO! AM2 RTD –50...200 °C, 2/3 wire (Pt100/1000)	12...24 V DC	0.25 °C resolution	–	2	–	6ED1055-1MD00-0BA2 <sup>1)</sup>
LOGO! AM2 AQ with 2 analog outputs	24 V DC	10-bit resolution	–	–	0...10 V DC / 0/4...20 mA	6ED1055-1MM00-0BA2 <sup>1)</sup>
<b>Communication and networking</b>						
LOGO! CSM12/24	12...24 V DC	4x RJ45 Port Ethernet Switches				6GK7177-1MA20-0AA0
LOGO! CMR2020	Communication module for connecting to GSM/GPRS <sup>2)</sup>					6GK7142-7BX00-0AX0
LOGO! CMR2040	Communication module for connecting to GSM/GPRS/UMTS/LTE <sup>2)</sup>					6GK7142-7EX00-0AX0
LOGO! CMK2000	Communication module for building automation with KNX					6BK1700-0BA20-0AA0
<b>Antennas</b>						
GPS antenna ANT895-6ML Flexible connecting cable	with N connect female connector for reception of GPS data on the LOGO! CMR					6GK5895-6ML00-0AA0
	with N connect/SMA male for linking GPS antenna and LOGO! CMR					6XV1875-5LH50
GPRS/LTE antenna ANT794-4MR	Rod antenna with 5 m flexible connecting lead SMA male for establishing a mobile connection via the LOGO! CMR					6NH9860-1AA00

<sup>1)</sup> Also available as SIPLUS extreme version, <sup>2)</sup> Country approvals: [www.siemens.com/mobilenetwork-approvals](http://www.siemens.com/mobilenetwork-approvals)

## Ordering data

Designation	Description	Article No.
<b>LOGO! 8 Software</b>		
LOGO! Soft Comfort V8.3	for Windows 10, 8, 7, XP, Linux and Mac OS X; on DVD, backward compatible, including LOGO! Web Editor	6ED1058-0BA08-0YA1
<b>LOGO! 8 Text Display HMI</b>		
LOGO! TDE Text Display		6ED1055-4MH08-0BA1 <sup>1)</sup>



## Ordering data

Designation	Description	Article No.
<b>LOGO! 8 Power Supplies</b>		
LOGO!Power	for converting the line voltage of 85...264 V AC / 110...300 V DC for converting the line voltage of 12 V DC or 24 V DC	
LOGO!Power 12 V / 0.9 A	18 mm wide	6EP3320-6SB00-0AY0
LOGO!Power 12 V / 1.9 A	36 mm wide	6EP3321-6SB00-0AY0
LOGO!Power 12 V / 4.5 A	54 mm wide	6EP3322-6SB00-0AY0
LOGO!Power 24 V / 0.6 A	18 mm wide	6EP3330-6SB00-0AY0
LOGO!Power 24 V / 1.3 A	36 mm wide	6EP3331-6SB00-0AY0
LOGO!Power 24 V / 2.5 A	54 mm wide	6EP3332-6SB00-0AY0
LOGO!Power 24 V / 4.0 A	72 mm wide	6EP3333-6SB00-0AY0
<b>LOGO! Inrush Current Limiter</b>		
LOGO! ICL230	For limiting the inrush current to 5 A of devices connected to 100–240 V AC. 18 mm wide	6EP4683-6LB00-0AY0

## Ordering data

Designation	Description	Article No.
<b>LOGO! 8 Starter Kits</b>		
	In Tanos Box with: LOGO! 8, LOGO! Soft Comfort V8, WinCC Basic, Ethernet cable	
LOGO! 8 12/24 V Starter Kit	LOGO! 12/24 RCE, LOGO!Power 24 V, 1.3 A	6ED1057-3BA01-0AA8
LOGO! 8 230 V Starter Kit	LOGO! 230 RCE	6ED1057-3BA03-0AA8
LOGO! 8 TDE Starter Kit	LOGO! 12/24 RCEo, LOGO!Power 24 V, 1.3 A, LOGO! TDE	6ED1057-3BA11-0AA8
LOGO! 8 12/24 V + KP300 Basic Starter Kit	LOGO! 12/24 RCE, LOGO!Power 24 V, 1.3 A, SIMATIC HMI KP300 Basic mono PN	6AV2132-0HA00-0AA1
LOGO! 8 12/24 V + KTP400 Basic Starter Kit	LOGO! 12/24 RCE, LOGO!Power 24 V, 1.3 A, SIMATIC HMI KTP400 Basic	6AV2132-0KA00-0AA1
LOGO! 8 12/24 V + KTP700 Basic Starter Kit	LOGO! 12/24 RCE, LOGO!Power 24 V, 1.3 A, SIMATIC HMI KTP700 Basic	6AV2132-3GB00-0AA1



شرکت سیمی نصر ماد

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تلفن: ۵-۸۸۶۴۱۴۹۳-۰۲۱-۴۱۹۰۷



# SIEMENS



## Product overview for SIMATIC S7-1200

TIA Selection Tool Web

## کنترلر سری ۱۲۰۰ زیمنس

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹  
تلفن: ۰۲۱-۸۸۶۴۱۴۹۳-۵ ۰۲۱-۴۱۹۰۷





کمپانی زیمنس از بزرگترین و قدرتمندترین تولید کنندگان ادوات برق و اتوماسیون صنعتی بوده و پس از معرفی سری PLC های S5 و S7-300,400 که با اقبال بسیار زیادی در صنعت روبرو شدند؛ اقدام به ساخت و معرفی سری جدید و بهینه تر ۱۲۰۰ نمود تا گام به گام و قدرتمندتر در عرصه های جهانی رقابت کند. ایده سازندگان برای طراحی و پایه ریزی این CPU ها تسهیل طراحی و برنامه نویسی، سرعت، کاهش هزینه، اشغال فضای کمتر و گسترش زمینه های کارکرد آن بوده است. برای مثال از کاربردهای S7-1200 میتوان به سیستمهای مونتاژ، نوارنقاله، جرثقیل و آسانسور، تجهیزات انتقال مواد، ماشینکاری فلزات، چاپ، بسته بندی، نساجی، سیستم ترکیب، تصفیه آب و فاضلاب، نمایشگر و اسکوربرد، توزیع و انتقال برق، تهویه، تاسیسات سرد و گرم، مدیریت انرژی، اعلام و اطفاء حریق، کنترل روشنایی، کنترل پمپاژ، سیستم های کنترل دسترسی و حفاظت، کنترل موقعیت و... اشاره کرد. ساختار این CPU ها، کامپکت بوده و قابلیت توسعه با اتصال انواع ماژول های ورودی و خروجی، ارتباطی و تغذیه را دارد.

## Central processing units



### CPU 1211C

Article no.:	Product Description
6ES7211-1AE40-0XB0	CPU 1211C (6 DI 24V DC; 4 DO 24VDC ; 2 AI), PS 24V DC
6ES7211-1BE40-0XB0	CPU 1211C (6 DI 24V DC; 4 DO Relay ; 2 AI), PS 230V AC
6ES7211-1HE40-0XB0	CPU 1211C (6 DI 24V DC; 4 DO Relay ; 2 AI), PS 24V DC

### CPU 1212C

6ES7212-1AE40-0XB0	CPU 1212C (8 DI 24V DC; 6 DO 24VDC ; 2 AI), PS 24V DC
6ES7212-1BE40-0XB0	CPU 1212C (8 DI 24V DC; 6 DO Relay ; 2 AI), PS 230V AC
6ES7212-1HE40-0XB0	CPU 1212C (8 DI 24V DC; 6 DO Relay ; 2 AI), PS 24V DC
6ES7212-1AF40-0XB0	CPU 1212FC (DC/DC/DC)
6ES7212-1HF40-0XB0	CPU 1212FC (DC/DC/Rly)
6AG1212-1BE40-4XB0	SIPLUS S7-1200 CPU 1212 AC/DC/RLY
6AG1212-1BE40-2XB0	SIPLUS S7-1200 CPU 1212 AC/DC/RLY
6AG2212-1AE40-1XB0	SIPLUS S7-1200 CPU 1212C DC/DC/DC RAIL
6AG1212-1AE40-4XB0	SIPLUS S7-1200 CPU 1212 DC/DC/DC
6AG1212-1AE40-2XB0	SIPLUS S7-1200 CPU 1212 DC/DC/DC
6AG1212-1HE40-2XB0	SIPLUS S7-1200 CPU 1212 DC/DC/RLY
6AG1212-1HE40-4XB0	SIPLUS S7-1200 CPU 1212 DC/DC/RLY


### CPU 1214C

6ES7214-1AG40-0XB0	CPU 1214C (14 DI 24V DC; 10 DO 24VDC ; 2 AI), PS 24V DC
6ES7214-1BG40-0XB0	CPU 1214C (14 DI 24V DC; 10 DO Relay ; 2 AI), PS 230V AC
6ES7214-1HG40-0XB0	CPU 1214C (14 DI 24V DC; 10 DO Relay ; 2 AI), PS 24V DC
6ES7214-1AF40-0XB0	CPU 1214FC (DC/DC/DC)
6ES7214-1HF40-0XB0	CPU 1214FC (DC/DC/Rly)
6AG1214-1BG40-4XB0	SIPLUS S7-1200 CPU 1214 AC/DC/RLY
6AG1214-1BG40-2XB0	SIPLUS S7-1200 CPU 1214 AC/DC/RLY
6AG1214-1BG40-5XB0	SIPLUS S7-1200 CPU 1214 AC/DC/RLY
6AG2214-1AG40-1XB0	SIPLUS S7-1200 CPU 1214C DC/DC/DC RAIL
6AG1214-1AG40-4XB0	SIPLUS S7-1200 CPU 1214 DC/DC/DC
6AG1214-1AG40-2XB0	SIPLUS S7-1200 CPU 1214 DC/DC/DC
6AG1214-1AG40-5XB0	SIPLUS S7-1200 CPU 1214 DC/DC/DC
6AG1214-1HG40-5XB0	SIPLUS S7-1200 CPU 1214 DC/DC/RLY
6AG1214-1HG40-2XB0	SIPLUS S7-1200 CPU 1214 DC/DC/RLY
6AG1214-1HG40-4XB0	SIPLUS S7-1200 CPU 1214 DC/DC/RLY
6AG1214-1AF40-5XB0	SIPLUS S7-1200 CPU 1214FC DC/DC/DC
6AG1214-1HF40-5XB0	SIPLUS S7-1200 CPU 1214FC DC/DC/RLY

### CPU 1215C

6ES7215-1AG40-0XB0	CPU 1215C (14 DI 24V DC; 10 DO 24VDC ; 2 AI; 2AO), PS 24V DC (2 PROFINET PORT)
6ES7215-1BG40-0XB0	CPU 1215C (14 DI 24V DC; 10 DO Relay ; 2 AI, 2 AO), PS 230V AC (2 PROFINET PORT)
6ES7215-1HG40-0XB0	CPU 1215C (14 DI 24V DC; 10 DO Relay ; 2 AI, 2AO), PS 24V DC (2 PROFINET PORT)
6ES7215-1AF40-0XB0	CPU 1215FC (DC/DC/DC)
6ES7215-1HF40-0XB0	CPU 1215FC (DC/DC/Rly)
6AG1215-1BG40-4XB0	SIPLUS S7-1200 CPU 1215 AC/DC/RLY
6AG1215-1BG40-2XB0	SIPLUS S7-1200 CPU 1215 AC/DC/RLY
6AG1215-1BG40-5XB0	SIPLUS S7-1200 CPU 1215 AC/DC/RLY
6AG1215-1AG40-5XB0	SIPLUS S7-1200 CPU 1215C DC/DC/DC
6AG1215-1HG40-5XB0	SIPLUS S7-1200 CPU 1215C DC/DC/RLY
6AG1215-1AG40-2XB0	SIPLUS S7-1200 CPU 1215 DC/DC/DC
6AG1215-1AG40-4XB0	SIPLUS S7-1200 CPU 1215 DC/DC/DC
6AG1215-1HG40-2XB0	SIPLUS S7-1200 CPU 1215 DC/DC/RLY
6AG1215-1HG40-4XB0	SIPLUS S7-1200 CPU 1215 DC/DC/RLY
6AG1215-1AF40-5XB0	SIPLUS S7-1200 CPU 1215FC DC/DC/DC

### CPU 1217C

 : Safety-related component

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



## Product overview for SIMATIC S7-1200

### Central processing units

Article no.: \*

CPU 1217C (10 DI 24V DC/4 DI 5V DC Diff; 6 DO 24VDC/4 DO 5V DC Diff; 2 AI, 2AO), PS 24V DC (2 PN)	6ES7217-1AG40-0XB0
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### Signal boards

Article no.: \*



#### Digital inputs

Signal board DI 4 x 24V DC 200KHZ	6ES7221-3BD30-0XB0
Signal board DI 4 x 5V DC 200KHZ	6ES7221-3AD30-0XB0
SIPLUS S7-1200 SB 1221 4DI 24VDC	6AG1221-3BD30-5XB0
SIPLUS S7-1200 SB 1221 4DI 5VDC	6AG1221-3AD30-5XB0

#### Digital outputs

Signal board DO 4 x 24V DC 200KHZ	6ES7222-1BD30-0XB0
Signal board DO 4 x 5V DC 200KHZ	6ES7222-1AD30-0XB0
SIPLUS S7-1200 SB 1222 4DQ 24VDC	6AG1222-1BD30-5XB0
SIPLUS S7-1200 SB 1222 4DQ 5VDC	6AG1222-1AD30-5XB0

#### Digital inputs/outputs

Signal board DI 2 x 24 V DC, DO 2 x 24 V DC	6ES7223-0BD30-0XB0
Signal board DI 2 x 24 V DC, DO 2 x 24 V DC, 0.1A	6ES7223-3BD30-0XB0
Signal board DI 2 x 5 V DC, DO 2 x 5 V DC, 0.1A	6ES7223-3AD30-0XB0
SIPLUS S7-1200 SB 1223 2DI/2DQ, 24VDC	6AG1223-0BD30-4XB0
SIPLUS S7-1200 SB 1223 2DI/2DQ, 24VDC	6AG1223-0BD30-5XB0
SIPLUS S7-1200 SB 1223 2DI/2DQ, 24VDC	6AG1223-3BD30-5XB0
SIPLUS S7-1200 SB1223 2DI/2DQ, 5VDC	6AG1223-3AD30-5XB0
SIPLUS S7-1200 SB 1223 2DI/2DQ RAIL	6AG2223-0BD30-1XB0

#### Analog inputs

Signal board AI, 1x12-bit, +-10 V or 0-20 mA	6ES7231-4HA30-0XB0
Signal board AE, resistor, RTD 1x16-bit	6ES7231-5PA30-0XB0
Signal board AI, thermocouple, TC 1x16-bit	6ES7231-5QA30-0XB0
SIPLUS S7-1200 SB 1231 1AI RTD	6AG1231-5PA30-5XB0

#### Analog outputs

Signal board AO 1x12-bit	6ES7232-4HA30-0XB0
SIPLUS S7-1200 SB 1232 1AQ	6AG1232-4HA30-4XB0
SIPLUS S7-1200 SB 1232 1AQ	6AG1232-4HA30-5XB0

### Communication boards

Article no.: \*



#### Point-to-point

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

 : Safety-related component

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

## Battery boards



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

Article no.: \*

6ES7297-0AX30-0XA0

## Digital modules



### Digital input SM 1221

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

### Digital output SM 1222

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

### Digital I/O SM 1223

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

 : Safety-related component

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## Digital modules

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

## Analog modules



### SM 1231 analog input module

	Article no.: *
Analog input 4 AI; 13-bit	6ES7231-4HD32-0XB0
Analog input 8 AI; 13-bit	6ES7231-4HF32-0XB0
Analog input 4 AI; 16-bit	6ES7231-5ND32-0XB0
Analog input 4 AI, resistor, RTD	6ES7231-5PD32-0XB0
Analog input 8 AI, resistor, RTD	6ES7231-5PF32-0XB0
Analog input 4 AI, thermocouple, TC	6ES7231-5QD32-0XB0
Analog input 8 AI, thermocouple, TC	6ES7231-5QF32-0XB0
Analog input, SM 1238 Energy Meter 480VAC	6ES7238-5XA32-0XB0
SIPLUS S7-1200 SM 1231 4AI 13Bit	6AG1231-4HD32-4XB0
SIPLUS S7-1200 SM 1231 4AI 16Bit	6AG1231-5ND32-4XB0
SIPLUS S7-1200 SM 1231 4AI RTD 16Bit	6AG1231-5PD32-2XB0
SIPLUS S7-1200 SM 1231 4AI RTD 16Bit	6AG1231-5PD32-4XB0
SIPLUS S7-1200 SM 1231 4AI TC 16Bit	6AG1231-5QD32-4XB0
SIPLUS S7-1200 SM 1231 8AI 13Bit	6AG1231-4HF32-4XB0
SIPLUS S7-1200 SM 1231 8AI RTD 16Bit	6AG1231-5PF32-4XB0
SIPLUS S7-1200 SM 1231 8AI RTD 16Bit	6AG1231-5PF32-2XB0
SIPLUS S7-1200 SM 1231 8AI TC 16Bit	6AG1231-5QF32-4XB0
SIPLUS S7-1200 SM 1231 RTD RAIL	6AG2231-5PD32-1XB0

### SM 1232 analog output module

Analog output 4 AO; 14-bit	6ES7232-4HD32-0XB0
Analog output 2 AO; 14-bit	6ES7232-4HB32-0XB0
SIPLUS S7-1200 SM 1232 2AQ 13Bit	6AG1232-4HB32-4XB0
SIPLUS S7-1200 SM 1232 4AQ 14Bit	6AG1232-4HD32-4XB0
SIPLUS S7-1200 SM 1232 4AQ 14Bit	6AG1232-4HD32-2XB0
SIPLUS S7-1200 SM 1232 4AQ RAIL	6AG2232-4HD32-1XB0

### SM 1234 analog input/output module

Analog I/O 4 AI, 2 AO	6ES7234-4HE32-0XB0
SIPLUS S7-1200 SM 1234 4AI/2AQ 13Bit	6AG1234-4HE32-2XB0
SIPLUS S7-1200 SM 1234 4AI/2AQ 13Bit	6AG1234-4HE32-4XB0
SIPLUS S7-1200 SM 1234 4AI/2AQ RAIL	6AG2234-4HE32-1XB1

 : Safety-related component

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

## Simulation modules



	Article no.: *
Simulator module for use with S7-1211C / S7-1212C, 8 inputs DC	6ES7274-1XF30-0XA0
Simulator module for use with S7-1214C / S7-1215C, 14 inputs DC	6ES7274-1XH30-0XA0
Simulator module for use with S7-1217C, 10 inputs 24V DC / 4 inputs 5V DC	6ES7274-1XK30-0XA0
SIMATIC S7-1200, analog simulator SIM 1274, 2 potentiometer inputs	6ES7274-1XA30-0XA0

## Communication modules



	Article no.: *
SM 1278 IO-Link Master	6ES7278-4BD32-0XB0
Communication module CM 1241, RS232	6ES7241-1AH32-0XB0
Communication module CM 1241, RS422/485	6ES7241-1CH32-0XB0
Communication module CM 1242-5 PROFIBUS DP slave	6GK7242-5DX30-0XE0
Communication module CM 1243-2 (AS-I V3.0)	3RK7243-2AA30-0XB0
Communication module CM 1243-5 PROFIBUS DP master	6GK7243-5DX30-0XE0
Communication module RF120C (S7-1200)	6GT2002-0LA00
Communications processor CP 1242-7 GPRS	6GK7242-7KX31-0XE0
Communications processor CP 1243-1	6GK7243-1BX30-0XE0
Communication processor CP 1243-7 LTE (EU models)	6GK7243-7KX30-0XE0
Communication processor CP 1243-7 LTE (US models)	6GK7243-7SX30-0XE0
Communications processor CP 1243-8 IRC	6GK7243-8RX30-0XE0
DCM 1271 (AS-I data decoupling)	3RK7271-1AA30-0AA0
Compact Switch Module CSM 1277	6GK7277-1AA10-0AA0
<b>SIPLUS</b>	
SIPLUS NET CP 1242-7 V2	6AG1242-7KX31-7XE0
SIPLUS NET CSM 1277	6AG1277-1AA10-4AA0
SIPLUS S7-1200 CM1241 RS232	6AG1241-1AH32-2XB0
SIPLUS S7-1200 CM 1241 RS232	6AG1241-1AH32-4XB0
SIPLUS S7-1200 CM1241 RS232 RAIL	6AG2241-1AH32-1XB0
SIPLUS S7-1200 CM 1241 RS422/485	6AG1241-1CH32-4XB0
SIPLUS S7-1200 CM 1241 RS422/485	6AG1241-1CH32-2XB0
SIPLUS S7-1200 CM1241 RS422/485 RAIL	6AG2241-1CH32-1XB0
SIPLUS S7-1200 CM 1242-5	6AG1242-5DX30-2XE0
SIPLUS S7-1200 CM 1242-5 RAIL	6AG2242-5DX30-1XE0
SIPLUS S7-1200 CM 1243-2	6AG1243-2AA30-7XB0
SIPLUS S7-1200 CM 1243-5	6AG1243-5DX30-2XE0
SIPLUS S7-1200 CM 1243-5 RAIL	6AG2243-5DX30-1XE0
SIPLUS S7-1200 CP 1243-1	6AG1243-1BX30-2AX0
SIPLUS S7-1200 CP 1243-1 RAIL	6AG2243-1BX30-1XE0
SIPLUS S7-1200 SM 1278 IO-Link Master	6AG1278-4BD32-2XB0
SIPLUS S7-1200 SM 1278 IO-Link Master	6AG1278-4BD32-4XB0

 : Safety-related component

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

## Technology modules



	Article no.: *
Weighing module SIWAREX WP231 for platform and container scales	7MH4960-2AA01
Weighing module SIWAREX WP241 for belt scales	7MH4960-4AA01
Weighing module SIWAREX WP251 for automatically dosing scales	7MH4960-6AA01
SIPLUS CMS1200 SM 1281 Condition Monitoring	6AT8007-1AA10-0AA0

## Power supplies



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

## Accessories

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

 : Safety-related component

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

## Accessories

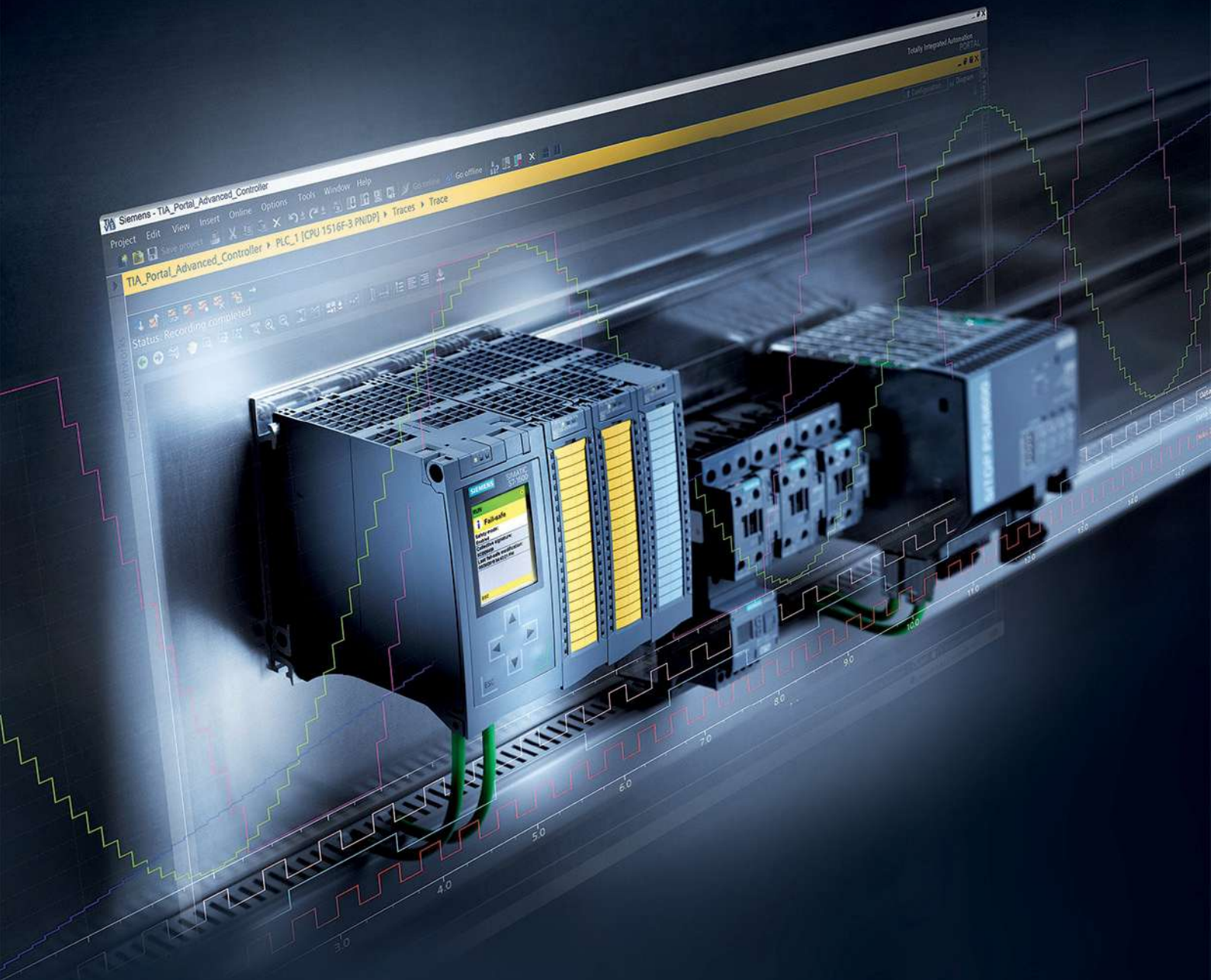
### Article no.: \*

I/O terminal block, gold-plated, 8 or 16 channel analog signal modules (4 pcs.)	6ES7292-1BG30-0XA0
I/O terminal block for analog signals CPU 1215C (4 pcs.)	6ES7292-1BF30-0XB0
I/O terminal block, gold-plated, 32-channel analog signal modules (4 pcs.)	6ES7292-1BL30-0XA0
<b>TeleService</b>	
TeleService Adapter IE Basic	6ES7972-0EB00-0XA0
TeleService Adapter IE Advanced	6ES7972-0EA00-0XA0
TeleService module modem	6ES7972-0MM00-0XA0
TeleService module ISDN	6ES7972-0MD00-0XA0
TeleService module RS232	6ES7972-0MS00-0XA0
Quad-band GSM antenna ANT 794-4MR	6NH9860-1AA00
Tri-band GSM antenna ANT 794-3M	6NH9870-1AA00
<b>Strain relief</b>	
S7-1200 SINGLE PORT RJ45 STRAIN RELIEF	6ES7290-3AA30-0XA0
S7-1200 DUAL PORT RJ45 STRAIN RELIEF	6ES7290-3AB30-0XA0
Expansion cable for signal modules, two-tier configuration, 2 m	6ES7290-6AA30-0XA0
SIMATIC PD, RS485 repeater for connecting PROFIBUS DP/MPI bus systems with max. 31 nodes. Max. baud rate 12 Mbps, IP20 degree of protection, improved user handling	6ES7972-0AA02-0XA0
SIMATIC S7, diagnostic repeater for PROFIBUS DP, for online diagnostics of the PROFIBUS line, DP-NORM SLAVE up to 12 Mbps, IP20 degree of protection, FAST-CONNECT connection system	6ES7972-0AB01-0XA0
<b>SIPLUS</b>	
SIPLUS DP diagnostic repeater	6AG1972-0AB01-4XA0
SIPLUS DP RS485-Repeater	6AG1972-0AA02-7XA0

 : Safety-related component

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

# SIEMENS



## Product overview for SIMATIC S7-1500

TIA Selection Tool Web

### کنترلر پیشرفته سری S7-1500

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹  
تلفن: ۰۲۱-۸۸۶۴۱۴۹۳-۵ ۰۲۱-۴۱۹۰۷





## کنترلر پیشرفته SIMATIC S7-1500

سریعترین کنترلر اتوماسیون صنعتی

با استفاده از کنترلر SIMATIC S7-1500 میتوان با بالاترین سرعت، پیچیده ترین الگوریتم های کنترلی را پیدا سازی کرد. این کنترلر دارای انواع مختلف CPU با کلاس های عملکردی متفاوت بصورت ماژولار و شامل ماژول های دیجیتال، آنالوگ، ارتباطی و ... می باشد.

این کنترلر دارای انواع کامپکت، استاندارد، تکنولوژی، ریداندت و Fail-Safe می باشد و شبکه های ارتباطی پروفینت و انواع شبکه های زیر را پوشش می دهد:

- TCP/IP
- ISO-on-TCP (RFC1006)
- UDP
- DHCP
- DNS
- SNMP
- DCP
- LLDP
- HTTP
- HTTPS
- MODBUS TCP
- PROFIBUS
- OPC UA

SIMATIC S7-1500 دارای درجه حفاظت IP20 بوده و برای نصب در کابینت کنترلر

در نظر گرفته شده است. لازم به ذکر است نرم افزار برنامه نویسی این کنترلر

TIA PORTAL می باشد.



## Central processing units

Article no.: \*



### Standard CPUs

CPU 1511-1 PN	6ES7511-1AK02-0AB0
CPU 1511F-1 PN	6ES7511-1FK02-0AB0
CPU 1513-1 PN	6ES7513-1AL02-0AB0
CPU 1513F-1 PN	6ES7513-1FL02-0AB0
CPU 1515-2 PN	6ES7515-2AM02-0AB0
CPU 1515F-2 PN	6ES7515-2FM02-0AB0
CPU 1516-3 PN/DP	6ES7516-3AN02-0AB0
CPU 1516F-3 PN/DP	6ES7516-3FN02-0AB0
CPU 1517-3 PN/DP	6ES7517-3AP00-0AB0
CPU 1517F-3 PN/DP	6ES7517-3FP00-0AB0
CPU 1518-4 PN/DP	6ES7518-4AP00-0AB0
CPU 1518F-4 PN/DP	6ES7518-4FP00-0AB0
CPU 1518-4 PN/DP MFP, bundle	6ES7518-4AX00-1AC0
CPU 1518F-4 PN/DP MFP, bundle	6ES7518-4FX00-1AC0
SIPLUS S7-1500 CPU 1511-1 PN	6AG1511-1AK02-2AB0
SIPLUS S7-1500 CPU 1511-1 PN	6AG1511-1AK02-7AB0
SIPLUS S7-1500 CPU 1511-1 PN T1 RAIL	6AG2511-1AK02-1AB0
SIPLUS S7-1500 CPU 1511F-1 PN	6AG1511-1FK02-2AB0
SIPLUS S7-1500 CPU 1513-1 PN	6AG1513-1AL02-7AB0
SIPLUS S7-1500 CPU 1513-1 PN	6AG1513-1AL02-2AB0
SIPLUS S7-1500 CPU 1513F-1 PN	6AG1513-1FL02-2AB0
SIPLUS S7-1500 CPU 1518-4 PN/DP	6AG1518-4AP00-4AB0
SIPLUS S7-1500 CPU 1518-4 PN/DP MFP	6AG1518-4AX00-4AC0
SIPLUS S7-1500 CPU 1518F-4 PN/DP	6AG1518-4FP00-4AB0

### Compact CPUs

CPU 1511C-1 PN	6ES7511-1CK01-0AB0
CPU 1512C-1 PN	6ES7512-1CK01-0AB0

### Technology CPUs

CPU 1511T-1 PN	6ES7511-1TK01-0AB0
CPU 1511TF-1 PN	6ES7511-1UK01-0AB0
CPU 1515T-2 PN	6ES7515-2TM01-0AB0
CPU 1515TF-2 PN	6ES7515-2UM01-0AB0
CPU 1516T-3 PN/DP	6ES7516-3TN00-0AB0
CPU 1516TF-3 PN/DP	6ES7516-3UN00-0AB0
CPU 1517T-3 PN/DP	6ES7517-3TP00-0AB0
CPU 1517TF-3 PN/DP	6ES7517-3UP00-0AB0

### Fault-tolerant and redundant CPUs

CPU 1513R-1 PN	6ES7513-1RL00-0AB0
CPU 1515R-2 PN	6ES7515-2RM00-0AB0
CPU 1517H-3 PN	6ES7517-3HP00-0AB0
SIPLUS S7-1500 CPU 1515R-2 PN	6AG1515-2RM00-7AB0
SIPLUS S7-1500 CPU 1515R-2 PN TX RAIL	6AG2515-2RM00-4AB0
SIPLUS S7-1500 CPU 1517H-3 PN	6AG1517-3HP00-4AB0

 : Safety-related component

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

## Digital modules

Article no.: \*



### Digital input

Digital input, DI 32x24VDC HF	6ES7521-1BL00-0AB0
Digital input, DI 16x24VDC HF	6ES7521-1BH00-0AB0
Digital input, DI 16x230VAC BA	6ES7521-1FH00-0AAA
Digital input, DI 16x24VDC SRC BA	6ES7521-1BH50-0AAA
Digital input, DI 16x24VDC BA; incl. front connector push-in	6ES7521-1BH10-0AAA
Digital input, DI 32x24VDC BA; incl. front connector push-in	6ES7521-1BL10-0AAA
Digital input, DI 16x24...125VUC HF	6ES7521-7EH00-0AB0
Digital input, DI 64x24VDC SNC/SRC BA	6ES7521-1BP00-0AAA
SIPLUS S7-1500 DI 16X230VAC BA	6AG1521-1FH00-7AA0
SIPLUS S7-1500 DI 16X24VDC HF	6AG1521-1BH00-7AB0
SIPLUS S7-1500 DI 16X24VDC SRC BA	6AG1521-1BH50-7AA0
SIPLUS S7-1500 DI 16x110VDC HF TX RAIL	6AG2521-7EH00-4AB0
SIPLUS S7-1500 DI 16x24VDC HF TX RAIL	6AG2521-1BH00-4AB0
SIPLUS S7-1500 DI 32X24VDC HF	6AG1521-1BL00-7AB0
SIPLUS S7-1500 DI 48VUC/125VDC HF	6AG1521-7EH00-7AB0

### Digital output

Digital output, DQ 32x24VDC/0.5A HF	6ES7522-1BL01-0AB0
Digital output, DQ 16x24VDC/0.5A HF	6ES7522-1BH01-0AB0
Digital output, DQ 8x24VDC/2A HF	6ES7522-1BF00-0AB0
Digital output, DQ 8x230VAC/2A ST Triac	6ES7522-5FF00-0AB0
Digital output, DQ 8x230VAC/5A ST relay	6ES7522-5HF00-0AB0
Digital output, DQ 16x230VAC/1A Triac	6ES7522-5FH00-0AB0
Digital output, DQ 16x230VAC/2A relay	6ES7522-5HH00-0AB0
Digital output, DQ 16x24VDC/0.5A BA; incl. front connector push-in	6ES7522-1BH10-0AAA
Digital output, DQ 32x24VDC/0.5A BA; incl. front connector push-in	6ES7522-1BL10-0AAA
Digital output, DQ 16x24...48VUC/125VDC/0.5A ST	6ES7522-5EH00-0AB0
Digital output, DQ 64x24VDC/0.3A BA	6ES7522-1BP00-0AAA
Digital output, DQ 64x24VDC/0.3A SNK BA	6ES7522-1BP50-0AAA
SIPLUS S7-1500 16DQ 230VAC 1A ST TRIAC	6AG1522-5FH00-7AB0
SIPLUS S7-1500 16DQ 230VAC 2A RLY	6AG1522-5HH00-7AB0
SIPLUS S7-1500 DQ 16X24VDC/0.5A HF	6AG1522-1BH01-7AB0
SIPLUS S7-1500 DQ 16x110VDC ST TX RAIL	6AG2522-5EH00-4AB0
SIPLUS S7-1500 DQ 16x24VDC HF TX RAIL	6AG2522-1BH01-4AB0
SIPLUS S7-1500 DQ 16x48VUC/125VDC ST	6AG1522-5EH00-7AB0
SIPLUS S7-1500 DQ 32X24VDC/0.5A HF	6AG1522-1BL01-7AB0
SIPLUS S7-1500 DQ 8X230VAC/2A ST (TRIAC)	6AG1522-5FF00-7AB0
SIPLUS S7-1500 DQ 8X230VAC/5A ST (RELAY)	6AG1522-5HF00-2AB0
SIPLUS S7-1500 DQ 8X24VDC/2A HF	6AG1522-1BF00-7AB0
SIPLUS S7-1500 DQ 8x230VAC ST 5A T1 RAIL	6AG2522-5HF00-1AB0

### Digital inputs/outputs

Digital input/digital output DI/DQ 16x24VDC/16xDC24V/0.5A BA; incl. front connector push-in	6ES7523-1BL00-0AAA
Digital input/output DI 32/DQ 32 x24VDC/0.3A SNK BA	6ES7523-1BP50-0AAA

### Fail-safe digital modules

Digital input, F-DI 16x24VDC	6ES7526-1BH00-0AB0
Digital output, F-DQ 8x24VDC/2A PPM	6ES7526-2BF00-0AB0
SIPLUS S7-1500 F-DI 16x24VDC	6AG1526-1BH00-2AB0
SIPLUS S7-1500 F-DI 16x24VDC T1 RAIL	6AG2526-1BH00-1AB0
SIPLUS S7-1500 F-DQ 8x24VDC/2A	6AG1526-2BF00-2AB0
SIPLUS S7-1500 F-DQ 8x24VDC 2A T1 RAIL	6AG2526-2BF00-1AB0

 : Safety-related component

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

## Digital modules

Article no.: \*



### Digital input

Digital input, DI 32x24VDC HF	6ES7521-1BL00-0AB0
Digital input, DI 16x24VDC HF	6ES7521-1BH00-0AB0
Digital input, DI 16x230VAC BA	6ES7521-1FH00-0AA0
Digital input, DI 16x24VDC SRC BA	6ES7521-1BH50-0AA0
Digital input, DI 16x24VDC BA; incl. front connector push-in	6ES7521-1BH10-0AA0
Digital input, DI 32x24VDC BA; incl. front connector push-in	6ES7521-1BL10-0AA0
Digital input, DI 16x24...125VUC HF	6ES7521-7EH00-0AB0
Digital input, DI 64x24VDC SNC/SRC BA	6ES7521-1BP00-0AA0
SIPLUS S7-1500 DI 16X230VAC BA	6AG1521-1FH00-7AA0
SIPLUS S7-1500 DI 16X24VDC HF	6AG1521-1BH00-7AB0
SIPLUS S7-1500 DI 16X24VDC SRC BA	6AG1521-1BH50-7AA0
SIPLUS S7-1500 DI 16x110VDC HF TX RAIL	6AG2521-7EH00-4AB0
SIPLUS S7-1500 DI 16x24VDC HF TX RAIL	6AG2521-1BH00-4AB0
SIPLUS S7-1500 DI 32X24VDC HF	6AG1521-1BL00-7AB0
SIPLUS S7-1500 DI 48VUC/125VDC HF	6AG1521-7EH00-7AB0

### Digital output

Digital output, DQ 32x24VDC/0.5A HF	6ES7522-1BL01-0AB0
Digital output, DQ 16x24VDC/0.5A HF	6ES7522-1BH01-0AB0
Digital output, DQ 8x24VDC/2A HF	6ES7522-1BF00-0AB0
Digital output, DQ 8x230VAC/2A ST Triac	6ES7522-5FF00-0AB0
Digital output, DQ 8x230VAC/5A ST relay	6ES7522-5HF00-0AB0
Digital output, DQ 16x230VAC/1A Triac	6ES7522-5FH00-0AB0
Digital output, DQ 16x230VAC/2A relay	6ES7522-5HH00-0AB0
Digital output, DQ 16x24VDC/0.5A BA; incl. front connector push-in	6ES7522-1BH10-0AA0
Digital output, DQ 32x24VDC/0.5A BA; incl. front connector push-in	6ES7522-1BL10-0AA0
Digital output, DQ 16x24...48VUC/125VDC/0.5A ST	6ES7522-5EH00-0AB0
Digital output, DQ 64x24VDC/0.3A BA	6ES7522-1BP00-0AA0
Digital output, DQ 64x24VDC/0.3A SNK BA	6ES7522-1BP50-0AA0
SIPLUS S7-1500 16DQ 230VAC 1A ST TRIAC	6AG1522-5FH00-7AB0
SIPLUS S7-1500 16DQ 230VAC 2A RLY	6AG1522-5HH00-7AB0
SIPLUS S7-1500 DQ 16X24VDC/0.5A HF	6AG1522-1BH01-7AB0
SIPLUS S7-1500 DQ 16x110VDC ST TX RAIL	6AG2522-5EH00-4AB0
SIPLUS S7-1500 DQ 16x24VDC HF TX RAIL	6AG2522-1BH01-4AB0
SIPLUS S7-1500 DQ 16x48VUC/125VDC ST	6AG1522-5EH00-7AB0
SIPLUS S7-1500 DQ 32X24VDC/0.5A HF	6AG1522-1BL01-7AB0
SIPLUS S7-1500 DQ 8X230VAC/2A ST (TRIAC)	6AG1522-5FF00-7AB0
SIPLUS S7-1500 DQ 8X230VAC/5A ST (RELAY)	6AG1522-5HF00-2AB0
SIPLUS S7-1500 DQ 8X24VDC/2A HF	6AG1522-1BF00-7AB0
SIPLUS S7-1500 DQ 8x230VAC ST 5A T1 RAIL	6AG2522-5HF00-1AB0

### Digital inputs/outputs

Digital input/digital output DI/DQ 16x24VDC/16xDC24V/0.5A BA; incl. front connector push-in	6ES7523-1BL00-0AA0
Digital input/output DI 32/DQ 32 x24VDC/0.3A SNK BA	6ES7523-1BP50-0AA0

### Fail-safe digital modules

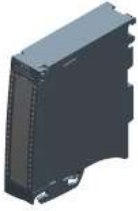
Digital input, F-DI 16x24VDC	6ES7526-1BH00-0AB0
Digital output, F-DQ 8x24VDC/2A PPM	6ES7526-2BF00-0AB0
SIPLUS S7-1500 F-DI 16x24VDC	6AG1526-1BH00-2AB0
SIPLUS S7-1500 F-DI 16x24VDC T1 RAIL	6AG2526-1BH00-1AB0
SIPLUS S7-1500 F-DQ 8x24VDC/2A	6AG1526-2BF00-2AB0
SIPLUS S7-1500 F-DQ 8x24VDC 2A T1 RAIL	6AG2526-2BF00-1AB0

 : Safety-related component

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

## Analog modules

Article no.: \*



### Analog input

Analog input, AI 8xU/I/R/RTD BA	6ES7531-7QF00-0AB0
Analog input, AI 8xU/I/RTD/TC ST	6ES7531-7KF00-0AB0
Analog input, AI 8xU/I HS	6ES7531-7NF10-0AB0
Analog input, AI 8xU/R/RTD/TC HF	6ES7531-7PF00-0AB0
Analog input, AI 8xU/I HF	6ES7531-7NF00-0AB0
Analog input, AI 4xU/I/RTD/TC ST; incl. front connector push-in	6ES7531-7QD00-0AB0
SIPLUS S7-1500 AI 8XU/I/RTD/TC ST	6AG1531-7KF00-7AB0
SIPLUS S7-1500 AI 8XU/I HF	6AG1531-7NF00-7AB0
SIPLUS S7-1500 AI 8XU/I HS	6AG1531-7NF10-7AB0
SIPLUS S7-1500 AI 8 X U/R/RTD/TC HF	6AG1531-7PF00-4AB0
SIPLUS S7-1500 AI 8xU/I/RTD/TC TX RAIL	6AG2531-7KF00-4AB0
SIPLUS S7-1500 AI 8xU/I HS TX RAIL	6AG2531-7NF10-4AB0

### Analog output

Analog output, AQ 8xU/I HS	6ES7532-5HF00-0AB0
Analog output, AQ 4xU/I ST	6ES7532-5HD00-0AB0
Analog output, AQ 4xU/I HF	6ES7532-5ND00-0AB0
Analog output, AQ 2xU/I ST; incl. front connector push-in	6ES7532-5NB00-0AB0
SIPLUS S7-1500 AQ 4XU/I ST	6AG1532-5HD00-7AB0
SIPLUS S7-1500 AQ 4xU/I ST TX RAIL	6AG2532-5HD00-4AB0
SIPLUS S7-1500 AQ 8XU/I HS	6AG1532-5HF00-7AB0

### Analog inputs/outputs

Analog input/analog output AI/AQ 4xU/I/RTD/TC 2xU/I ST; incl. front connector push-in	6ES7534-7QE00-0AB0
---	--------------------

## Communication modules

Article no.: \*



Communication module, CM PtP, RS232, Basic	6ES7540-1AD00-0AA0
Communication module, CM PtP, RS422/485, Basic	6ES7540-1AB00-0AA0
Communication module, CM PtP, RS232, High Feature	6ES7541-1AD00-0AB0
Communication module, CM PtP, RS422/485, High Feature	6ES7541-1AB00-0AB0
Communication Module, CM 1542-5, PROFIBUS DP Master/Slave	6GK7542-5DX00-0XE0
Communication Module, CM 1542-1, PROFINET Controller	6GK7542-1AX00-0XE0
Communication module, CM 8xIO-Link	6ES7547-1JF00-0AB0
Communication processor, CP 1543-1, Industrial Ethernet	6GK7543-1AX00-0XE0
Communication Processor, CP 1542-5, PROFIBUS DP Master/Slave	6GK7542-5FX00-0XE0
Communications processor, CP 1545-1, Industrial Ethernet	6GK7545-1GX00-0XE0

### SIPLUS

SIPLUS NET CP 1543-1	6AG1543-1AX00-2XE0
SIPLUS S7-1500 CM 1542-5	6AG1542-5DX00-7XE0
SIPLUS S7-1500 CM PTP RS422/485 TX RAIL	6AG2541-1AB00-4AB0
SIPLUS S7-1500 CM PtP RS232 BA	6AG1540-1AD00-7AA0
SIPLUS S7-1500 CM PtP RS232 HF	6AG1541-1AD00-7AB0
SIPLUS S7-1500 CM PtP RS232 HF TX RAIL	6AG2541-1AD00-4AB0
SIPLUS S7-1500 CM PtP RS422/485 BA	6AG1540-1AB00-7AA0
SIPLUS S7-1500 CM PtP RS422/485 HF	6AG1541-1AB00-7AB0

 : Safety-related component

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

## Product overview for SIMATIC S7-1500

### Technology modules



	Article no.: *
Technology module, TM PosInput 2	6ES7551-1AB00-0AB0
Technology module, TM Count 2x24V	6ES7550-1AA00-0AB0
Technology module, TM Timer DIDQ 16x24V	6ES7552-1AA00-0AB0
TM PTO 4	6ES7553-1AA00-0AB0
Technology module, SIWAREX WP521 ST	7MH4980-1AA01
Technology module, SIWAREX WP522 ST	7MH4980-2AA01
<b>SIPLUS</b>	
SIPLUS S7-1500 TM COUNT 2X24V	6AG1550-1AA00-7AB0
SIPLUS S7-1500 TM POSINPUT 2	6AG1551-1AB00-7AB0

### System power supplies



	Article no.: *
System power supply, PS 25W 24V DC	6ES7505-0KA00-0AB0
System power supply, PS 60W 24/48/60V DC	6ES7505-0RA00-0AB0
System power supply for data retentivity, PS 60W 24/48/60V DC HF	6ES7505-0RB00-0AB0
System power supply, PS 60W 120/230V AC/DC	6ES7507-0RA00-0AB0
<b>SIPLUS</b>	
SIPLUS S7-1500 PS 25W 24V DC	6AG1505-0KA00-7AB0
SIPLUS S7-1500 PS 60W 120/230V AC/DC	6AG1507-0RA00-7AB0
SIPLUS S7-1500 PS 60W 24/48/60V DC	6AG1505-0RA00-7AB0

### Load current supplies



	Article no.: *
Load current supply PM 70W, 120/230 V AC, 24 V DC, 3 A	6EP1332-4BA00
Load current supply PM 190W, 120/230 V AC, 24 V DC, 8 A	6EP1333-4BA00
<b>SIPLUS</b>	
SIPLUS S7-1500 PM 1507 24V/3A	6AG1332-4BA00-7AA0
SIPLUS S7-1500 PM 1507 24V/8A	6AG1333-4BA00-7AA0

### Accessories



	Article no.: *
Memory card	
<b>SIPLUS RIC memory cards</b>	
SIPLUS RIC library for SIMATIC S7-15xx, SMC 12MB	6AG6003-7CF00-0LE0
SIPLUS RIC library for SIMATIC S7-15xx, SMC 24MB	6AG6003-7CF00-0LF0
SIPLUS RIC library for SIMATIC S7-15xx, SMC 256MB	6AG6003-7CF00-0LLO
SIPLUS RIC library for SIMATIC S7-15xx, SMC 2GB	6AG6003-7CF00-0LP0
<b>Front connector</b>	
Front connector, screw-type terminal for 35mm modules, 40-pin	6ES7592-1AM00-0XB0
Front connector, push-in system for 35mm modules, 40-pin	6ES7592-1BM00-0XB0
Front connector, push-in system for 25mm modules, 40-pin (spare part only)	6ES7592-1BM00-0XA0
Front connector potential bridges, 20 pcs.	6ES7592-3AA00-0AA0
STEP7 Software & SUS	

 : Safety-related component

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

## Accessories

Article no.: \*

### CPU display

Display, CPU1511/1513, 35mm	6ES7591-1AA00-0AA0
Display, CPU1511(F)/1512C/1513(F)	6ES7591-1AA01-0AA0
Display, CPU1515/1516/1517/1518, 70mm	6ES7591-1BA00-0AA0
Display, CPU1515/1516/1517/1518	6ES7591-1BA01-0AA0
SIPLUS S7-1500 FRONTKLAPPE V2 CPU 35MM	6AG1591-1AA01-2AA0
SIPLUS S7-1500 FRONTKLAPPE V2 CPU 70MM	6AG1591-1BA01-2AA0

### Front door

Universal front door for I/O modules (35mm), 5 pcs.	6ES7528-0AA00-7AA0
Universal front door for I/O modules (25mm), 5 pcs.	6ES7528-0AA00-0AA0
Universal front door for S7-1500 PS modules (70 mm), 5 pieces	6ES7528-0AA60-7AA0
Universal front door for S7-1500 PS/CP modules (35 mm), 5 pieces	6ES7528-0AA80-7AA0
Universal front door for S7-1500 F-IO modules, 5 pieces	6ES7528-0AA10-7AA0

### Labeling sheets

Sheet with labeling strips for modules 35mm wide (Al grey)	6ES7592-2AX00-0AA0
Sheet with labeling strips for modules 25mm wide (Al grey)	6ES7592-1AX00-0AA0
Sheets with labeling strips (yellow)	6ES7592-2CX00-0AA0

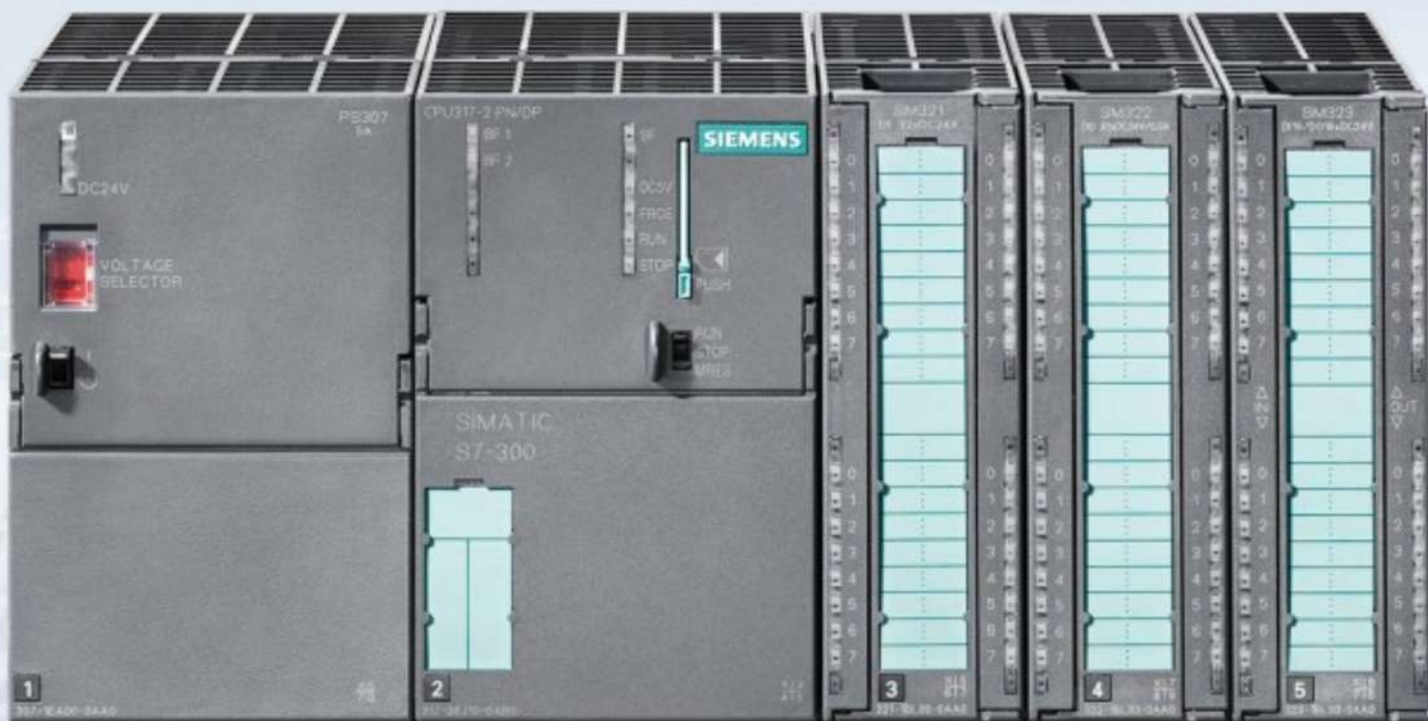
### Miscellaneous

PE connection DIN rail	6ES7590-5AA00-0AA0
U connector	6ES7590-0AA00-0AA0
Shielding set for S7-1500 25mm modules	6ES7590-5CA10-0XA0
Shielding set for S7-1500 35mm modules	6ES7590-5CA00-0AA0
Power supply connector, DC/AC	6ES7590-8AA00-0AA0
Shield terminal element	6ES7590-5BA00-0AA0
SIMATIC PD, RS485 repeater for connecting PROFIBUS DP/MPI bus systems with max. 31 nodes. Max. baud rate 12 Mbps, IP20 degree of protection, improved user handling	6ES7972-0AA02-0XA0
SIMATIC S7, diagnostic repeater for PROFIBUS DP, for online diagnostics of the PROFIBUS line, DP-NORM SLAVE up to 12 Mbps, IP20 degree of protection, FAST-CONNECT connection system	6ES7972-0AB01-0XA0
E coding elements type F for ET 200MP modules F-DI, F-DQ, 5 pieces	6ES7592-6EF00-1AA0
SIPLUS DP diagnostic repeater	6AG1972-0AB01-4XA0
SIPLUS DP RS485-Repeater	6AG1972-0AA02-7XA0
SIPLUS S7-1500 E-CODING ELEMENTS TYPE F	6AG1592-6EF00-2AA0
SIPLUS S7-1500 U connector	6AG1590-0AA00-7AA0

 : Safety-related component

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

# SIEMENS



## کنترلر پیشرفته سری S7-300

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹  
تلفن: ۰۲۱-۸۸۶۴۱۴۹۳-۵ ۰۲۱-۴۱۹۰۷



## Central processing units



### Standard CPUs

CPU 312	24 V DC	MPI			6ES7312-1AE14-0AB0
CPU 314	24 V DC	MPI			6ES7314-1AG14-0AB0
CPU315-2 DP	24 V DC	MPI	PROFIBUS master/slave		6ES7315-2AH14-0AB0
CPU315-2 PN/DP	24 V DC	MPI/DP	PROFINET		6ES7315-2EH14-0AB0
CPU317-2 DP	24 V DC	MPI/DP	PROFIBUS master/slave		6ES7317-2AK14-0AB0
CPU317-2 PN/DP	24 V DC	MPI/DP	PROFINET		6ES7317-2EK14-0AB0
CPU 319-3 PN/DP	24 V DC	MPI/DP	PROFIBUS master/slave	PROFINET	6ES7318-3EL01-0AB0



### Compact CPUs

CPU 312C	24 V DC	DI 10	DO 6		HCS 2	MPI		6ES7312-5BF04-0AB0	
CPU 313C	24 V DC	DI 24	DO 16	AI 4	AO 2	HCS 3	MPI	6ES7313-5BG04-0AB0	
CPU 313C-2 PtP	24 V DC	DI 16	DO 16			HCS 3	MPI	6ES7313-6BG04-0AB0	
CPU 313C-2 DP	24 V DC	DI 16	DO 16			HCS 3	MPI	PROFIBUS master/slave	6ES7313-6CG04-0AB0
CPU 314C-2 PtP	24 V DC	DI 24	DO 16	AI 4	AO 2	HCS 4	MPI	6ES7314-6BH04-0AB0	
CPU 314C-2 DP	24 V DC	DI 24	DO 16	AI 4	AO 2	HCS 4	MPI	PROFIBUS master/slave	6ES7314-6CH04-0AB0
CPU 314C-2 PN/DP	24 V DC	DI 24	DO 16	AI 4	AO 2	HCS 4	MPI/DP	PROFINET	6ES7314-6EH04-0AB0



### I/O modules

SM 321	DIGITAL		DI 16					6ES7321-1BH02-0AA0
SM 321	DIGITAL		DI 16					6ES7321-1BH10-0AA0
SM 321	DIGITAL		DI 16					6ES7321-1BH50-0AA0
SM 321	DIGITAL		DI 32					6ES7321-1BL00-0AA0
SM 321	DIGITAL		DI 64					6ES7321-1BP00-0AA0
SM 321	DIGITAL		DI 16					6ES7321-1CH00-0AA0
SM 321	DIGITAL		DI 16					6ES7321-1CH20-0AA0
SM 321	DIGITAL		DI 32					6ES7321-1EL00-0AA0
SM 321	DIGITAL		DI 8					6ES7321-1FF01-0AA0
SM 321	DIGITAL		DI 8					6ES7321-1FF10-0AA0
SM 321	DIGITAL		DI 16					6ES7321-1FH00-0AA0
SM 321	DIGITAL		DI 16					6ES7321-7BH01-0AB0
SM 322	DIGITAL					DO 8		6ES7322-1BF01-0AA0
SM 322	DIGITAL					DO 16		6ES7322-1BH01-0AA0
SM 322	DIGITAL					DO 16		6ES7322-1BH10-0AA0
SM 322	DIGITAL					DO 32		6ES7322-1BL00-0AA0
SM 322	DIGITAL					DO 64		6ES7322-1BP00-0AA0
SM 322	DIGITAL					DO 64		6ES7322-1BP50-0AA0
SM 322	DIGITAL					DO 8		6ES7322-1CF00-0AA0
SM 322	DIGITAL					DO 8		6ES7322-1FF01-0AA0
SM 322	DIGITAL					DO 16		6ES7322-1FH00-0AA0
SM 322	DIGITAL					DO 32		6ES7322-1FL00-0AA0
SM 322	DIGITAL					DO 8		6ES7322-1HF01-0AA0
SM 322	DIGITAL					DO 8		6ES7322-1HF10-0AA0
SM 322	DIGITAL					DO 16		6ES7322-1HH01-0AA0
SM 322	DIGITAL					DO 8		6ES7322-5FF00-0AB0
SM 322	DIGITAL					DO 16		6ES7322-5GH00-0AB0
SM 322	DIGITAL					DO 8		6ES7322-5HF00-0AB0
SM 322	DIGITAL					DO 8		6ES7322-8BF00-0AB0
SM 323	DIGITAL		DI 8			DO 8		6ES7323-1BH01-0AA0
SM 323	DIGITAL		DI 16			DO 16		6ES7323-1BL00-0AA0
SM 327	DIGITAL		DI 8 (+8 اختياري)			DO 8 اختياري		6ES7327-1BH00-0AB0
SM 331	RTD-ANALOG					AI 8		6ES7331-1KF02-0AB0
SM 331	ANALOG					AI 8		6ES7331-7HF01-0AB0
SM 331	ANALOG THERMOCOUPLE					AI 2		6ES7331-7KB02-0AB0
SM 331	ANALOG THERMOCOUPLE					AI 8		6ES7331-7KF02-0AB0



## Product overview for SIMATIC S7-300

### Central processing units



#### I/O modules

SM 331	ANALOG	AI 8		6ES7331-7NF00-0AB0
SM 331	ANALOG	AI 8		6ES7331-7NF10-0AB0
SM 331	ANALOG THERMOCOUPLE	AI 6		6ES7331-7PE10-0AB0
SM 331	RTD-ANALOG	AI 8		6ES7331-7PF01-0AB0
SM 331	ANALOG THERMOCOUPLE	AI 8		6ES7331-7PF11-0AB0
SM 332	ANALOG		AO 2	6ES7332-5HB01-0AB0
SM 332	ANALOG		AO 4	6ES7332-5HD01-0AB0
SM 332	ANALOG		AO 8	6ES7332-5HF00-0AB0
SM 332	ANALOG		AO 4	6ES7332-7ND02-0AB0
SM 334	ANALOG	AI 4	AO 2	6ES7334-0CE01-0AA0
SM 334	ANALOG	AI 4	AO 2	6ES7334-0KE00-0AB0



#### Communication

CP 340	RS 232C	6ES7340-1AH02-0AE0
CP 340	20 mA (TTY)	6ES7340-1BH02-0AE0
CP 340	RS 422/485	6ES7340-1CH02-0AE0
CP 341	RS 232C	6ES7341-1AH02-0AE0
CP 341	20 mA (TTY)	6ES7341-1BH02-0AE0
CP 341	RS 422/485	6ES7341-1CH02-0AE0
CP 343-2	AS-Interface	6GK7343-2AH01-0XA0
CP 343-2P	AS-Interface	6GK7343-2AH11-0XA0
CP 342-5	9-pin Sub-D socket (Rs485)	6GK7342-5DA03-0XE0
CP 342-5 FO	Duplex sockets	6GK7342-5DF00-0XE0
CP 342-5	9-pin D-sub female connector	6GK7343-5FA01-0XE0
CP 343-1 Lean	Rj45 port	6GK7343-1CX10-0XE0
CP 343-1	Rj45 port	6GK7343-1EX30-0XE0
CP 343-1 Advanced	Rj45 port	6GK7343-1GX31-0XE0

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹

تلفن: ۰۲۱-۴۱۹۰۷ ۰۲۱-۸۸۶۴۱۴۹۳-۵



# SIEMENS



## SIEMENS S7-400

### کنترلر پیشرفته سری S7-400

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹  
تلفن: ۰۲۱-۸۸۶۴۱۴۹۳-۵ ۰۲۱-۴۱۹۰۷



## Central processing units

### Standard CPUs



CPU 412-1 Work memory 512 KB	6ES7412-1XJ07-0AB0
CPU 412-2 PN Work memory 1 MB,	6ES7412-2EK07-0AB0
CPU 412-2 Work memory 1 MB	6ES7412-2XK07-0AB0
CPU 414-2 Work memory 2 Mb1	6ES7414-2XL07-0AB0
414-3 PN/DP C Work memory 4 MB	6ES7414-3EM07-0AB0
CPU 414-3 Work memory 4 MB	6ES7414-3XM07-0AB0
CPU 416-2 Work memory 8 MB	6ES7416-2XP07-0AB0
416-3 PN/DP Work memory 16 MB	6ES7416-3ES07-0AB0
CPU 416-3 Work memory 16 M	6ES7416-3XS07-0AB0
CPU 417-4 Work memory 32 MB	6ES7417-4XT07-0AB0

### High-availability CPUs



5 interfaces: 1x MPI/DP, 1x DP, 1x PN and 2 for sync modules, 1 MB memory (512 KB data/512 KB program)	6ES7412-5HK06-0AB0
5 interfaces: 1x MPI/DP, 1x DP, 1x PN and 2 for sync modules, 4 MB memory (2 MB data/2 MB program),	6ES7414-5HM06-0AB0
5 interfaces: 1x MPI/DP, 1x DP, 1x PN and 2 for sync modules, 16 MB memory (10 MB data/6 MB program)	6ES7416-5HS06-0AB0
1x MPI/DP, 1x DP, 1x PN and 2 for sync modules, 32 MB memory (16 MB data/16 MB program)	6ES7417-5HT06-0AB0

### Signal modules



SM 421 32 DI; 24 V DC	6ES7421-1BL01-0AA0
SM 421, 16 DI; 24 V DC with 0.05 ms input delay alarm, diagnostics	6ES7421-7BH01-0AB0
SM 422 32 DO; 24 V DC, 0.5 A	6ES7422-1BL00-0AA0
SM 422,16 DO; 5..230 V AC, 5 A relay	6ES7422-1HH00-0AA0
SM 431 8 AI, resolution 13 bit, U/I/resistor	6ES7431-1KF00-0AB0
SM 431, 8 AI, resolution 16 bit, U/I/Thermocouple,	6ES7431-7KF00-0AB0
SM 431,8 AI, resolution 14 bit, U/I/Resistor	6ES7431-1KF20-0AB0
SM 432, 8 AO, resolution 13 bit	6ES7432-1HF00-0AB0

### function modules



FM 450-1, counter module, 2 channels	6ES7450-1AP01-0AE0
FM 451 3 positioning module 3 channels	6ES7451-3AL00-0AE0
FM 452 cam control system, 2 channels	6ES7452-1AH00-0AE0
FM 453 function module 3 channels	6ES7453-3AH00-0AE0
FM 455 C control module 16 channels	6ES7455-0VS00-0AE0
FM 455 S control module 16 channels	6ES7455-1VS00-0AE0

### Connection system ( RACKS )



Ur2 RACK 9SLOTS	6ES7400-1JA01-0AA0
Ur2 RACK ALU 9SLOTS	6ES7400-1JA11-0AA0
Ur1 RACK 18SLOTS	6ES7400-1TA01-0AA0
Ur1 RACK ALU 18SLOTS	6ES7400-1TA11-0AA0
Ur2 H RACK 2x9SLOTS	6ES7400-2JA00-0AA0
Ur2 H RACK ALU 2x9SLOTS	6ES7400-2JA10-0AA0
Cr3 RACK 4SLOTS	6ES7401-1DA01-0AA0
Cr2 RACK 18SLOTS	6ES7401-2TA01-0AA0
Er2 EXP RACK 9SLOTS	6ES7403-1JA01-0AA
Er2 EXP RACK ALU 9SLOTS	6ES7403-1JA11-0AA0
Er1 EXP RACK 18SLOTS	6ES7403-1TA01-0AA0
Er1 EXP RACK ALU 18SLOTS	6ES7403-1TA11-0AA0

## Central processing units



### interface modules

IM460-0 (Up to 5M-Up to 8 Exp)	6ES7460-0AA01-0AB0
IM461-0 (Up to 5M-Up to 8 Exp)	6ES7461-0AA01-0AA0
IM460-1 (Up to 1.5M-Up to 2 Exp)	6ES7460-1BA01-0AB0
IM461-1 (Up to 1.5M-Up to 2 Exp)	6ES7461-1BA01-0AA0
IM460-3 (Up to 102M-Up to 8 Exp)	6ES7460-3AA01-0AB0
IM461.3 (Up to 102M-Up to 8 Exp)	6ES7461-3AA01-0AA0



### COMMUNICATION MODULES

CP 440-1	6ES7440-1CS00-0YE0
CP 441-1	6ES7441-1AA05-0AE0
CP 441-2	6ES7441-2AA05-0AE0
CP 443-5 (EXTENDED)	6GK7443-5DX05-0XE0
CP443-1	6GK7443-1EX30-0XE0
CP 443-1 (ADVANCED)	6GK7443-1GX30-0XE0
TIM 4R-IE	6NH7800-4BA00
TIM 4R-IE DNP3	6NH7803-4BA00-0AA0



### POWER SUPPLIES

PS405, 4A 24/48/60V DC	6ES7405-0DA02-0AA0
PS 405, 10A 24/48/60V DC	6ES7405-0KA02-0AA0
PS 405, 10A, RED 24/48/60V DC	6ES7405-0KR02-0AA0
PS A05, 20A 24/48/60V DC	6ES7405-0RA02-0AA0
PS 407, 4A 120/230V DC	6ES7407-0DA02-0AA0
PS 407, 10A 120/230V DC	6ES7407-0KA02-0AA0
PS407, 10A, RED 120/230VDC	6ES7407-0KR02-0AA0
PS 407, 20A, 120/230V DC	6ES7407-0RA02-0AA0

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### کنترلر توزیع شده سری ET 200MP

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹  
تلفن: ۰۲۱-۴۱۹۰۷ ۰۲۱-۸۸۶۴۱۴۹۳-۵





### PLC Programming

	Article no.
SIMATIC STEP 7 V15 Professional	Download: 6ES7822-1AE05-0YA5 DVD: 6ES7822-1AA05-0YA5
SIMATIC STEP 7 V15 Safety Advanced	Download: 6ES7833-1FA15-0YH5 DVD: 6ES7833-1FA15-0YA5
TIA Portal Multiuser V15	Download: 6ES7823-1AE05-0YA5 DVD: 6ES7823-1AA05-0YA5
SIMATIC S7-PLCSIM Advanced V2.0	Download: 6ES7823-1FE00-0YA5 DVD: 6ES7823-1FA00-0YA5
SIMATIC ODK 1500S V2.5	Download: 6ES7806-2CD03-0YG0 DVD: 6ES7806-2CD03-0YA0
SIMATIC Target 1500S™ for Simulink® V2.0	Download: 6ES7823-1BE01-0YA5 DVD: -
SIMATIC Energy Suite V15 Engineering incl. 10 Energy Objects* (2 x 5 EnO)	Download: 6AV2108-0AA04-0AH5 DVD: 6AV2108-0AA04-0AA5

### Runtime Software on CPU



	Article no.
OPC UA S7-1500 small ( $\leq$ CPU 1513 (F))	Download: 6ES7823-0BE00-1BA0 DVD: 6ES7823-0BA00-1BA0
OPC UA S7-1500 medium (CPU 1515/1516 (F))	Download: 6ES7823-0BE00-1CA0 DVD: 6ES7823-0BA00-1CA0
OPC UA S7-1500 large (CPU 1517/1518 (F))	Download: 6ES7823-0BE00-1DA0 DVD: 6ES7823-0BA00-1DA0
SIMATIC ProDiag S7-1500 for 250 Supervisions	Download: 6ES7823-0AE00-1AA0 DVD: 6ES7823-0AA00-1AA0
SIMATIC Energy Suite S7-1500, 5 Energy Objects* (1 x 5 EnO)	Download: 6AV2108-0CF00-0BH0 DVD: 6AV2108-0CF00-0BB0
SIMATIC Energy Suite S7-1500, 10 Energy Objects* (1 x 10 EnO)	Download: 6AV2108-0CH00-0BH0 DVD: 6AV2108-0CH00-0BB0
SIMATIC Energy Suite S7-1500, 10 Energy Objects* (2 x 5 EnO)	Download: 6AV2108-0DF00-0BH0 DVD: 6AV2108-0DF00-0BB0
SIMATIC Energy Suite S7-1500, 50 Energy Objects* (5 x 10 EnO)	Download: 6AV2108-0FH00-0BH0 DVD: 6AV2108-0FH00-0BB0
SIMATIC Energy Suite S7-1500, 100 Energy Objects* (10 x 10 EnO)	Download: 6AV2108-0HH00-0BH0 DVD: 6AV2108-0HH00-0BB0

### CPUs



	Article no.
<b>Standard-CPUs</b>	
CPU 1511-1 PN	6ES7511-1AK01-0AB0
CPU 1513-1 PN	6ES7513-1AL01-0AB0
CPU 1515-2 PN	6ES7515-2AM01-0AB0
CPU 1516-3 PN/DP	6ES7516-3AN01-0AB0
CPU 1517-3 PN/DP	6ES7517-3AP00-0AB0
CPU 1518-4 PN/DP	6ES7518-4AP00-0AB0
CPU 1518-4 PN/DP MFP (incl. C/C++ RT, OPC UA RT)	6ES7518-4AX00-1AC0
<b>Compact-CPUs</b>	
CPU 1511C-1 PN	6ES7511-1CK00-0AB0
CPU 1512C-1 PN	6ES7512-1CK00-0AB0
<b>F-CPUs</b>	
CPU 1511F-1 PN	6ES7511-1FK01-0AB0
CPU 1513F-1 PN	6ES7513-1FL01-0AB0
CPU 1515F-2 PN	6ES7515-2FM01-0AB0
CPU 1516F-3 PN/DP	6ES7516-3FN01-0AB0
CPU 1517F-3 PN/DP	6ES7517-3FP00-0AB0
CPU 1518F-4 PN/DP	6ES7518-4FP00-0AB0
CPU 1518F-4 PN/DP MFP (incl. C/C++ RT, OPC UA RT)	6ES7518-4FX00-1AC0
<b>T-CPUs</b>	
CPU 1511T-1 PN	6ES7511-1TK01-0AB0
CPU 1515T-2 PN	6ES7515-2TM01-0AB0
CPU 1516T-3 PN/DP	6ES7516-3TN00-0AB0
CPU 1517T-3 PN/DP	6ES7517-3TP00-0AB0
CPU 1511TF-1 PN	6ES7511-1UK01-0AB0
CPU 1515TF-2 PN	6ES7515-2UM01-0AB0
CPU 1516TF-3 PN/DP	6ES7516-3UN00-0AB0
CPU 1517TF-3 PN/DP	6ES7517-3UP00-0AB0

\* An energy object corresponds to an energy measuring station

## SIMATIC S7-1500 and ET 200MP portfolio at a glance



### Interface module for distributed I/Os



#### ET 200MP PROFINET

	Article no.
IM 155-5 PN BA	6ES7155-5AA00-0AA0
IM 155-5 PN ST	6ES7155-5AA00-0AB0
IM 155-5 PN HF	6ES7155-5AA00-0AC0
<b>PROFIBUS</b>	
IM 155-5 DP ST	6ES7155-5BA00-0AB0

### I/Os



#### 35-mm wide modules (without front connector)

	Article no.
DI 16 x 24 VDC HF	6ES7521-1BH00-0AB0
DI 32 x 24 VDC HF	6ES7521-1BL00-0AB0
DI 16 x 24 VDC SRC BA	6ES7521-1BH50-0AA0
DI 16 x 230 VAC BA	6ES7521-1FH00-0AA0
DI 16 x 24 ... 125 VUC HF	6ES7521-7EH00-0AB0
DQ 16 x 24 VDC/0.5A HF	6ES7522-1BH01-0AB0
DQ 32 x 24 VDC/0.5A HF	6ES7522-1BL01-0AB0
DQ 8 x 24 VDC/2A HF	6ES7522-1BF00-0AB0
DQ 8 x 230 VAC/2A ST (Triac)	6ES7522-5FF00-0AB0
DQ 8 x 230 VAC/5A ST (Relay)	6ES7522-5HF00-0AB0
DQ 16 x 230 VAC/1A ST (Triac)	6ES7522-5FH00-0AB0
DQ 16 x 230 VAC/2A ST (Relay)	6ES7522-5HH00-0AB0
DQ 16 x 24 ... 48 VUC/125 VDC/0.5A ST	6ES7522-5EH00-0AB0
AI 8 x U/I/RTD/TC ST	6ES7531-7KF00-0AB0
AI 8 x U/I HS	6ES7531-7NF10-0AB0
AI 8 x U/I/RTD/TC HF	6ES7531-7PF00-0AB0
AI 8 x U/I HF	6ES7531-7NF00-0AB0
AQ 4 x U/I ST	6ES7532-5HD00-0AB0
AQ 8 x U/I HS	6ES7532-5HF00-0AB0
AQ 4 x U/I HF	6ES7532-5ND00-0AB0

#### 35-mm wide modules, failsafe (without front connector)

F-DI 16 x 24 VDC	6ES7526-1BH00-0AB0
F-DQ 8 x 24 VDC / 2A	6ES7526-2BF00-0AB0

#### 25-mm wide modules (including front connector)

DI 16 x 24 VDC BA	6ES7521-1BH10-0AA0
DI 32 x 24 VDC BA	6ES7521-1BL10-0AA0
DQ 16 x 24 VDC/0.5A BA	6ES7522-1BH10-0AA0
DQ 32 x 24 VDC/0.5A BA	6ES7522-1BL10-0AA0
DI 16 x 24 VDC/DQ 16 x 24 VDC/0.5A BA	6ES7523-1BL00-0AA0
AI 4 x U/I/RTD/TC ST	6ES7531-7QD00-0AB0
AQ 2 x U/I ST	6ES7532-5NB00-0AB0
AI/AQ 4 x U/I/RTD/TC / 2 x U/I ST	6ES7534-7QE00-0AB0





## Technology modules



### Technology modules

	Article no.
TM Count 2 x 24 V, counter module 200 kHz	6ES7550-1AA00-0AB0
TM PosInput 2, position detection module	6ES7551-1AB00-0AB0
TM Timer DIDQ 16 x 24 V, Time-based I/O	6ES7552-1AA00-0AB0
TM PTO 4, interface for stepper drives	6ES7553-1AA00-0AB0
TM SIWAREX WP521 ST	7MH4980-1AA01
TM SIWAREX WP522 ST	7MH4980-2AA01

## Communication



### Serial interfaces

	Article no.
CM PtP RS232 BA, Freeport, 3964(R), USS	6ES7540-1AD00-0AA0
CM PtP RS232 HF, Freeport, 3964(R), USS, Modbus RTU	6ES7541-1AD00-0AB0
CM PtP RS422/485 BA, Freeport, 3964(R), USS	6ES7540-1AB00-0AA0
CM PtP RS422/485 HF, Freeport, 3964(R), USS, Modbus RTU	6ES7541-1AB00-0AB0

### PROFIBUS

CM 1542-5, PROFIBUS communication module	6GK7542-5DX00-0XE0
CP 1542-5, communications processor (PROFIBUS)	6GK7542-5FX00-0XE0

### Ethernet

CP 1543-1, Industrial Ethernet with Security, FTP and email	6GK7543-1AX00-0XE0
CM 1542-1, PROFINET communication module	6GK7542-1AX00-0XE0

## Accessories



### Mounting rails

Mounting rail, 160 mm (with drill hole)	6ES7590-1AB60-0AA0
Mounting rail, 245 mm (with drill hole)	6ES7590-1AC40-0AA0
Mounting rail, 482 mm (with drill hole)	6ES7590-1AE80-0AA0
Mounting rail, 530 mm (with drill hole)	6ES7590-1AF30-0AA0
Mounting rail, 830 mm (with drill hole)	6ES7590-1AJ30-0AA0
Mounting rail, 2,000 mm (without drill hole) for customization	6ES7590-1BC00-0AA0

### Front connectors

Front connector for 35-mm wide modules; screw terminal, 40-pin	6ES7592-1AM00-0XB0
Front connector for 35-mm wide modules; Push-in terminal, 40-pin	6ES7592-1BM00-0XB0



### Memory cards

SIMATIC Memory Card 4 MB	6ES7954-8LC02-0AA0
SIMATIC Memory Card 12 MB	6ES7954-8LE03-0AA0
SIMATIC Memory Card 24 MB	6ES7954-8LF03-0AA0
SIMATIC Memory Card 256 MB	6ES7954-8LL03-0AA0
SIMATIC Memory Card 2 GB	6ES7954-8LP02-0AA0
SIMATIC Memory Card 32 GB	6ES7954-8LT03-0AB0



## Power supply and system wiring



	Article no.
<b>PM load current supply</b>	
PM 70 W, 120/230 VAC	6EP1332-4BA00
PM 190 W, 120/230 VAC	6EP1333-4BA00
<b>PS system power supply</b>	
System power supply 25 W 24 VDC	6ES7505-0KA00-0AB0
System power supply 60 W 24/48/60 VDC	6ES7505-0RA00-0AB0
System power supply 60 W 120/230 VAC/DC	6ES7507-0RA00-0AB0
System power supply 60 W 24/48/60 VDC HF	6ES7505-0RB00-0AB0

## Related topics



### SIPLUS extreme

Specially coated automation and drive components for use under particularly demanding ambient conditions. You can find information on SIPLUS extreme in the Siemens Industry Mall or at [siemens.com/siplus-extreme](http://siemens.com/siplus-extreme)

### SIMATIC HMI

The SIMATIC HMI Comfort Panels are perfectly suited for efficient implementation of demanding operator control and process monitoring solutions in conjunction with the Advanced Controllers SIMATIC S7-1500. [siemens.com/comfort-panels](http://siemens.com/comfort-panels)

### SINAMICS Converters

SINAMICS S210 – The simple, high-performance and safe servodrive system. With the converter that is specially designed for use with the newly developed SIMOTICS S-1FK2 motors and the single-cable solution OCC, Siemens offers a new servodrive system for highly dynamic motion control applications. [siemens.com/sinamics-s210](http://siemens.com/sinamics-s210)

### SIMATIC TOP connect

Complete connection system for the input and output modules of the SIMATIC S7-1500 in two versions: The fully modular connection with front plug-in module, connecting cables and I/O modules for sensors/actuators in the field, and the flexible connection with bundled individual wires for connecting sensors/actuators in the control cabinet. [siemens.com/simatic-tc](http://siemens.com/simatic-tc)

## Promotional packages



	Article no.
<b>SIMATIC S7-1500 Starter Kit</b>	
SIMATIC S7-1500 Starter Kit with compact CPU 1511C-1 PN, SIMATIC memory card 4 MB, Mounting rail 160 mm, Power supply PM 70 W 120/230 V AC, STEP 7 Professional V15, 365-day license	6ES7511-1CK01-4YB5
<b>PowerPack STEP 7 Professional V15</b>	
Conversion of the Starter Kit to a full license:	6ES7822-1BE05-0YC5
Floating license for STEP 7 Professional V15 Only valid if ordered together with a software update (SUS)	6ES7822-1AE00-0YY0
Prerequisite is a STEP 7 Professional V15, 365-day license, license key download	

## Configurator

### TIA Selection Tool

You can use the TIA Selection Tool to select, configure and order devices for Totally Integrated Automation (TIA). It not only combines the familiar configurators for automation technology in a single tool, but can do much more. [siemens.com/tia-selection-tool](http://siemens.com/tia-selection-tool)

The Siemens logo is displayed in a bold, teal, sans-serif font. It is positioned in the upper left corner of the advertisement, set against a white rectangular background. The overall image background features a Siemens SIMATIC S7-1500 PLC rack with a digital display showing a 'Fail-safe' status, overlaid with a semi-transparent TIA Portal software interface showing a ladder logic diagram and a multi-colored waveform graph.

*Ingenuity for life*

Engineered with TIA Portal

Increase productivity  
with the ultimate power

Advanced Controllers  
SIMATIC S7-1500 with ET 200MP

[siemens.com/s7-1500](https://www.siemens.com/s7-1500)

# Advanced Controllers SIMATIC S7-1500 for complex automation tasks

## SIMATIC S7-1500 plus TIA Portal

The SIMATIC® S7-1500 Advanced Controller sets new standards in system performance and usability. The seamless integration of the SIMATIC S7-1500 controller into the Totally Integrated Automation Portal (TIA Portal) offers advantages such as shared data management, a uniform operating concept and centralized services. This makes the use of universal functions particularly easy. The controller is quick and easy to install and connect, and with its quick system response times, it boosts productivity at the wave of a hand. For you, this means more flexibility in handling, shorter time-to-market, and a fast rate of return on your plant.

## Scalable performance and functionality

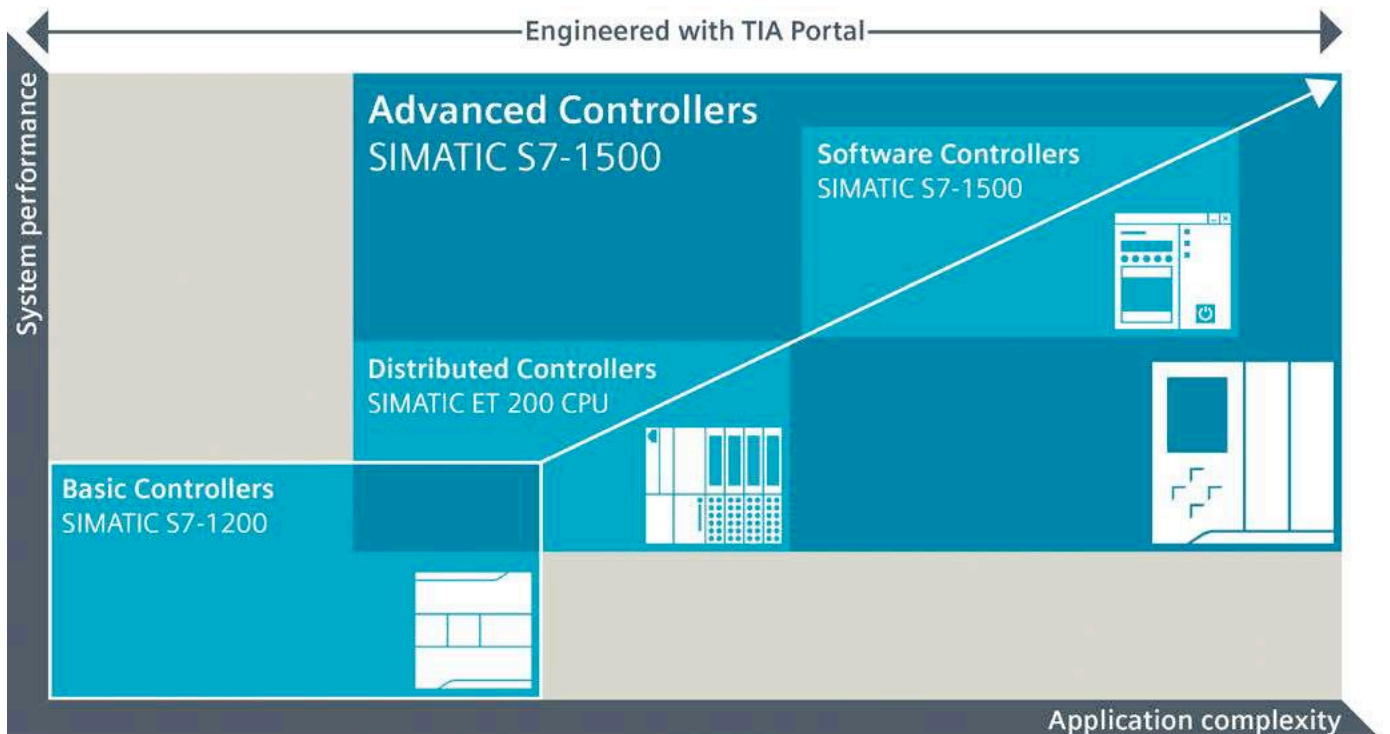
There are various CPU versions in several performance classes available for the SIMATIC S7-1500. The portfolio includes standard CPUs and standard CPUs with the option of integrating C/C++ code. With the compact CPUs, the digital and analog I/Os are integrated, counter inputs and pulse inputs can be directly recorded on the CPU. Standard and safety programs can be run on the same controller with the help of the fail-safe CPUs. The Technology CPUs extend the Motion Control functions available in all SIMATIC S7-1500 controllers for demanding solutions.

The integration of the SIMATIC S7-1500 Technology-CPU (T-CPU) into the TIA Portal is an advantage that the machine manufacturer Sollas passes on to its customers. They can configure the T-CPU in the TIA Portal themselves in the event of changes, without having to commission a packaging machine specialist.



**“The main advantage of the S7-1500 T-CPU is that it offers a host of Motion Control functions which can be used without the need for specialist knowledge of motion.”**

Dirk Verbeek, Technical Manager of Sollas



Siemens offers the right controller for an extremely wide range of automation requirements. The new generation of SIMATIC Controllers, comprising Basic, Advanced, Distributed and Software Controllers, leaves a lasting impression with its scalability and continuous functionality.



### PLC Programming

SIMATIC STEP 7 V15 Professional	Download: 6ES7822-1AE05-0YA5 DVD: 6ES7822-1AA05-0YA5
SIMATIC STEP 7 V15 Safety Advanced	Download: 6ES7833-1FA15-0YH5 DVD: 6ES7833-1FA15-0YA5
TIA Portal Multiuser V15	Download: 6ES7823-1AE05-0YA5 DVD: 6ES7823-1AA05-0YA5
SIMATIC S7-PLCSIM Advanced V2.0	Download: 6ES7823-1FE00-0YA5 DVD: 6ES7823-1FA00-0YA5
SIMATIC ODK 1500S V2.5	Download: 6ES7806-2CD03-0YG0 DVD: 6ES7806-2CD03-0YA0
SIMATIC Target 1500S™ for Simulink® V2.0	Download: 6ES7823-1BE01-0YA5 DVD: -
SIMATIC Energy Suite V15 Engineering incl. 10 Energy Objects* (2 x 5 EnO)	Download: 6AV2108-0AA04-0AH5 DVD: 6AV2108-0AA04-0AA5

## Runtime Software on CPU



OPC UA S7-1500 small (≤ CPU 1513 (F))	Download: 6ES7823-0BE00-1BA0 DVD: 6ES7823-0BA00-1BA0
OPC UA S7-1500 medium (CPU 1515/1516 (F))	Download: 6ES7823-0BE00-1CA0 DVD: 6ES7823-0BA00-1CA0
OPC UA S7-1500 large (CPU 1517/1518 (F))	Download: 6ES7823-0BE00-1DA0 DVD: 6ES7823-0BA00-1DA0
SIMATIC ProDiag S7-1500 for 250 Supervisions	Download: 6ES7823-0AE00-1AA0 DVD: 6ES7823-0AA00-1AA0
SIMATIC Energy Suite S7-1500, 5 Energy Objects* (1 x 5 EnO)	Download: 6AV2108-0CF00-0BH0 DVD: 6AV2108-0CF00-0BB0
SIMATIC Energy Suite S7-1500, 10 Energy Objects* (1 x 10 EnO)	Download: 6AV2108-0CH00-0BH0 DVD: 6AV2108-0CH00-0BB0
SIMATIC Energy Suite S7-1500, 10 Energy Objects* (2 x 5 EnO)	Download: 6AV2108-0DF00-0BH0 DVD: 6AV2108-0DF00-0BB0
SIMATIC Energy Suite S7-1500, 50 Energy Objects* (5 x 10 EnO)	Download: 6AV2108-0FH00-0BH0 DVD: 6AV2108-0FH00-0BB0
SIMATIC Energy Suite S7-1500, 100 Energy Objects* (10 x 10 EnO)	Download: 6AV2108-0HH00-0BH0 DVD: 6AV2108-0HH00-0BB0

## CPUs



<b>Standard-CPUs</b>	
CPU 1511-1 PN	6ES7511-1AK01-0AB0
CPU 1513-1 PN	6ES7513-1AL01-0AB0
CPU 1515-2 PN	6ES7515-2AM01-0AB0
CPU 1516-3 PN/DP	6ES7516-3AN01-0AB0
CPU 1517-3 PN/DP	6ES7517-3AP00-0AB0
CPU 1518-4 PN/DP	6ES7518-4AP00-0AB0
CPU 1518-4 PN/DP MFP (incl. C/C++ RT, OPC UA RT)	6ES7518-4AX00-1AC0
<b>Compact-CPUs</b>	
CPU 1511C-1 PN	6ES7511-1CK00-0AB0
CPU 1512C-1 PN	6ES7512-1CK00-0AB0
<b>F-CPUs</b>	
CPU 1511F-1 PN	6ES7511-1FK01-0AB0
CPU 1513F-1 PN	6ES7513-1FL01-0AB0
CPU 1515F-2 PN	6ES7515-2FM01-0AB0
CPU 1516F-3 PN/DP	6ES7516-3FN01-0AB0
CPU 1517F-3 PN/DP	6ES7517-3FP00-0AB0
CPU 1518F-4 PN/DP	6ES7518-4FP00-0AB0
CPU 1518F-4 PN/DP MFP (incl. C/C++ RT, OPC UA RT)	6ES7518-4FX00-1AC0
<b>T-CPUs</b>	
CPU 1511T-1 PN	6ES7511-1TK01-0AB0
CPU 1515T-2 PN	6ES7515-2TM01-0AB0
CPU 1516T-3 PN/DP	6ES7516-3TN00-0AB0
CPU 1517T-3 PN/DP	6ES7517-3TP00-0AB0
CPU 1511TF-1 PN	6ES7511-1UK01-0AB0
CPU 1515TF-2 PN	6ES7515-2UM01-0AB0
CPU 1516TF-3 PN/DP	6ES7516-3UN00-0AB0
CPU 1517TF-3 PN/DP	6ES7517-3UP00-0AB0

\* An energy object corresponds to an energy measuring station

# SIMATIC S7-1500 and ET 200MP portfolio at a glance



## Interface module for distributed I/Os



### ET 200MP PROFINET

	Article no.
IM 155-5 PN BA	6ES7155-5AA00-0AA0
IM 155-5 PN ST	6ES7155-5AA00-0AB0
IM 155-5 PN HF	6ES7155-5AA00-0AC0

### PROFIBUS

IM 155-5 DP ST	6ES7155-5BA00-0AB0
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## I/Os



### 35-mm wide modules (without front connector)

	Article no.
DI 16 x 24 VDC HF	6ES7521-1BH00-0AB0
DI 32 x 24 VDC HF	6ES7521-1BL00-0AB0
DI 16 x 24 VDC SRC BA	6ES7521-1BH50-0AA0
DI 16 x 230 VAC BA	6ES7521-1FH00-0AA0
DI 16 x 24 ... 125 VUC HF	6ES7521-7EH00-0AB0
DQ 16 x 24 VDC/0.5A HF	6ES7522-1BH01-0AB0
DQ 32 x 24 VDC/0.5A HF	6ES7522-1BL01-0AB0
DQ 8 x 24 VDC/2A HF	6ES7522-1BF00-0AB0
DQ 8 x 230 VAC/2A ST (Triac)	6ES7522-5FF00-0AB0
DQ 8 x 230 VAC/5A ST (Relay)	6ES7522-5HF00-0AB0
DQ 16 x 230 VAC/1A ST (Triac)	6ES7522-5FH00-0AB0
DQ 16 x 230 VAC/2A ST (Relay)	6ES7522-5HH00-0AB0
DQ 16 x 24 ... 48 VUC/125 VDC/0.5A ST	6ES7522-5EH00-0AB0
AI 8 x U/I/RTD/TC ST	6ES7531-7KF00-0AB0
AI 8 x U/I HS	6ES7531-7NF10-0AB0
AI 8 x U/R/RTD/TC HF	6ES7531-7PF00-0AB0
AI 8 x U/I HF	6ES7531-7NF00-0AB0
AQ 4 x U/I ST	6ES7532-5HD00-0AB0
AQ 8 x U/I HS	6ES7532-5HF00-0AB0
AQ 4 x U/I HF	6ES7532-5ND00-0AB0

### 35-mm wide modules, failsafe (without front connector)

F-DI 16 x 24 VDC	6ES7526-1BH00-0AB0
F-DQ 8 x 24 VDC / 2A	6ES7526-2BF00-0AB0

### 25-mm wide modules (including front connector)



DI 16 x 24 VDC BA	6ES7521-1BH10-0AA0
DI 32 x 24 VDC BA	6ES7521-1BL10-0AA0
DQ 16 x 24 VDC/0.5A BA	6ES7522-1BH10-0AA0
DQ 32 x 24 VDC/0.5A BA	6ES7522-1BL10-0AA0
DI 16 x 24 VDC/DQ 16 x 24 VDC/0.5A BA	6ES7523-1BL00-0AA0
AI 4 x U/I/RTD/TC ST	6ES7531-7QD00-0AB0
AQ 2 x U/I ST	6ES7532-5NB00-0AB0
AI/AQ 4 x U/I/RTD/TC / 2 x U/I ST	6ES7534-7QE00-0AB0



## Technology modules



### Technology modules

	Article no.
TM Count 2 x 24 V, counter module 200 kHz	6ES7550-1AA00-0AB0
TM PosInput 2, position detection module	6ES7551-1AB00-0AB0
TM Timer DIDQ 16 x 24 V, Time-based I/O	6ES7552-1AA00-0AB0
TM PTO 4, interface for stepper drives	6ES7553-1AA00-0AB0
TM SIWAREX WP521 ST	7MH4980-1AA01
TM SIWAREX WP522 ST	7MH4980-2AA01

## Communication



### Serial interfaces

	Article no.
CM PtP RS232 BA, Freeport, 3964(R), USS	6ES7540-1AD00-0AA0
CM PtP RS232 HF, Freeport, 3964(R), USS, Modbus RTU	6ES7541-1AD00-0AB0
CM PtP RS422/485 BA, Freeport, 3964(R), USS	6ES7540-1AB00-0AA0
CM PtP RS422/485 HF, Freeport, 3964(R), USS, Modbus RTU	6ES7541-1AB00-0AB0

### PROFIBUS

CM 1542-5, PROFIBUS communication module	6GK7542-5DX00-0XE0
CP 1542-5, communications processor (PROFIBUS)	6GK7542-5FX00-0XE0

### Ethernet

CP 1543-1, Industrial Ethernet with Security, FTP and email	6GK7543-1AX00-0XE0
CM 1542-1, PROFINET communication module	6GK7542-1AX00-0XE0

## Accessories



### Mounting rails

Mounting rail, 160 mm (with drill hole)	6ES7590-1AB60-0AA0
Mounting rail, 245 mm (with drill hole)	6ES7590-1AC40-0AA0
Mounting rail, 482 mm (with drill hole)	6ES7590-1AE80-0AA0
Mounting rail, 530 mm (with drill hole)	6ES7590-1AF30-0AA0
Mounting rail, 830 mm (with drill hole)	6ES7590-1AJ30-0AA0
Mounting rail, 2,000 mm (without drill hole) for customization	6ES7590-1BC00-0AA0

### Front connectors

Front connector for 35-mm wide modules; screw terminal, 40-pin	6ES7592-1AM00-0XB0
Front connector for 35-mm wide modules; Push-in terminal, 40-pin	6ES7592-1BM00-0XB0

### Memory cards



SIMATIC Memory Card 4 MB	6ES7954-8LC02-0AA0
SIMATIC Memory Card 12 MB	6ES7954-8LE03-0AA0
SIMATIC Memory Card 24 MB	6ES7954-8LF03-0AA0
SIMATIC Memory Card 256 MB	6ES7954-8LL03-0AA0
SIMATIC Memory Card 2 GB	6ES7954-8LP02-0AA0
SIMATIC Memory Card 32 GB	6ES7954-8LT03-0AB0

## Power supply and system wiring



	Article no.
<b>PM load current supply</b>	
PM 70 W, 120/230 VAC	6EP1332-4BA00
PM 190 W, 120/230 VAC	6EP1333-4BA00
<b>PS system power supply</b>	
System power supply 25 W 24 VDC	6ES7505-0KA00-0AB0
System power supply 60 W 24/48/60 VDC	6ES7505-ORA00-0AB0
System power supply 60 W 120/230 VAC/DC	6ES7507-ORA00-0AB0
System power supply 60 W 24/48/60 VDC HF	6ES7505-ORB00-0AB0

## Related topics



### SIPLUS extreme

Specially coated automation and drive components for use under particularly demanding ambient conditions. You can find information on SIPLUS extreme in the Siemens Industry Mall or at [siemens.com/siplus-extreme](http://siemens.com/siplus-extreme)

### SIMATIC HMI

The SIMATIC HMI Comfort Panels are perfectly suited for efficient implementation of demanding operator control and process monitoring solutions in conjunction with the Advanced Controllers SIMATIC S7-1500. [siemens.com/comfort-panels](http://siemens.com/comfort-panels)

### SINAMICS Converters

SINAMICS S210 – The simple, high-performance and safe servodrive system. With the converter that is specially designed for use with the newly developed SIMOTICS S-1FK2 motors and the single-cable solution OCC, Siemens offers a new servodrive system for highly dynamic motion control applications. [siemens.com/sinamics-s210](http://siemens.com/sinamics-s210)

### SIMATIC TOP connect

Complete connection system for the input and output modules of the SIMATIC S7-1500 in two versions: The fully modular connection with front plug-in module, connecting cables and I/O modules for sensors/actuators in the field, and the flexible connection with bundled individual wires for connecting sensors/actuators in the control cabinet. [siemens.com/simatic-tc](http://siemens.com/simatic-tc)

## Promotional packages



	Article no.
<b>SIMATIC S7-1500 Starter Kit</b>	
SIMATIC S7-1500 Starter Kit with compact CPU 1511C-1 PN, SIMATIC memory card 4 MB, Mounting rail 160 mm, Power supply PM 70 W 120/230 V AC STEP 7 Professional V15, 365-day license	6ES7511-1CK01-4YB5
<b>PowerPack STEP 7 Professional V15</b>	
Conversion of the Starter Kit to a full license: Floating license for STEP 7 Professional V15 Only valid if ordered together with a software update (SUS)	6ES7822-1BE05-0YC5  6ES7822-1AE00-0YY0
Prerequisite is a STEP 7 Professional V15, 365-day license, license key download	

## Configurator

### TIA Selection Tool

You can use the TIA Selection Tool to select, configure and order devices for Totally Integrated Automation (TIA). It not only combines the familiar configurators for automation technology in a single tool, but can do much more. [siemens.com/tia-selection-tool](http://siemens.com/tia-selection-tool)

# Highlights

## SIMATIC S7-1500 and ET 200MP

### 1 Efficient engineering

The support of all IEC 61131-3 programming languages (LAD/FBD, STL, SCL and Graph) and of high-level languages such as C++ enable efficient programming of the Advanced Controllers in the shared engineering framework TIA Portal.

### 2 Innovative design

The onboard display of the CPU supports diagnostics and initial commissioning with functions such as check tag status and IP address assignment. Cabling is convenient thanks to pre-wiring positions of the I/O modules and jumper links.

### 3 High performance

You can achieve productivity and product quality in your manufacturing process with the advanced controller thanks to the backplane bus and shortest reaction times. The PROFINET connection with deterministic dynamic time response ensures reproducibility and precision in the  $\mu$ s range.

### 4 Reliable diagnostics

The automatic generation of system and user diagnostics enables quick error detection. Any errors can be quickly localized on-site thanks to 1:1 LED channel assignment in the I/O modules.

### 5 Safety Integrated

The Advanced Controllers combine functions for standard and fail-safe tasks. The high-density channel, fail-safe I/O modules can be directly addressed while doing the engineering.

### 6 Technology Integrated

Motion Control tasks can be programmed directly in the controller – starting with speed-controlled axes through to camming. A variety of technology functions such as pulse width modulation (PWM) can be implemented.

### 7 Security Integrated

Integrated copy and know-how protection functions protect intellectual property and protect the controller against cyber attacks.

### Advanced Controllers

		Modular design			Compact design
		Standard-CPU	Technology-CPU	Multifunctional platform	Compact-CPU
	CPU-types	CPU 1511, 1513, 1515, 1516, 1517, 1518	CPU 1511T, 1515T, 1517T, 1516T	CPU 1518 MFP	CPU 1511C, 1512C
1	Efficient engineering	IEC languages C/C++	x –	x x	x –
2	Innovative design	Onboard-I/Os PROFINET interfaces/ ports (max.)	– 1/2 to 3/4	– 3/4	x 1/2
3	High performance	Bit performance	60 ns to 1 ns	60 ns to 2 ns	1 ns
	Communication options	OPC UA, PROFINET (including PROFIsafe**, PROFInergy and PROFIdrive), PROFIBUS ***, TCP/IP, PtP, Modbus RTU and Modbus TCP			
	Program memory Data memory	150 KB to 6 MB 1 MB to 20 MB	150 KB to 3 MB 1 MB to 8 MB	4 to 6 MB 20 MB additional 20 MB for executing ODK applications	175 to 250 KB 1 MB
4	Reliable diagnostics	Integrated system diagnostics	x	x	x
5	Safety Integrated	Fail-safe	x	x	–
6	Technology Integrated	Motion Control functions	<ul style="list-style-type: none"> <li>External encoder, output cam, measuring input</li> <li>Speed and positioning axis</li> <li>Relative synchronism</li> <li>PID controllers (integrated)</li> <li>Counters, pulse width modulation, pulse train outputs (with technology modules)</li> </ul>	<ul style="list-style-type: none"> <li>External encoder, output cam, measuring input</li> <li>Speed and positioning axis</li> <li>Relative synchronism</li> <li>PID controllers (integrated)</li> <li>Counters, pulse width modulation, pulse train outputs (with technology modules)</li> <li>Absolute synchronism, camming</li> </ul>	<ul style="list-style-type: none"> <li>External encoder, output cam, measuring input</li> <li>Speed and positioning axis</li> <li>Relative synchronism</li> <li>PID controllers (integrated)</li> <li>Counters, pulse width modulation, pulse train outputs (integrated)</li> </ul>
7	Security Integrated	Functions	Know-how, copy, access protection and firewall		

\*\* Only for the modular design      \*\*\* For Compact-CPU via CM



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Subject to changes and errors.

The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

Siemens offers automation and drives products with industrial security functions that support safe operation of the plant or machine. They are an important component in a holistic industrial security concept. With this in mind, our products undergo continuous development. We therefore recommend that you keep yourself informed with respect to our product updates, and that you only use the latest versions in each case. You can find information on this at: <http://support.automation.siemens.com>. There you can also register for a newsletter specifically about these products.

To ensure the secure operation of a plant or machine, it is also necessary to take suitable preventive action (e.g. cell protection concept) and to integrate the automation and drive components into a state-of-the-art, holistic industrial security policy for the entire plant or machine. Products used from other manufacturers should also be taken into account here.

For more information, go to [www.siemens.com/industrialsecurity](http://www.siemens.com/industrialsecurity)

Follow us at  
[twitter.com/siemensindustry](https://twitter.com/siemensindustry)  
[youtube.com/siemens](https://youtube.com/siemens)

## Advanced Controllers SIMATIC S7-1500 with ET 200MP

- **New in portfolio: TF-CPU, IM 155 BA and PS 60 W DC HF for retentivity**
- **Efficient engineering thanks to TIA Portal**
- **Latest references**

Discover more:  
[siemens.com/s7-1500](http://siemens.com/s7-1500)

# SIEMENS



Engineered with TIA Portal

## The powerful IO system for compact control cabinets

SIMATIC ET 200SP

[siemens.com/et200sp](http://siemens.com/et200sp)

### کنترلر توزیع شده سری ET 200SP

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹

تلفن: ۰۲۱-۴۱۹۰۷ ۰۲۱-۸۸۶۴۱۴۹۳-۵



## 3 – IO modules

### Digital input and output modules



	Article No.
DI 8x24VDC BA	6ES7131-6BF00-#AA0*
DI 8x24VDC SRC BA	6ES7131-6BF60-0AA0
DI 4x120...230VAC ST	6ES7131-6FD00-0BB1
DI 8x24VDC ST	6ES7131-6BF00-#BA0*
DI 16x24VDC ST	6ES7131-6BH00-#BA0*
DI 8x24VDC HF (add-on function: module-internal shared input)	6ES7131-6BF00-0CA0
DI 8xNAMUR HF	6ES7131-6TF00-0CA0
DI 8x24VDC HS (add-on function: counting and oversampling)	6ES7131-6BF00-0DA0
DQ 8x24VDC/0.5A BA	6ES7132-6BF00-#AA0*
DQ 8x24VDC/0.5A SNK BA	6ES7132-6BF60-0AA0
DQ 4x24VDC/2A ST	6ES7132-6BD20-#BA0*
DQ 4x24...230VAC/2A ST	6ES7132-6FD00-#BB1*
DQ 8x24VDC/0,5A ST	6ES7132-6BF00-#BA0*
DQ16x24VDC/0,5A BA	6ES7132-6BH00-0AA0 <b>NEU!</b>
DQ 16x24VDC ST	6ES7132-6BH00-#BA0*
DQ 4x24VDC/2A HF (add-on function: module-internal shared output)	6ES7132-6BD20-0CA0
DQ 8x24VDC/0.5A HF (add-on function: module-internal shared output)	6ES7132-6BF00-0CA0
DQ 4x24VDC/2A HS	6ES7132-6BD20-0DA0
(Add-on-Funktion: PWM, Oversampling und Ventilansteuerung)	
DQ4x24...230VAC/2A HF (Add-on-Funktion: Leistungssteuerung)	6ES7132-6FD00-0CU0 <b>NEU!</b>
RQ 4x24VDC/2A CO ST	6ES7132-6GD50-0BA0
RQ 4x120VDC230VAC/5A NO ST	6ES7132-6HD00-#BB1*
RQ 4x120VDC230VAC/5A NO MA ST	6ES7132-6MD00-0BB1
(IO simulation module with manual operation)	

### Analog input and output modules



	Article No.
AI 8xI 2/4-wire BA	6ES7134-6GF00-0AA1
AI 8xU BA	6ES7134-6FF00-0AA1
AI 2xI 2/4-wire ST	6ES7134-6GB00-0BA1
AI 2xU ST	6ES7134-6FB00-0BA1
AI 4xU/I 2-wire ST	6ES7134-6HD00-#BA1*
AI 4xI 2/4-wire ST	6ES7134-6GD00-0BA1
AI 2xU/I 2/4-wire HF (add-on function: scaling of the measured values)	6ES7134-6HB00-0CA1
AI 4xRTD/TC 2/3/4-wire HF	6ES7134-6JD00-#CA1*
AI 8xRTD/TC 2-wire HF	6ES7134-6JF00-#CA1*
AI 2xU/I 2/4-wire HS (add-on function: oversampling)	6ES7134-6HB00-0DA1
AI 4xI 2-wire 4...20mA HART	6ES7134-6TD00-0CA1
AI Energy Meter ST (230/400V)	6ES7134-6PA01-0BDO
AI Energy Meter ST (277/480V)	6ES7134-6PA20-0BDO
AQ 2xI ST	6ES7135-6GB00-0BA1
AQ 2xU ST	6ES7135-6FB00-0BA1
AQ 4xU/I ST	6ES7135-6HD00-0BA1
AQ 2xU/I HF	6ES7135-6HB00-0CA1
AQ 2xU/I HS (add-on function: oversampling)	6ES7135-6HB00-0DA1

### Fail-safe modules



	Article No.
F-DI 8x24VDC HF	6ES7136-6BA00-0CA0
F-DQ 4x24VDC/2A HF	6ES7136-6DB00-0CA0
F-PM-E 24VDC/8A PPM ST	6ES7136-6PA00-0BC0
F-RQ 1x24VDC/24...230VAC/5A	6ES7136-6RA00-0BF0
F-CM AS-i Safety ST	3RK7136-6SC00-0BC1

### Technologie- und Spezialmodule



	Artikelnummer
TM Count 1x24V	6ES7138-6AA00-0BA0
TM PosInput 1 (SSI, 5V-Count)	6ES7138-6BA00-0BA0
TM 1xSIWAREX WP321 ST (Wiegemodul)	7MH4138-6AA00-0BA0
TM Timer DIDQ 16x24V	6ES7552-1AA00-0AB0
TM Pulse 2x24V	6ES7138-6DB00-0BB1

\* »#«: if 0 = PU 1, if 2 = PU 10



## 3 – IO modules

### Communication modules



	Article No.
CM 4xIO-Link ST	6ES7137-6BD00-0BA0
CM 1xPtP ST (ASCII, 3964R, USS, Modbus)	6ES7137-6AA00-0BA0
CM AS-i Master ST	3RK7137-6SA00-0BC1
CM DP Master (for controllers)	6ES7545-5DA00-0AB0
CP 1542SP-1 (expansion of IE interface)	6GK7542-6UX00-0XE0
CP 1542SP-1 IRC (connection of RTUs)	6GK7542-6VX00-0XE0
CP 1543SP-1 (IP security)	6GK7543-6WX00-0XE0
ET 200AL BU-Send	6ES7193-6BN00-0NE0
ET 200AL BA-Send 1xFC	6ES7193-6AS00-0AA0

### Potential Verteiler



	Article No.	
PotDis-TB-P1-R	6ES7193-6TP00-0TP1	NEU!
PotDis-TB-P2-B	6ES7193-6TP00-0TP2	NEU!
PotDis-TB-n.c.-G	6ES7193-6TP00-0TN0	NEU!
PotDis-TB-BR-W	6ES7193-6TP00-0TP0	NEU!
PotDis-BU-P1/D-R	6ES7193-6UP00-0DP1	NEU!
PotDis-BU-P1/B-R	6ES7193-6UP00-0BP1	NEU!
PotDis-BU-P2/D-B	6ES7193-6UP00-0DP2	NEU!
PotDis-BU-P2/B-B	6ES7193-6UP00-0BP2	NEU!

Also available as SIPLUS extreme ET 200SP for use in extreme environmental conditions.  
 More information here: [siemens.com/siplus-extreme](http://siemens.com/siplus-extreme)



## 1 – BusAdapter



	Article No.
BA 2xRJ45	6ES7193-6AR00-0AA0
BA 2xFC	6ES7193-6AF00-0AA0
BA 2xSCRJ	6ES7193-6AP00-0AA0
BA SCRJ/RJ45 media converter (FOC – copper)	6ES7193-6AP20-0AA0
BA SCRJ/FC	6ES7193-6AP40-0AA0
BA 2xLC	6ES7193-6AG00-0AA0
BA LC/RJ45	6ES7193-6AG20-0AA0
BA LC/FC	6ES7193-6AG40-0AA0

## 2 – Interface modules and CPU



	Article No.
IM155-6PN ST with server module and BusAdapter 2xRJ45	6ES7155-6AA00-0BN0
IM155-6PN ST with server module, without BusAdapter	6ES7155-6AU00-0BN0
IM155-6PN HF with server module, without BusAdapter	6ES7155-6AU00-0CN0
IM155-6DP HF with server module (6ES71936PA000AA0) and DP connector (6ES7972-0BB700XA0)	6ES7155-6BA00-0CN0
IM155-6PN BA with server module and integrated RJ45	6ES7155-6AR00-0AN0
IM155-6PN HS with server module, without BusAdapter	6ES7155-6AU00-0DN0
CPU 1510SP-1PN (SIMATIC Memory Card required)	6ES7510-1DJ01-0AB0
CPU 1512SP-1PN (SIMATIC Memory Card required)	6ES7512-1DK01-0AB0
CPU 1510SP F-1PN (SIMATIC Memory Card required)	6ES7510-1SJ01-0AB0
CPU 1512SP F-1PN (SIMATIC Memory Card required)	6ES7512-1SK01-0AB0
CPU 1515SP PC (incl. HMI)	6ES7677-2AA...
CPU 1515SP PC F (incl. HMI)	6ES7677-2FA...

## 4 – Base Units

### Base Unit type A0



	Article No.
16 push-in, 2 infeeds jumpered, DI dig./analog, max. 24 V DC/10 A	6ES7193-6BP00-#BA0*
16 push-in, 10 AUX, 2 infeeds jumpered, DI dig./analog, max. 24 V DC/10 A	6ES7193-6BP20-#BA0*
16 push-in, 2 infeeds separate, DI dig./analog, max. 24 V DC/10 A	6ES7193-6BP00-#DA0*
16 push-in, 10 AUX, 2 infeeds separate, DI dig./analog, max. 24 V DC/10 A	6ES7193-6BP20-#DA0*

### Base Unit type A1

	Article No.
16 push-in, 2 infeeds jumpered, temperature, max. 24 V DC/10 A	6ES7193-6BP00-0BA1
16 push-in, 2x5 add. term. + 2 infeeds, temperature, max. 24 V DC/10 A	6ES7193-6BP40-0BA1
16 push-in, 2 infeeds separate, temperature, max. 24 V DC/10 A	6ES7193-6BP00-0DA1
16 push-in, 2x5 add. term. + 2 infeeds, temperature, max. 24 V DC/10 A	6ES7193-6BP40-0DA1

### Base Unit Typ B0, C1, D0, F0 und U0



	Article No.
Base Unit type B0, 12 push-in, 4 AUX, up to 230 V	6ES7193-6BP20-0BB0
Base Unit type B1, 12 push-in, up to 230 V	6ES7193-6BP20-0BB1
Base Unit type C0, 6 push-in, 2 AUX, for AS-i, Safety	6ES7193-6BP20-0DC0
Base Unit type C1, 6 push-in	6ES7193-6BP20-0BC1
Base Unit Typ D0, 12 Push-in	6ES7193-6BP00-0BD0
Base Unit Typ F0, 8 Push-in	6ES7193-6BP20-0BF0
Base Unit Typ U0, 16 Push-in, 2 Einsp. getrennt*	6ES7193-6BP00-#DU0
Base Unit Typ U0, 16 Push-in, 2 Einsp. gebrückt*	6ES7193-6BP00-#BU0

You can find possible combinations of IO modules with the Base Units/interface modules or PC configurators at: [www.siemens.com/et200sp](http://www.siemens.com/et200sp) or in the TIA Selection Tool.

## Accessories



	Article No.
10 color-coded labels	6ES7193-6CP...
500 labeling strips, light gray	6ES7193-6LR10-0AA0
500 labeling strips, yellow	6ES7193-6LR10-0AGO
1,000 labeling strips 10 DIN A4, 100 labels per sheet, light gray	6ES7193-6LA10-0AA0
1,000 labeling strips 10 DIN A4, 100 labels per sheet, yellow	6ES7193-6LA10-0AGO
160 reference ID labels	6ES7193-6LF30-0AW0
5 BU cover, 15 mm	6ES7133-6CV15-1AM0
5 BU cover, 20 mm	6ES7133-6CV20-1AM0
5 shield contacts (terminal and shield support), max. 2 conductors	6ES7193-6SC00-1AM0
SIMATIC Memory Card (4, 12, 24, 256 MB, 2 GB)	6ES7954-8L...



## Motor starter



	Article No.
Direct starter (0.3 – 12 A)	3RK1308-0A+00-0CP0**
Reversing starter (0.3 – 12 A)	3RK1308-0B+00-0CP0**
Direct starter Failsafe (0.3 – 12 A)	3RK1308-0C+00-0CP0**
Reversing starter Failsafe (0.3 – 12 A)	3RK1308-0D+00-0CP0**
Base Unit type motor starter (MS)	3RK1908-0AP00-...
3DI/LC module	3RK1908-1AA00-0BP0
BU cover, 30 mm	3RK1908-1CA00-0BP0
Cover for infeed bus	3RK1908-1DA00-2BP0
Additional mechanical bracket	3RK1908-1EA00-1BP0
Ancillary fans	3RW4928-8VB00

\* »#«: if 0 = PU 1, if 2 = PU 10

\*\* »+« replace in MLFB for required version: B for 0.3 – 1.0 A; C for 0.9 – 3.0 A; D for 2.8 – 9.0 A; E for 4.0 – 12.0 A

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹

تلفن: ۰۲۱-۴۱۹۰۷ ۰۲۱-۸۸۶۴۱۴۹۳-۵





## Order overview SITOP – regulated power supplies, expansion modules, and DC UPS

	Product	Rated input voltage (range)	Dimensions in mm (W x H x D)	Article number <sup>1)</sup>	Short description	
Power supplies in special design, for special uses						
	12 V DC/3 A, PSU100D	100 ... 240 V AC (85 ... 264 V AC)	97 x 98 x 38	6EP1321-1LD00	<ul style="list-style-type: none"> <li>Low-cost power supply for wall mounting in various installation positions</li> <li>Rugged aluminum enclosure</li> <li>Wide-range input</li> <li>Temperature range from –10 to +70 °C</li> </ul>	
	12 V DC/8.3 A, PSU100D		97 x 158 x 38	6EP1322-1LD00		
	24 V DC/2.1 A, PSU100D		97 x 128 x 38	6EP1331-1LD00		
	24 V DC/3.1 A, PSU100D		97 x 128 x 38	6EP1332-1LD00		
	24 V DC/4.1 A, PSU100D		97 x 158 x 38	6EP1332-1LD10		
	24 V DC/6.2 A, PSU100D		97 x 178 x 38	6EP1333-1LD00		
	24 V DC/12.5 A, PSU100D		105 x 199 x 41	6EP1334-1LD00		
	24 V DC/5 A, PSU100P	120 ... 230 V AC (85 ... 132/170 ... 264 V AC)	120 x 181 x 60	6EP1333-7CA00	<ul style="list-style-type: none"> <li>Rugged metal enclosure in IP67 degree of protection for distributed use</li> <li>Signaling contact and LED for operation status</li> </ul>	
	24 V DC/8 A, PSU100P			6EP1334-7CA00		
	24 V DC/8 A, ET200pro PS	400 ... 480 V 3 AC (340 ... 550 V 3 AC)	310 x 135 x 90	6ES7148-4PC00-0HA0		
	48 V DC/5 A, PSU100E	120/230 V AC (85 ... 132/170 ... 264 V AC)	42 x 125 x 125	6EP3344-0SB00-0AY0	<ul style="list-style-type: none"> <li>Single-phase 48 V DC power supply in a slim aluminum enclosure</li> </ul>	
	24 V DC/5 A, PSU300E	400 ... 500 V 3 AC (320 ... 550 V 3 AC)	42 x 125 x 125	6EP1433-0AA00	<ul style="list-style-type: none"> <li>3-phase 24 V DC power supply in a slim aluminium enclosure</li> </ul>	
	12 V DC/20 A, PSU3800	400 ... 500 V 3 AC (320 ... 575 V 3 AC)	70 x 125 x 125	6EP3424-8UB00-0AY0	<ul style="list-style-type: none"> <li>Optimized power supply for battery charging, with selectable output characteristic, functional expansion possible using expansion modules</li> </ul>	
	24 V DC/17 A, PSU3800		70 x 125 x 125	6EP3436-8UB00-0AY0		
24 V DC/30 ... 40 A, PSU3800	135 x 145 x 150		6EP3437-8UB00-0AY0			
3 ... 52 V DC/10 A, PSU3600 flexi	120 ... 230 V AC (85 ... 264 V AC, 88 ... 250 V DC)	42 x 125 x 135	6EP3343-0SA00-0AY0	<ul style="list-style-type: none"> <li>Compact multi-function power supply unit with flexible setting of the output voltage, also dynamically from 0 ... 52 V DC via signal input</li> </ul>		
15 V/3.5 A 2 x DC, PSU3600 dual	120 ... 230 V DC (85 ... 264 V AC, 88 ... 250 V DC)	42 x 125 x 125	6EP3323-0SA00-0BY0	<ul style="list-style-type: none"> <li>Two outputs, each can be set between 12 and 28 V DC, e.g., for +/- 15 V DC or 2 voltage levels, e.g., 12 V DC and 24 V DC</li> <li>Each output with limited power according to NEC Class 2</li> </ul>		
Expansion modules to increase system availability						
	Redundancy module, RED1200	12 V DC, 24 V, 48 V (10 ... 58 V DC)	35 x 135 x 125	6EP4346-7RB00-0AX0	<ul style="list-style-type: none"> <li>Redundancy modules RED1200/PSE202U for decoupling SITOP power supply units of the same type: <ul style="list-style-type: none"> <li>24 V/10 A: 2 power supply units up to 5 A or 1 up to 10 A</li> <li>24 V/NEC Class 2: 2 up to 40 A with limiting of output to 100 VA</li> <li>20 A: 2 up to 10 A or 1 up to 20 A</li> <li>40 A: 2 up to 20 A or 1 up to 40 A</li> </ul> </li> <li>Redundancy modules RED1200 additionally provide: <ul style="list-style-type: none"> <li>Decoupling of 12 V to 48 V DC power supply units</li> <li>Series connection to increase the voltage up to 96 V DC</li> <li>Parallel connection of more than two power supply units to increase the power</li> <li>In PSU6200 design, push-in terminals</li> </ul> </li> </ul>	
	• 40 A			45 x 135 x 125		6EP4347-7RB00-0AX0
Redundancy module PSE202U	24 V DC (19 ... 29 V DC)	30 x 80 x 100	6EP1964-2BA00			
• 24 V DC/NEC Class 2			6EP1962-2BA00			
• 24 V DC/40 A			6EP1961-3BA21			
Buffer module PSE201U	24 V DC (24 ... 28.8 V DC)	70 x 125 x 125	6EP1961-3BA01	<ul style="list-style-type: none"> <li>Buffering of short-term network failures into the seconds range, buffer time depending on load, e.g.: PSE201U: 200 ms/40 A, 1.6 s/5 A, max. 10 s, BUF1200: 300 ms/40 A, 2.4 s/5 A, the buffer time can be increased by connecting buffer modules in parallel</li> </ul>		
200 ms/40 A for SITOP PSU8200, PSU6200, and SITOP smart						
Buffer module BUF1200	24 V DC (20 ... 30 V DC)	70 x 135 x 155	6EP4231-7HB00-0AX0			
	Selectivity module SEL1200	24 V DC (20.4 ... 30 V DC)	45 x 135 x 125	6EP4437-7FB00-3CX0		<ul style="list-style-type: none"> <li>Selectivity modules for electronic protection of 24 V DC feeders and quick fault localization</li> <li>SEL1200: switch-off characteristic for standard protection</li> <li>SEL1400/PSE200U: current-limiting for increased requirements regarding protection</li> <li>Manual activation and deactivation of feeders via reset button</li> <li>Remote reset for temporary faults</li> <li>Sequential connection reduces total inrush current</li> <li>With group signaling contact or single-channel signaling for channel-specific evaluation via SIMATIC S7 function block</li> <li>SEL1200/1400 with diagnostics of voltage, current, set threshold value, reason for shutdown, etc. per output</li> <li>PSE200U: voltage measuring point for current per output (1 V ≠ 1 A)</li> </ul>
	• 4 x 2 ... 10 A			6EP4437-7FB00-3DX0		
• 8 x 1 ... 5 A	6EP4437-7FB00-3DX0					
• 8 x 2 ... 10 A	6EP4438-7FB00-3DX0					
Selectivity module SEL1400	24 V DC (20.4 ... 30 V DC)	45 x 135 x 125	6EP4437-7EB00-3CX0			
• 4 x 2 ... 10 A			6EP4437-7EB00-3DX0			
• 8 x 1 ... 5 A			6EP4437-7EB00-3DX0			
• 8 x 2 ... 10 A	6EP4438-7EB00-3DX0					
	Selectivity module PSE200U ... with common signaling contact	24 V DC (22 ... 30 V DC)	72 x 80 x 72	6EP1961-2BA11		
	• 4 x 0.5 ... 3 A	24 V DC (22 ... 30 V DC)	72 x 80 x 72	6EP1961-2BA51		
• 4 x 3 ... 10 A	24 V DC (22 ... 30 V DC)	72 x 80 x 72	6EP1961-2BA21			
... with single-channel signaling	24 V DC (22 ... 30 V DC)	72 x 80 x 72	6EP1961-2BA31			
• 4 x 0.5 ... 3 A NEC Class 2	24 V DC (22 ... 30 V DC)	72 x 80 x 72	6EP1961-2BA61			
• 4 x 3 ... 10 A	24 V DC (22 ... 30 V DC)	72 x 80 x 72	6EP1961-2BA41			
Diagnostics module SITOP select	24 V DC (22 ... 30 V DC)	72 x 90 x 90	6EP1961-2BA00			
Maintenance-free SITOP DC UPS with capacitors – Uninterruptible power supply up to minutes						
	24 V DC/15 A, 2.5 kW, UPS500S	24 V DC (22 ... 29 V DC), SITOP 24 V	120 x 125 x 125	6EP1933-2EC41	<ul style="list-style-type: none"> <li>DC UPS modules with integral energy buffer, digital inputs and outputs, and USB interface</li> <li>Totally maintenance-free DC UPS with double-layer capacitors</li> <li>SITOP UPS500S can be combined with up to three expansion modules UPS501S</li> <li>Capacitors eliminate battery replacement</li> <li>Long service life even at high ambient temperature</li> <li>No ventilation of the mounting location necessary</li> <li>SITOP Manager (free download) supports further processing and response of the PC</li> </ul>	
	24 V DC/15 A, 5 kW, UPS500S		120 x 125 x 125	6EP1933-2EC51		
	24 V DC/15 A, 5 kW, UPS501S	24 V DC, UPS500S	70 x 125 x 125	6EP1935-5PG01		
DC UPS with battery modules – Uninterruptible power supply up to hours, optionally with Ethernet/PROFINET connection and TIA integration						
	SITOP UPS1600, 24 V DC/10 A	24 V DC (22 ... 29 V DC), input voltage via 24 V DC SITOP power supply unit	50 x 125 x 125	6EP4134-3AB00-0AY0		<ul style="list-style-type: none"> <li>DC UPS module with digital inputs/outputs, with USB or Ethernet/PROFINET interfaces as option</li> <li>New maintenance-free battery modules BAT1600 with automatic detection by UPS1600</li> <li>BAT1600 2.5 and 7.5 Ah in Lithium technology (LiFePo4) with a long durability at high temperature</li> <li>Intelligent battery management for monitoring operational readiness, battery supply line, battery charge status, and durability, selection of optimum, temperature-driven charging characteristic</li> <li>High overload capacity and high charging current</li> <li>Minimum standby consumption</li> <li>SITOP Manager (free download) supports configuration and monitoring in PC-based systems</li> <li>Complete integration into TIA: user-friendly engineering in the TIA Portal, function blocks for S7 user programs and WinCC faceplates (free download)</li> <li>Integrated OPC UA Server</li> </ul>
	• with USB interface		50 x 125 x 125	6EP4134-3AB00-1AY0		
	• with Ethernet/PROFINET interface (2 ports)		50 x 125 x 125	6EP4134-3AB00-2AY0		
	SITOP UPS1600, 24 V DC/20 A		50 x 125 x 125	6EP4136-3AB00-0AY0		
	• with USB interface		50 x 125 x 125	6EP4136-3AB00-1AY0		
	• with Ethernet/PROFINET interface (2 ports)		50 x 125 x 125	6EP4136-3AB00-2AY0		
	SITOP UPS1600, 24 V DC/40 A		70 x 125 x 150	6EP4137-3AB00-0AY0		
	• with USB interface		70 x 125 x 150	6EP4137-3AB00-1AY0		
	• with Ethernet/PROFINET interface (2 ports)		70 x 125 x 150	6EP4137-3AB00-2AY0		
	SITOP BAT1600		End-of-charge voltage, automatically set by UPS1600	89 x 156 x 129	6EP4132-0JA00-0AY0	
• 24 V DC/2.5 Ah LiFePo4 <b>NEW</b>	89 x 156 x 169	6EP4133-0GA00-0AY0				
• 24 V DC/3.2 Ah Pb <b>NEW</b>	238 x 156 x 129	6EP4134-0JA00-0AY0				
• 24 V DC/7.5 Ah LiFePo4 <b>NEW</b>	238 x 156 x 125	6EP4135-0GE00-0AY0				
• 24 V DC/12 Ah Pb <b>NEW</b>	394 x 212 x 165	6EP4137-0GE00-0AY0				
• 24 V DC/38 Ah Pb <b>NEW</b>						
<sup>1)</sup> Current ordering data plus terms and conditions of sale and delivery can be found in the Catalog KT10.1 and in the Internet at <a href="http://siemens.com/industrymall">siemens.com/industrymall</a>						

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹

تلفن: ۰۲۱-۴۱۹۰۷ ۰۲۱-۸۸۶۴۱۴۹۳-۵





# SIEMENS



# SIMATIC HMI

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹  
تلفن: ۰۲۱-۴۱۹۰۷ ۰۲۱-۸۸۶۴۱۴۹۳-۵



## Technology overview

		SIMATIC Basic HMI: inexpensive realization of simple HMI tasks							
		SIMATIC HMI Key Panels			SIMATIC HMI Basic Panels				
					2 <sup>nd</sup> Generation	2 <sup>nd</sup> Generation	2 <sup>nd</sup> Generation	2 <sup>nd</sup> Generation	
		KP8 PN	KP8F PN	KP32F PN	KTP400 Basic	KTP700 Basic DP KTP700 Basic	KTP900 Basic	KTP1200 Basic DP KTP1200 Basic	KP300 Basic mono PN KP400 Basic color PN
<b>Devices for special requirements</b>									
<b>Outdoor – for the outdoor area</b>	Extremely robust HMI panels with IP66 for the outdoor area and designed for numerous industries.								
<b>PRO – for all-round protection</b>	All-round IP65 protected devices / enclosure type 4X/12 for flexible mounting on the support arm or stand.								
<b>INOX – for hygienic production</b>	Certified stainless steel devices (IP66K) for safety and cleanliness in the hygienic area.								
<b>SIPLUS – the standard xtremextreme conditions</b>	Specially hardened versions for increased operational reliability under extreme conditions.								
<b>EX – for genuinely hard cases</b>	HMI devices that can be used directly in hazardous areas (zone 2/22). <sup>8)</sup>								
<b>Type of operation</b>		8	8	32	4" Touch + Key	7" Touch + Key	9" Touch + Key	12" Touch + Key	3,6" Key 4" Key
<b>Function keys (programmable)</b>		8	8	32	Widescreen TFT, 65k colors, LED backlighting				
<b>Output type</b>					Size (in inches)				
<b>LED colour modes</b>	5 (green, red, yellow, blue, white)				4,3"	7"	9"	12,1"	3,6" 4,3"
<b>Typical service life</b>					Resolution (W x H in pixels)				
<b>Short-stroke keys (in number of switching cycles)</b>	1,500,000				480 x 272	800 x 480	800 x 480	1,280 x 800	240 x 80 480 x 272
<b>Light-emitting diodes (ON period in %)</b>	100 %				MTBF <sup>5)</sup> backlighting (in h)				
<b>Interfaces</b>					20,000	20,000	20,000	20,000	50,000
<b>Digital inputs / outputs<sup>1)</sup></b>	8	8	16	<b>Operator controls</b>	Front dimensions (in mm)				
<b>Fail-safe inputs SIL 2 / SIL 3</b>	- / -	1/2	2/4	Touch screen and tactile keys	141 x 116	214 x 158	267 x 182	330 x 245	165 x 97 150 x 186
<b>PROFINET with integrated switch</b>	2	2	2	Function keys (programmable) / system keys	<b>Operator controls</b>				
<b>Functionality</b>				4 / -	8 / -	8 / -	10 / -	10 / -	Tactile keys
<b>Push button and lamp test</b>	•				<b>Usable memory</b>				
<b>Degree of protection</b>					User memory				
<b>Front / rear</b>	IP65 / IP20				10 MB	10 MB	10 MB	10 MB	1 MB
<b>ANSCHLUSS ZUR STEUERUNG</b>					Memory for options / recipes <sup>4)</sup>				
<b>SIMATIC S7, WinAC</b>	S7-1200 S7-1500 S7-300 S7-400	S7-1200 <sup>2)</sup> S7-1500 <sup>2)</sup> S7-300 (F) S7-400 (F)			- / 256 KB	- / 256 KB	- / 256 KB	- / 256 KB	- / 40 KB
<b>SIMATIC S5</b>	•				<b>Interfaces</b>				
<b>SINUMERIK</b>	•				Serial / MPI / PROFIBUS DP / PROFINET (Ethernet)				
<b>SIMOTION</b>	•				- / - / - / •	• <sup>3)</sup> / • / • / - - / - / - / •	- / - / - / •	• <sup>3)</sup> / • / • / - - / - / - / •	- / - / - / •
<b>Engineering software</b>					USB-Host / USB-Device				
<b>Configuration</b>	STEP 7 V5.5 or STEP 7 Basic V11 and higher or third-party systems (GSD, GSD-ML)				1 / -	1 / -	1 / -	1 / -	-
<b>Ambient conditions</b>					Slot for CF / Multimedia / SD				
<b>Mounting position</b>	Portrait or landscape format				- / - / -	- / - / -	- / - / -	- / - / -	- / - / -
<b>Max. permissible angle of inclination without forced ventilation (in °)</b>	+ / - 30				<b>Functionality (when configured with WinCC TIA Portal)</b>				
<b>Max. relative humidity (in %)</b>	< 90				Signaling system (number of messages / message classes)				
<b>Temperature</b>					1,000 / 32	1,000 / 32	1,000 / 32	1,000 / 32	200 / 32
<b>Operation (vertical installation) in °C</b>	0 ... +55	0 ... +55	0 ... +55		Prozess pictures				
<b>Operation (max. angle of inclination) in °C</b>	0 ... +45	0 ... +45	0 ... +45		250	250	250	250	50
<b>Dimensions</b>					Tags				
<b>Enclosure front (W x H in mm)</b>	98 x 155	98 x 155	295 x 155		800	800	800	800	250 500
<b>Installation cutout / device depth (W x H / D in mm)</b>	68 x 129 / 49	68 x 129 / 49	275 x 135 / 39		Vector graphics				
<b>Article No.*)</b>	6AV3688-3AY36-0AX0	6AV3688-3AF37-0AX0	6AV3688-3EH47-0AX0		• / f(t)	• / f(t)	• / f(t)	• / f(t)	• / f(t)
					Bar charts / trend diagrams				
					-	-	-	-	-
					Faceplates				
					-	-	-	-	-
					Recipes				
					50	50	50	50	5
					Archiving / Visual Basic scripts				
					• / -	• / -	• / -	• / -	- / -
					PG functions				
					-	-	-	-	-
					<b>Connection to PLC</b>				
					SIMATIC S7 / SIMATIC WinAC				
					• / •	• / •	• / •	• / •	• / •
					SINUMERIK / SIMOTION				
					• <sup>6)</sup> / •	• <sup>6)</sup> / •	• <sup>6)</sup> / •	• <sup>6)</sup> / •	- / -
					Allen Bradley / Mitsubishi				
					• / •	• / •	• / •	• / •	• / •
					Modicon / Omron				
					• / -	• / • • / -	• / -	• / • • / -	• / -
					<b>Engineering software</b>				
					Configuration				
					WinCC Basic V13 or higher	WinCC Basic V13 or higher	WinCC Basic V13 or higher	WinCC Basic V13 or higher	WinCC Basic V11 or higher
					<b>Options, application</b>				
					Sm@rtServer / Audit / Logon (V15.1 or higher)				
					• (V14 or higher) / - / -	• (V14 or higher) / - / -	• (V14 or higher) / - / -	• (V14 or higher) / - / -	- / - / -
					OPC-Server / HTML-Browser				
					- / •	- / •	- / •	- / •	- / -
					<b>Article No.*)</b>				
					6AV2123-2DB03-0AX0	6AV2123-2GA03-0AX0 6AV2123-2GB03-0AX0	6AV2123-2JB03-0AX0	6AV2123-2MA03-0AX0 6AV2123-2MB03-0AX0	6AV6647-0AH11-3AX0 6AV6647-0AJ11-3AX0

<sup>1)</sup> Freely configurable <sup>2)</sup> F-Safety, if supported by CPUs <sup>3)</sup> RS232 with adapter <sup>4)</sup> Integrated Flash, expandable via memory card

<sup>7)</sup> You can find current ordering data and terms and conditions of sales and delivery in the Catalog ST 80/ST PC and on the Internet at [www.siemens.com/industrymall](http://www.siemens.com/industrymall)

Technology overview

**SIMATIC Advanced HMI, Panel-based: implement complex HMI tasks with a high level of user convenience**

	SIMATIC HMI Comfort Panels							SIMATIC HMI Mobile Panels			
	KTP400 Comfort KP400 Comfort	TP700 Comfort KP700 Comfort	TP900 Comfort KP900 Comfort	TP1200 Comfort KP1200 Comfort	TP1500 Comfort <sup>7)</sup> KP1500 Comfort	TP1900 Comfort	TP2200 Comfort	2 <sup>nd</sup> Generation	2 <sup>nd</sup> Generation	2 <sup>nd</sup> Generation	
Type of operation	4" Touch + Key 4" Key	7" Touch 7" Key	9" Touch 9" Key	12" Touch 12" Key	15" Touch 15" Key		19" Touch	22" Touch	KTP400F Mobile	KTP700 Mobile KTP700F Mobile	KTP900 Mobile KTP900F Mobile
Display	Widescreen TFT, 16 million colors, LED backlighting							Widescreen TFT, 16 million colors, LED backlighting			
Size (in inches)	4,3"	7"	9"	12,1"	15,4"		18,5"	21,5"	4,3"	7"	9"
Resolution (W x H in pixels)	480 x 272	800 x 480	800 x 480	1,280 x 800	1,280 x 800		1,366 x 768	1,920 x 1,080	480 x 272	800 x 480	800 x 480
MTBF <sup>5)</sup> backlighting (in h)	80,000	80,000	80,000	80,000	80,000		50,000	30,000	50,000	50,000	50,000
Front dimensions (in mm)	140 x 116 152 x 188	214 x 158 308 x 204	274 x 190 362 x 230	330 x 241 454 x 289	415 x 310 483 x 310		483 x 337	560 x 380	194 x 166	248 x 172 248 x 195	307 x 201 307 x 224
Operator controls	Touch screen or tactile keys	Touch screen or tactile keys	Touch screen or tactile keys	Touch screen or tactile keys	Touch screen or tactile keys		Touch screen	Touch screen	Touch screen and tactile keys	Touch screen and tactile keys	Touch screen and tactile keys
Function keys (programmable) / system keys	4 (with LED) / - 8 (with LED) / •	- / - 24 (with LED) / •	- / - 26 (with LED) / •	- / - 34 (with LED) / •	- / - 36 (with LED) / •		- / -	- / -	4 (with LED) / -	8 (with LED) / -	10 (with LED) / -
Usable memory											
User memory	4 MB	12 MB	12 MB	12 MB	24 MB		24 MB	24 MB	4 MB	12 MB	12 MB
Memory for options / recipes <sup>4)</sup>	4 MB / 512 KB	12 MB / 2 MB	12 MB / 2 MB	12 MB / 2 MB	24 MB / 4 MB		24 MB / 4 MB	24 MB / 4 MB	4 MB / 512 KB	12 MB / 2 MB	12 MB / 2 MB
Alarm buffer	•	•	•	•	•		•	•	•	•	•
Interfaces											
Serial / MPI / PROFIBUS DP / PROFINET (Ethernet)	• <sup>3)</sup> / • / • / 1	• <sup>3)</sup> / • / • / 2	• <sup>3)</sup> / • / • / 2	• <sup>3)</sup> / • / • / 2	• <sup>3)</sup> / • / • / 3		• <sup>3)</sup> / • / • / 3	• <sup>3)</sup> / • / • / 3	- / - / - / 1	- / - / - / 1	- / - / - / 1
USB-Host / USB-Device	1 / 1	2 / 1	2 / 1	2 / 1	2 / 1		2 / 1	2 / 1	1 / -	1 / -	1 / -
Slot for CF / Multimedia / SD	- / • / •	- / • / •	- / • / •	- / • / •	- / • / •		- / • / •	- / • / •	- / • / •	- / • / •	- / • / •
Functionality (when configured with WinCC TIA Portal)											
Signaling system (number of messages / message classes)	2,000 / 32	4,000 / 32	4,000 / 32	4,000 / 32	6,000 / 32		6,000 / 32	6,000 / 32	2,000 / 32	4,000 / 32	4,000 / 32
Process pictures	500	500	500	500	750		750	750	500	500	500
Tags	1,024	2,048	2,048	2,048	4,096		4,096	4,096	1,024	2,048	2,048
Vector graphics	•	•	•	•	•		•	•	•	•	•
Bar charts / trend diagrams	• / f(t), f(x)	• / f(t), f(x)	• / f(t), f(x)	• / f(t), f(x)	• / f(t), f(x)		• / f(t), f(x)	• / f(t), f(x)	• / f(t), f(x)	• / f(t), f(x)	• / f(t), f(x)
Faceplates	•	•	•	•	•		•	•	•	•	•
Recipes	100	300	300	300	500		500	500	100	300	300
Archiving / Visual Basic scripts	• / •	• / •	• / •	• / •	• / •		• / •	• / •	• / •	• / •	• / •
PG functions	STATUS / CONTROL, diagnostics viewer							STATUS / CONTROL, diagnostics viewer			
Connection to PLC											
SIMATIC S7 / SIMATIC WinAC	• / •	• / •	• / •	• / •	• / •		• / •	• / •	• / •	• / •	• / •
SINUMERIK / SIMOTION	• / •	• / •	• / •	• / •	• / •		• / •	• / •	• / •	• / •	• / •
Allen Bradley / Mitsubishi	• / •	• / •	• / •	• / •	• / •		• / •	• / •	• / •	• / •	• / •
Modicon / Omron	• / •	• / •	• / •	• / •	• / •		• / •	• / •	• / •	• / •	• / •
Engineering software											
Configuration	WinCC Comfort V11 or higher	WinCC Comfort V11 or higher	WinCC Comfort V11 or higher	WinCC Comfort V11 or higher	WinCC Comfort V14 SP1 or higher		WinCC Comfort V14 SP1 or higher	WinCC Comfort V14 SP1 or higher	WinCC Comfort V13 SP1 or higher	WinCC Comfort V13 SP1 or higher	WinCC Comfort V13 SP1 or higher
Options, application											
Sm@rtServer / Audit / Logon (V15.1 or higher)	• / • / •	• / • / •	• / • / •	• / • / •	• / • / •		• / • / •	• / • / •	• / • / •	• / • / •	• / • / •
OPC-Server / HTML-Browser	• / •	• / •	• / •	• / •	• / •		• / •	• / •	• / •	• / •	• / •
Article No. *)	6AV2124-2DC01-0AX0 6AV2124-1DC01-0AX0	6AV2124-0GC01-0AX0 6AV2124-1GC01-0AX0	6AV2124-0JC01-0AX0 6AV2124-1JC01-0AX0	6AV2124-0MC01-0AX0 6AV2124-1MC01-0AX0	6AV2124-0QC02-0AX1 6AV2124-1QC02-0AX1		6AV2124-0UC02-0AX1	6AV2124-0XC02-0AX1	6AV2125-2DB23-0AX0	6AV2125-2GB03-0AX0 6AV2125-2GB23-0AX0	6AV2125-2JB03-0AX0 6AV2125-2JB23-0AX0

<sup>5)</sup> Reduction of brightness by 50%, can be extended by dimming and PROFenergy.

<sup>6)</sup> KNo access to NCK Data,

<sup>7)</sup> Memory, scope of functions and quantity structures as for TP1200,

<sup>8)</sup> Panel PC EX and ThinClient EX for Zone 1/21

Technology overview

SIMATIC Advanced HMI, PC-based: efficient realization of even the most demanding and complex HMI tasks							
SIMATIC Panel-PCs							
SIMATIC IPC277E			SIMATIC IPC277E		SIMATIC IPC377E		
General features	Panel PC, 7" Touch	Panel PC, 9" Touch	Panel PC, 12" Touch or Multitouch	Panel PC, 15" Touch or Multitouch	Panel PC, 19" Touch or Multitouch	Panel PC, 12", 15" or 19" Touch	
Resolution in pixels (widescreen)	(800 x 480)	(800 x 480)	(1,280 x 800)	T (1,280 x 800), MT (1,366 x 768)	(1,366 x 768)	12" (1,280 x 800); 15" and 19" (1,366 x 768)	
Processor	Intel Celeron N2807 (2C/2T, 1,58 (2.16) GHz, 1 MB cache, VT-x); Intel Celeron N2930 (4C/4T, 1,83 (2.16) GHz, 2 MB cache, VT-x)			Intel Celeron N2807 (2C/2T, 1,58 (2.16) GHz, 1 MB cache, VT-x); Intel Celeron N2930 (4C/4T, 1,83 (2.16) GHz, 2 MB cache, VT-x)		Intel Celeron Quad Core N3160 (4C/4T, 1.6 GHz, up to 2.24 GHz, 2 MB cache)	
Main memory	2 GB, 4 GB or 8 GB; 512 KByte NVRAM optional			2 GB, 4 GB or 8 GB; 512 KByte NVRAM optional		4 GB DDR3L-1600 (up to 8 GB supported) 4 GB, 8 GB, DDR3L - 1600	
Free expansion slots	-			-		1 x mPCIe (half-size); mounting location for 1 x mSATA (full-size)	
Operating systems (preinstalled and activated)	Windows Embedded Standard 7 (E/P), 32 Bit/64 Bit; Windows 7 Ultimate, MUI <sup>1)</sup> , 32 Bit/64 Bit; Windows 10 IoT Enterprise, 64 Bit, MUI			Windows Embedded Standard 7 (E/P), 32 Bit/64 Bit; Windows 7 Ultimate, MUI <sup>1)</sup> , 32 Bit/64 Bit; Windows 10 IoT Enterprise, 64 Bit, MUI		Windows 7 Ultimate (64 Bit) MUI <sup>1)</sup> Windows 10 Enterprise LTSB 2016 (64 BIT) MUI	
Packages/bundles	Packages with WinCC RT Advanced, WinCC V7 and WinAC RTX (F) / Bundles/Windows 10 Enterprise			Packages with WinCC RT Advanced, WinCC V7 and WinAC RTX (F) / Bundles/Windows 10 Enterprise		Packages with WinCC V7; WinCC RT Advanced	
Power supply / temporary voltage interruption	DC 24 V; 20.4 - 28.8 V; isolated / max. 10 ms (according to NAMUR); On/Off switch			DC 24 V; 20.4 - 28.8 V; isolated / max. 10 ms (according to NAMUR); On/Off switch		DC 24 V, 20.4 10 28.8 V / max. 10 ms	
MTBF backlighting	up to 80,000 h <sup>2)</sup> ; dimmable from 0 to 100%				up to 50,000 h <sup>2)</sup>		up to 50,000 h; dimmable from 0 to 100%
<b>Drives</b>							
Mass storage	CFast up to 16 GB (accessible from outside); SSD 240 / 480 GB; HDD 320 GB (IPC227E only)			CFast up to 16 GB (accessible from outside); SSD 240 / 480 GB; HDD 320 GB (IPC227E only)		HDD 500 GB	
Optical drives	-			-		-	
<b>Interfaces</b>							
Fieldbus	PROFINET RT over Ethernet			PROFINET RT over Ethernet		-	
Ethernet	2 x 10/100/1000 Mbps (RJ45); teaming			2 x 10/100/1000 Mbps (RJ45); teaming		2 x 10 / 100 / 1000 Mbps (RJ45); teaming capability	
USB	Rear: 1 x USB 3.0, 2 x USB 2.0		Rear: 1 x USB 3.0, 3 x USB 2.0	Rear: 1 x USB 3.0, 3 x USB 2.0; front: USB 2.0 (with single touch)		2 x USB 3.0; 2 x USB 2.0	
Serial / parallel	1 x RS232 / RS485 / RS422 can be selected in BIOS			1 x RS232 / RS485 / RS422 can be selected in BIOS		2 x RS232; 2 x RS232/485/422 selectable in BIOS	
Graphics interface	1 x DisplayPort			1 x DisplayPort		1 x DisplayPort, 1 x VGA	
<b>Monitoring / diagnostics functions</b>							
Basic functionality	Temperature; watchdog; HDD; CFast; SSD; CMOS battery (alarm locally by means of SIMATIC IPC DiagBase software)			Temperature; watchdog; HDD; CFast; SSD; CMOS battery (alarm locally by means of SIMATIC IPC DiagBase software)		Front-LEDs for POWER and HDD	
Advanced functions	System monitoring: Operating hours counter for preventive maintenance, maintenance mode, networking (LAN), SNMP and OPC interface (optionally by means of SIMATIC IPC DiagMonitor software)			System monitoring: Operating hours counter for preventive maintenance, maintenance mode, networking (LAN), SNMP and OPC interface (optionally by means of SIMATIC IPC DiagMonitor software)		-	
Remote access	-			-		-	
<b>Ambient conditions</b>							
Degree of protection / EMC	IP65 (front) / EN 55022A; EN 61000-6-4; EN 61000-6-2; FCC A			IP65 (front) / EN 55022A; EN 61000-6-4; EN 61000-6-2; FCC A		IP65 front, IP40 rear / protection class I acc. to IEC 61140	
Vibration during operation <sup>5)</sup>	10 - 58 Hz: 0,0375 mm; 58 - 200 Hz: 9,8 m/s <sup>2</sup> (approx. 1 g) when operated with CFast/SSD			10 - 58 Hz: 0,0375 mm; 58 - 200 Hz: 9,8 m/s <sup>2</sup> (approx. 1 g) when operated with CFast/SSD		0.5 g, for wall mounting with HDD	
Shock load during operation <sup>6)</sup>	50 m/s <sup>2</sup> ; 30 ms (approx. 5 g) when operated with CFast/SSD			50 m/s <sup>2</sup> ; 30 ms (approx. 5 g) when operated with CFast/SSD		1 g, with HDD	
Relative humidity <sup>8)</sup>	5 bis 85% at 25 °C (no condensation)			5 bis 85% at 25 °C (no condensation)		5 - 85% at 30 °C (no condensation)	
Ambient temperature in continuous operation at full processor performance	0 - 50 °C			0 - 45 °C		0 - 40 °C (with HDD)	
Certification / EU directives	CE; cULus (508); for Singletouch 7"/9"/12" <sup>2)</sup> for Multitouch 12"/15"/19" available soon + WEEE / RoHS, C-Tick; ST: shipbuilding approvals			CE; cULus (508); for Singletouch 7"/9"/12" <sup>2)</sup> for Multitouch 12"/15"/19" available soon + WEEE / RoHS, C-Tick; ST: shipbuilding approvals		CE; cULus (UL 60950); KCC; EAC; FCC; BSMI (available soon)	
<b>Dimensions</b>							
Operator panel (W x H) single-touch	214 x 158 mm	274 x 190 mm	330 x 241 mm	415 x 310 mm	483 x 337 mm	12" (320 x 226 mm) / 15" (416,5 x 298 mm) / 19" (483 x 337 mm)	
Operator panel (W x H) multitouch			315 x 227 mm	398 x 257 mm	464 x 294 mm		
Installation dimensions (W x H) single-touch	197 x 141 x 71 mm	251 x 166 x 71 mm	310 x 221 x 66 mm	396 x 291 x 76 mm	465 x 319 x 76 mm	12" (302 x 208 x 89 mm) / 15" (388 x 240 x 89 mm) / 19" (455 x 279 x 89 mm)	
Installation dimensions (W x H) multitouch			299 x 211 x 76 mm	382 x 241 x 76 mm	448 x 278 x 76 mm		
Article No.*)	6AV7882-0A..0...0	6AV7882-0B..0...0	6AV7882-0C/6AV7882-0H	6AV7882-0D/6AV7882-0F	6AV7882-0E/6AV7882-0G	6AV7230-0.A20..BA0	

<sup>1)</sup> MUI (multi-language user interface); 5 languages (ENG, GER, FR, SP, IT)

<sup>2)</sup> GL, LRS, BV, DNV, ABS, Class NK

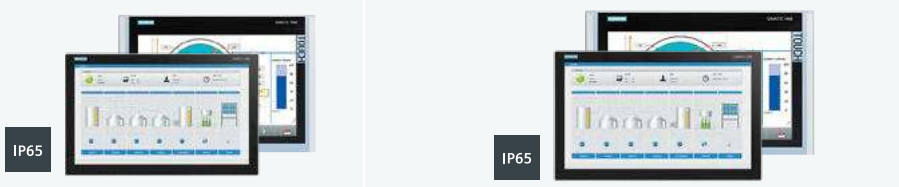

<sup>3)</sup> Optionally with daylight display

<sup>4)</sup> Panel PC only

<sup>5)</sup> Tested according to: IEC 60068-2-6

<sup>6)</sup> Tested according to: IEC 60068-2-27, IEC 60068-2-2

Technology overview

SIMATIC Advanced HMI, PC-based: efficient realization of even the most demanding and complex HMI tasks				
SIMATIC Panel-PCs				
SIMATIC IPC477E			SIMATIC IPC677D	
				
<b>General features</b>	Panel PC, 15" Touch or Multitouch	Panel PC, 19" Touch or Multitouch	Panel PC, 22" Touch or Multitouch and 24" Multitouch	Panel PC, 15", 19" or 22" Touch or Multitouch
Resolution in pixels (widescreen)	T (1,280 x 800), MT (1,366 x 768)	(1,366 x 768)	(1,920 x 1,080)	15" T (1,280 x 800); 15" MT (1,366 x 768); 19" (1,366 x 768); 22" (1,920 x 1,080)
Processor	Intel Celeron G3902E (2C / 2T, 1.6 GHz, 2 MB cache); Intel Core i3 6102E (2C / 4T, 1.9 (2.7) GHz, 6 MB cache); Intel Xeon Processor E3-1505L v5 (4C / 8T, 2.0 (2.8) GHz, 8 MB cache)		Intel Celeron G3902E (2C / 2T, 1.6 GHz, 2 MB cache); Intel Core i3 6102E (2C / 4T, 1.9 (2.7) GHz, 6 MB cache); Intel Xeon Processor E3-1505L v5 (4C / 8T, 2.0 (2.8) GHz, 8 MB cache)	Intel Xeon E3-1268L v3 (4C / 8T; 2,3 (3,3) GHz; 8 MB Cache; VT-d; AMT 9.0); Core i3-4330TE (2C / 4T; 2,4 GHz; 4 MB Cache; VT-x); Celeron G1820TE (2C / 2T; 2,2 GHz; 2 MB Cache)
Main memory	4 GB, 8 GB or 16 GB; 512 KByte NVRAM optional			
Free expansion slots	up to 1 x PCIe card (optional); (1 x PCIe x 4); max. 6 W			
Operating systems (preinstalled and activated)	Windows Embedded Standard 7 (E / P), 32-bit / 64-bit; Windows 7 Ultimate, MUI <sup>1)</sup> , 64-bit; Windows 10 IoT Enterprise; LTSB2016		10 IoT Enterprise; LTSB2016	Windows 7 Ultimate (32 / 64 Bit) MUI <sup>1)</sup> ; Windows 10 IoT Enterprise (64-bit) MUI; Windows Embedded Standard 7 P (32 Bit); released for S7-1500 Software Controller, suited for Linux
Packages/bundles	Packages with WinCC RT V7, WinCC RT Professional, WinCC RT Advanced, SIMATIC Software		Controller	Packages with WinCC V7; WinCC RT Advanced; WinCC RT Professional and WinAC RTX (F)
Power supply / temporary voltage interruption	DC 24 V, 19,2 - 28,8 V; isolated / max. 20 ms (according to NAMUR); or 100-240 V AC,		50/60 Hz; on-off switch	AC: 100-240 V; 50-60 Hz / max. 20 ms (according to NAMUR); 24 V DC: 20.4 - 28.8 V
MTBF backlighting	up to 80,000 h <sup>7)</sup> ; dimmable from 0 bis 100%	up to 50,000 h <sup>7)</sup> ; dimmable from 0 bis 100%	up to 30,000 h <sup>7)</sup> ; dimmable from 0 bis 100%	up to 50,000 h
<b>Drives</b>				
Mass storage	CFast up to 30 GB (accessible from outside); SSD 240 / 480 GB; HDD 320 GB			Internal installation: 250 GB 3.5" or 500 GB 3.5"; SSD 240 GB plus optional HDD 320 GB RAID1: 2 x 320 GB 2.5"
Optical drives	can be connected by means of ext. drive via USB			
<b>Interfaces</b>				
Fieldbus	PROFINET RT over Ethernet			
Ethernet	3 x 10 / 100 / 1000 Mbps (RJ45); teaming capability			1 x 12 Mbps (isolated; CP 5622) optional
USB	Rear: 4 x USB 3.0; front: 1 x USB 3.0 (for single-touch)			2 x Intel: 10 / 100 / 1000 Mbps (RJ45); teaming; 1 x Intel: 10 / 100 / 1000 Mbps for PROFINET IRT variant
Serial / parallel	2 x RS232 / RS485 / RS422 can be selected in BIOS, optional			4 x USB 3.0; 1 x USB 3.0 on front (with single-touch)
Graphics interface	2 x DisplayPort			1 x COM1
<b>Monitoring / diagnostics functions</b>				
Basic functionality	Temperature; watchdog; HDD; CFast; SSD; CMOS battery (alarm locally by means of SIMATIC IPC DiagBase software)			Temperature; fan; watchdog; HDD; RAID; SSD; CMOS battery (alarm locally by means of SIMATIC IPC DiagBase software)
Advanced functions	System monitoring: Operating hours counter for preventive maintenance, maintenance mode, networking (LAN), SNMP and OPC interface (optionally by means of SIMATIC IPC DiagMonitor software)			Temperature; fan; watchdog; hard disks (SMART) System/Ethernet monitoring; operating hours counter; communication over Ethernet; SNMP and OPC interface (optionally by means of SIMATIC IPC DiagMonitor software)
Remote access	Remote access over Intel AMT for Core i7 and over SIMATIC IPC Remote Manager			Remote access over Intel Active Management Technology (iAMT) 9.0 and SIMATIC IPC Remote Manager
<b>Ambient conditions</b>				
Degree of protection / EMC	IP65 (front) according to IEC 60529 / EN 61000-6-4; CISPR220 Class B; FCC Class A;		IP20 (rear)	IP65 front; IP20 elsewhere
Vibration during operation <sup>5)</sup>	5 - 9 Hz: 3.5 mm; 9 - 500 Hz: 9.8 m/s <sup>2</sup> (approx. 1 g) when operated with CFast / SSD			10 - 58 Hz: 0.075 mm; 58 - 500 Hz; 9.8 m/s <sup>2</sup> (approx. 1 g)
Shock load during operation <sup>6)</sup>	50 m/s <sup>2</sup> ; 30 ms (approx. 5 g) when operated with CFast / SSD			50 m/s <sup>2</sup> ; 30 ms (approx. 5 g)
Relative humidity <sup>8)</sup>	up to 85% at 30 °C (no condensation)			5 - 80% at 25 °C (no condensation)
Ambient temperature in continuous operation at full processor performance	0 - 50 °C		0 - 45 °C	5 - 45 °C (maximum configuration)
Certification / EU directives	CE; cULus (508); WEEE / RoHS; C-Tick			
<b>Dimensions</b>				
Operator panel (W x H) single-touch	415 x 310 mm	483 x 337 mm	22" (560 x 380 mm) / 22" (529 x 331 mm) / 24" (585 x 363 mm)	15" Touch: 415 x 310 mm; 15" Multitouch: 416 x 298 mm; 19": 483 x 337 mm; 22": 560 x 380 mm
Operator panel (W x H) multitouch	398 x 257 mm	464 x 294 mm		
Installation dimensions (W x H) single-touch	395 x 290 x 83 mm	464 x 318 x 83 mm	22" (542 x 360 x 83 mm) / 22" (513 x 315 x 83 mm) / 24" (569 x 347 x 83 mm)	15" Touch: 395 x 290 x 112 mm; 15" Multitouch: 398 x 279 x 112 mm; 19": 464 x 318 x 112 mm; 22": 541 x 361 x 112 mm
Installation dimensions (W x H) multitouch	382 x 241 x 83 mm	448 x 278 x 83 mm		
Article No. *)	6AV7241-B / 6AV7241-J	6AV7241-D / 6AV7241-K	6AV7241-E / 6AV7241-L / 6AV7241-R (MT)	6AV7260-




<sup>7)</sup> with 24h continuous operation; depending on temperature

<sup>8)</sup> Tested according to IEC 60068-2-78, IEC 60068-2-30, IEC 60068-2-56

<sup>9)</sup> According to EN 60068-2-6 and DNV Shipbuilding Approval Vibration Class A

<sup>10)</sup> in heating mode

Technology  
overview

	SIMATIC Industrie-Monitore and Thin Clients		SIMATIC Industrie-Monitore and Thin Clients
	SIMATIC Industrial Thin Client	SIMATIC Industrial Flat Panel	SIMATIC Industrial Flat Panel
			
<b>General features</b>	12" Touch; 15", 19", 22" Touch / Multitouch	12" Touch, 15" Touch or Multitouch	19" and 22" Touch or Multitouch
Resolution in pixels (widescreen)	12" T (1,280 x 800) 15" T / MT (1,280 x 800 / 1,366 x 768) 19" T and MT (1,366 x 768) 22" T and MT (1,920 x 1,080)	12" T (1,280 x 800) 15" T (1,280 x 800) 15" MT (1,920 x 1,080)	19" T (1,366 x 768) 19" MT (1,920 x 1,080) 22" T (1,920 x 1,080) 22" MT (1,920 x 1,080)
Max. distance to PC	Unlimited over Ethernet	12" Standard: 5 m 15" Standard: 5 m; Extended: 30 m	Standard: 5 m Extended: 30 m as Ethernet monitor: unlimited
Processor	Intel Celeron (1,2 GHz)	-	-
Operating system (preinstalled and activated) / supported protocols	Closed Linux / VNC; SINUMERIK; WinCC-OA; web browser; JAVA; CITRIX Client	-	-
Power supply / max. power consumption	12": DC 24 V / approx. 28 W 15": DC 24 V / approx. 36 W 19": DC 24 V / approx. 32 W 22": DC 24 V / approx. 53 W	24 V DC; 19.2 - 28.8 V, approx. 40 W; 100-240 V AC, 50 / 60 Hz optional	24 V DC; 19.2 - 28.8 V, approx. 40 W; 100-240 V AC, 50 / 60 Hz optional
MTBF background lighting	up to 50,000 h <sup>?)</sup> ; dimnable from 0 to 100%	12" up to 50,000 h <sup>?)</sup> ; dimmable from 10 to 100%; 15" up to 80,000 h <sup>?)</sup> ; dimmable from 0 to 100%	up to 80,000 h <sup>?)</sup> ; dimmable from 0 bis 100 %
<b>Interfaces</b>			
Ethernet	2 x 10 / 100 / 1000 Mbps (RJ45)	-	-
USB	Rear: 2 x USB 2.0 / for Multitouch 4 x USB 2.0	For Extended version: 2 x USB 2.0 (rear)	For Extended version: 2 x USB 2.0 (rear)
Graphics interface	-	1 x DVI-D; 1 x DisplayPort (partially 1 Ethernet and 1 x DisplayPort)	1 x DVI-D; 1 x DisplayPort (partially 1 Ethernet and 1 x DisplayPort)
<b>Ambient conditions</b>			
Degree of protection / EMC	IP65 (front); CE; EN 61000-6-4	IP65 (front); CE; EN 61000-6-4; EN 61000-6-2	IP65 (front); CE; EN 61000-6-4; EN 61000-6-2
Vibration during operation <sup>5)</sup>	10 - 58 Hz: 0,0375 mm; 58 - 200 Hz: 9,8 m/s <sup>2</sup> (1 g)	10 - 58 Hz: 0,0375 mm; 58 - 200 Hz: 9,8 m/s <sup>2</sup> (1 g)	10 - 58 Hz: 0,0375 mm; 58 - 200 Hz: 9,8 m/s <sup>2</sup> (1 g)
Shock load during operation <sup>6)</sup>	50 m/s <sup>2</sup> (5 g); 30 ms	150 m/s <sup>2</sup> (approx. 15 g); 11 ms	150 m/s <sup>2</sup> (approx. 15 g); 11 ms
Relative humidity <sup>8)</sup>	5 - 85% at 25 °C (no condensation)	95% at 25 °C (no condensation)	95% at 25 °C (no condensation)
Ambient temperature during continuous operation	0 - 50 °C (12" / 15") 0 - 45 °C (19" / 22")	0 - 50 °C (partially up to 45 °C)	0 - 50 °C (partially up to 45 °C)
Certification / EU directives	CE; cULus; C-Tick; KCC; FM	CE; cULus / cULus Hazardous Location; partially or optional: ATEX, RCM, marine, Ex, KC	CE; cULus / cULus Hazardous Location; partially or optional: ATEX, RCM, marine, Ex, KC
<b>Dimensions</b>			
Operator panel (W x H) Single-touch (ST) Multitouch (MT))	12": 330 x 241 mm 15": 415 x 310 mm (ST) / 398 x 257 mm (MT) 19": 483 x 337 mm (ST) / 464 x 294 mm (MT) 22": 560 x 380 mm (ST) / 529 x 331 mm (MT)	12": 330 x 241 mm (ST) 15": 416 x 298 mm (ST) 15": 398 x 257 mm (MT)	19": 483 x 337 mm (ST) 19": 464 x 294 mm (MT) 22": 560 x 380 mm (ST) 22": 529 x 331 mm (MT)
Installation dimensions (W x H x D) Single-touch (ST) Multitouch (MT)	12": 310 x 221 x 82 mm 15": 396 x 291 x 75 mm (ST) / 382 x 241 x 75 mm (MT) 19": 465 x 319 x 75 mm (ST) / 448 x 278 x 75 mm (MT) 22": 542 x 362 x 75 mm (ST) / 513 x 315 x 75 mm (MT)	12": 308 x 219 x 71,1 mm (ST) 15": 399 x 291 x 63 mm (ST) 15": 382 x 241 x 63 mm (MT)	19": 465 x 319 x 63 mm (ST) 19": 448 x 278 x 63 mm (MT) 22": 542 x 362 x 63 mm (ST) 22": 513 x 315 x 63 mm (MT)
Article No. *)	6AV6646-1A...-0AX0 / 6AV6646-1B...-0NA0 / PRO 19" and 22" 6AV6646-1B...	6AV7466-1T...; 6AV7863-2T.../-2M...	6AV7863-3T.../-3M...; -4T.../-4M...

PROtected, INOX and Ex devices see: [siemens.com/special-hmi-devices](http://siemens.com/special-hmi-devices)

# SIEMENS

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Digital Factory

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کامپیوترهای صنعتی  
**SIMATIC IPC**

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹  
تلفن: ۰۲۱-۴۱۹۰۷ ۰۲۱-۸۸۶۴۱۴۹۳-۵



Rack PC      Box PC      Panel PC

**Embedded industrial PCs**  
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Ultra-compact
- IPC2x7  
Compact
- IPC4x7  
Powerful

**High-end industrial PCs**  
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Attractive price

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# SIEMENS

## SINAMICS low voltage converters

Standard performance converters

Industry specific converters

High performance converters

Distributed converters

## Powerful and flexible

### دراپورهای LV سری سینامیکس

### SINAMICS DRIVE

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹

تلفن: ۰۲۱-۸۸۶۴۱۴۹۳-۵ ۰۲۱-۴۱۹۰۷



High performance converters



## SINAMICS S150

Multifunctional. Precise. Capable of energy recovery.

### Highlights

- Modular system for high performance
- High degree of scalability, flexibility, combinability

### Applications



Processing Moving

Format	Cabinet unit
Drive concept	AC/AC
Degree of protection	IP20, optional: IP21, IP23, IP43, IP54
Supply voltage/ power kW (hp)	
3AC 380 ... 480 V	110 ... 800 kW (150 ... 1150 hp)
3AC 500 ... 690 V	75 ... 1200 kW (75 ... 1250 hp)
Energy recovery	Yes
Control modes	V/f control Vector control with and without encoder Servo control with and without encoder
Ambient temperature	0 °C to 40 °C
Line filter	With integrated line filter for environments according to IEC 61800-3 Category C3/C2  Without line filter for environments according to IEC 61800-3 Category C4
Braking chopper	Yes (optional)
Safety functions	STO, SS1, SBC, SOS, SS2, SLS, SSM, SDI, SLP, SP, SBT, SLA, SCA
Communication	PROFINET, PROFIBUS DP, EtherNet/IP, USS (no CU310), CANopen (CU320-2), Modbus TCP, PROFI-safe
TIA Portal connected	Yes
Commissioning tools	SINAMICS Startdrive, SCOUT, web server
Controller	SIMATIC, SIMOTION
Recommended motors	SIMOTICS SD, XP, DP, TN, HT, M



[siemens.com/sinamics-s150](https://www.siemens.com/sinamics-s150)



[siemens.com/dt-configurator](https://www.siemens.com/dt-configurator)

## SINAMICS DCM Universal. Scalable. Rugged.



Format	Built-in unit
Drive concept	AC/DC
Degree of protection	IP00 / IP20
Supply voltage/ power kW (hp)	
1AC 50 ... 230 V	1.61 ... 362 kW (2.16 ... 485 hp)
1AC 50 ... 400 V	2.81 ... 653 kW (3.77 ... 876 hp)
1AC 50 ... 480 V	3.37 ... 310 kW (4.52 ... 416 hp)
1AC 50 ... 575 V	16.1 ... 863 kW (21.6 ... 1160 hp)
3AC 10 ... 50 V	0.16 ... 183 kW (0.21 ... 245 hp)
3AC 50 ... 400 V	6.3 ... 1460 kW (8.4 ... 1950 hp)
3AC 50 ... 480 V	6.3 ... 690 kW (8.4 ... 925 hp)
3AC 50 ... 575 V	35 ... 1930 kW (47 ... 2590 hp)
3AC 100 ... 690 V	551 ... 2160 kW (739 ... 2900 hp)
3AC 100 ... 830 V	831 ... 1900 kW (1110 ... 2550 hp)
3AC 100 ... 950 V	2200 ... 2500 kW (2950 ... 3350 hp)
Energy recovery	Yes
Control modes	Speed control, torque control, closed-loop EMF control (operation without tachometer), field weakening control
Ambient temperature	0 °C to 45 °C without derating for armature currents ≤ 125 A 0 °C to 40 °C without derating for armature currents ≥ 210 A Up to 55 °C with derating
Line filter	With additional line filter for environments according to IEC 61800-3 Category C2  Without additional line filter for environments according to IEC 61800-3 Category C3, C4
Safety functions	STO, SS1
Communication	PROFINET, PROFIBUS DP, USS, EtherNet/IP, Modbus TCP
TIA Portal connected	Yes
Commissioning tools	BOP, AOP30, SCOUT
Controller	SIMATIC, SIMATIC PCS 7, SIMOTION
Recommended motors	SIMOTICS DC

### Highlights

- For simple and favorably-priced plant and system modernization
- Flexible expandability regarding both functionality and performance
- High power rating in a compact design
- High reliability of all components

### Applications



Moving



Processing

[siemens.com/sinamics-dcm](https://www.siemens.com/sinamics-dcm)



[siemens.com/dt-configurator](https://www.siemens.com/dt-configurator)





## SINAMICS G115D Versatile. Rugged. Distributed.

### Highlights

- User friendly, modular solution with a new construction design for easy wiring, commissioning and servicing incl. dedicated features for conveyor technology
- Out-of-the-box concept for easy handling, fast set up and extremely simple to operate design for applications with horizontal motion

### Applications



Moving

Format	Motor mounted	Wall mounted
Drive concept	AC/AC	
Degree of protection	IP55 (limited by geared motor) or optional IP65/UL rating follows geared motor (compact system)	IP65 (connector version) or IP66 (gland version)/UL type 4X
Supply voltage/ power range	3AC 380 ... 480 V 0.37 – 4 kW / 0.5 – 5 HP FSA up to 1.5 kW, FSB up to 4 kW	0.37 – 7.5 kW / 0.5 – 10 HP FSA up to 1.5 kW, FSB up to 4 kW, FSC <sup>1</sup> up to 7.5 kW
Energy recovery	No	
Control modes	U/f, FCC, ECO, SLVC sensorless vector control	
Ambient temperature	–30 to 40 °C/to 55 °C (> 40 °C with derating)	
Line filter	With integrated line filter for environments according to IEC 61800-3 Category C2 <sup>2</sup>	
Braking chopper	Yes, integrated	
Safety functions	STO according to SIL2/PLd, via F-DI and/or PROFIsafe	
Communication	PROFINET/Ethernet IP, AS-i <sup>1</sup> or I/O controlled <sup>1</sup>	
TIA Portal connected	Yes, complete drive system	
Commissioning tools	SINAMICS Startdrive, G120 Smart Access Module	
Controller	SIMATIC S7-1200/ S7-1500, SIMATIC ET200	
Recommended motors	SIMOGEAR (geared motors) <sup>3</sup>	

<sup>1</sup> In 2nd Step

<sup>2</sup> Removal of functional grounding (IT system) possible

<sup>3</sup> The motor mounted version is offered only with geared motor and converter as a complete drive system.

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹

تلفن: ۰۲۱-۴۱۹۰۷ ۰۲۱-۸۸۶۴۱۴۹۳-۵





## SINAMICS V20

### Simple. Rugged. Efficient.

#### Highlights

- The perfect solution for basic applications
- Easy to install
- Easy to use

#### Applications



Pumping/  
Ventilating/  
Compressing



Moving



Processing

<b>Format</b>	Built-in unit (compact)
<b>Drive concept</b>	AC/AC
<b>Degree of protection</b>	IP20/UL open type
<b>Supply voltage/ power kW (hp)</b>	
1AC 200 ... 240 V	0.12 ... 3 kW (0.16 ... 4 hp)
3AC 380 ... 480 V	0.37 ... 30 kW (0.5 ... 40 hp)
<b>Energy recovery</b>	No
<b>Control modes</b>	V/f (linear, square law, FCC, ECO)
<b>Ambient temperature</b>	-10 °C to 40 °C without derating/to 60 °C with derating
<b>Line filter</b>	With integrated line filter for environments according to IEC 61800-3 Category C3/C2/C1  Without integrated line filter for environments according to IEC 61800-3 Category C4
<b>Braking chopper</b>	External braking chopper, except for frame size FSD/FSE 3AC with integrated braking chopper
<b>Safety functions</b>	No
<b>Communication</b>	USS/Modbus RTU
<b>TIA Portal connected</b>	No
<b>Commissioning tools</b>	BOP-2, V20 Smart Access Module
<b>Controller</b>	SIMATIC S7-1200
<b>Recommended motors</b>	SIMOTICS GP/SD (standard induction motors, aluminum/cast iron)



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[siemens.com/dt-configurator](http://siemens.com/dt-configurator)

## SINAMICS G120C

Versatile. User-friendly. Compact.



Format	Built-in unit (compact)
Drive concept	AC/AC
Degree of protection	IP20/UL open type
Supply voltage/ power kW (hp)	3AC 380 ... 480 V 0.55 ... 132 kW (0.75 ... 150 hp)
Energy recovery	No
Control modes	V/f (linear, square law, FCC, ECO), sensorless vector control (SLVC)
Ambient temperature	-10 °C to 40 °C without derating/to 60 °C with derating
Line filter	With integrated line filter for environments according to IEC 61800-3 Category C3/C2 Without integrated line filter for environments according to IEC 61800-3 Category C4
Braking chopper	Integrated braking chopper
Safety functions	STO
Communication	Frame size FSAA 0.55 kW to FSC 18.5 kW available with PROFINET, PROFIBUS DP, EtherNet/IP, USS/Modbus RTU Frame size FSD 22 kW to FSF 132 kW available with PROFINET
TIA Portal connected	Yes
Commissioning tools	BOP-2, IOP-2, G120 Smart Access Module, SINAMICS Startdrive
Controller	SIMATIC S7-1200, SIMATIC ET200
Recommended motors	SIMOTICS GP/SD (standard induction motors, aluminum/cast iron) SIMOGEAR (geared motors)

### Highlights

- Compact for simple installation in the smallest space
- Simple commissioning and operator control
- Perfect integration in the automation environment
- Integrated safety technology

### Applications



Pumping/  
Ventilating/  
Compress-  
ing

Moving

Processing

[siemens.com/sinamics-g120c](https://www.siemens.com/sinamics-g120c)



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## SINAMICS G120 Multifunctional. Combinable. Safety Integrated.

### Highlights

- High degree of flexibility and combinability
- Higher-level, standard safety concept
- Wide range of power ratings

### Applications



Pumping/  
Ventilating/  
Compressing



Moving



Processing



Positioning

### Modular design



<b>Format</b>	Built-in unit (modular) Power Module, Control Unit, commissioning options
<b>Drive concept</b>	AC/AC
<b>Degree of protection</b>	IP20/UL open type
<b>Supply voltage/ power kW (hp)</b>	
1AC/3AC 200 ... 240 V	0.55 ... 4 kW (0.75 ... 5 hp), Power Module PM240-2
3AC 200 ... 240 V	5.5 ... 55 kW (7.5 ... 60 hp), Power Module PM240-2
3AC 380 ... 480 V	0.55 ... 250 kW (0.75 ... 400 hp), Power Module PM240-2
3AC 380 ... 480 V	7.5 ... 90 kW (10 ... 125 hp), Power Module PM250
3AC 500 ... 690 V	11 ... 250 kW (10 ... 400 hp bei 600 V), PM240-2
<b>Control unit</b>	Control Unit CU230P-2, CU240E-2, CU240E-2 F, CU250S-2
<b>Energy recovery</b>	In conjunction with PM250 Power Modules
<b>Control modes</b>	V/f (linear, square law, FCC, ECO), vector control with and without encoder (VC, SLVC)
<b>Ambient temperature</b>	-10 °C to 40 °C without derating/to 60 °C with derating
<b>Line filter</b>	With integrated line filter for environments according to IEC 61800-3 Category C3/C2 Without integrated line filter for environments according to IEC 61800-3 Category C4
<b>Braking chopper</b>	Integrated braking chopper for PM240-2 Power Modules
<b>Safety functions</b>	STO, SS1, SBC, SLS, SDI, SSM
<b>Communication</b>	PROFINET, PROFIBUS DP, EtherNet/IP, USS/Modbus RTU, CANopen, PROFIsafe
<b>TIA Portal connected</b>	Yes
<b>Commissioning tools</b>	BOP-2, IOP-2, G120 Smart Access Module, SINAMICS Startdrive
<b>Controller</b>	SIMATIC ET200, SIMATIC S7-1500, SIMATIC PCS 7

### Recommended motors

SIMOTICS GP/SD (standard induction motors, synchronous-reluctance motors aluminum/cast iron)  
SIMOGEAR (geared motors)  
SIMOTICS TN (trans-standard motors)  
SIMOTICS M-1PH8 (compact induction motors)  
SIMOTICS XP (explosion-protected motors)



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## SINAMICS G130/G150

Multifunctional. User-friendly. Rugged.



Format	G130: Built-in unit (modular) G150: Cabinet unit
Drive concept	AC/AC
Degree of protection	G130: IP00 / IP20 G150: IP20 Optional: IP21, IP23, IP43, IP54
Supply voltage/ power kW (hp)	
3AC 380 ... 480 V	110 ... 560 kW (150 ... 800 hp) (G130) 110 ... 900 kW (150 ... 800 hp) (G150)
3AC 500 ... 600 V	110 ... 560 kW (150 ... 800 hp) (G130) 110 ... 1000 kW (150 ... 800 hp) (G150)
3AC 660 ... 690 V	75 ... 800 kW (85 ... 810 hp) (G130) 75 ... 2700 kW (85 ... 810 hp) (G150)
Energy recovery	No
Control modes	Sensorless vector control or V/f control
Ambient temperature	0 °C to 40 °C without derating/to 55 °C with derating
Line filter	With integrated line filter for environments according to IEC 61800-3 Category C3/C2 (optional)
Braking chopper	G130: System component Braking Module G150: Braking Module optional
Safety functions	STO, SS1, SBC, SLS, SDI, SSM, SBT
Communication	PROFINET, PROFIBUS DP, EtherNet/IP, USS, CANopen, PROFIsafe
TIA Portal connected	Yes
Commissioning tools	AOP30, SINAMICS Startdrive, STARTER
Controller	SIMATIC ET200, SIMATIC S7-1500, SIMATIC PCS 7

Recommended motors	SIMOTICS GP/SD (standard induction motors aluminum/cast iron) SIMOTICS TN (trans-standard motors) SIMOTICS HT (low-speed permanent magnet synchronous motors)
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### Highlights

- **Applications:** Pumps, fans, compressors, extruders, mixers, mills etc.
- **Service-friendly** thanks to device modules that are easy to access
- **100% line supply voltage at the motor** without any secondary effects
- **When required, with integrated line harmonics filter and du/dt filter**

### Applications



Pumping/  
Ventilating/  
Compressing

Moving

Processing

[siemens.com/sinamics-g130](http://siemens.com/sinamics-g130); [siemens.com/sinamics-g150](http://siemens.com/sinamics-g150)



[siemens.com/dt-configurator](http://siemens.com/dt-configurator)





## SINAMICS G180

Multifunctional. Industry specific.  
Seamless across the system.

### Highlights

- Industry specific features such as du/dt filter and PTC evaluation
- Applications: Pumps, fans, extruders, compressors – also in hazardous zones
- Voltage levels: 400 V/500 V/690 V
- Line side: 6 to 24 pulse or LHF (Line Filter)
- From 200 kW, air or liquid cooled
- ATEX-certified for motors in hazardous zones

### Applications



Pumping/  
Ventilating/  
Compressing



Moving



Processing

<b>Format</b>	Built-in unit (compact) Cabinet unit
<b>Drive concept</b>	AC/AC
<b>Degree of protection</b>	Compact devices: IP20 (optional IP21) Cabinet units/systems: IP21 (higher degrees of protection up to IP54 optional)/with water cooling, IP54
<b>Supply voltage/ power kW (hp)</b>	
3AC 380 ... 480 V	2.2 ... 200 kW, compact device 250 ... 630 kW, cabinet unit
3AC 480 ... 500 V	2.2 ... 160 kW, compact device 250 ... 800 kW, cabinet unit
3AC 500 ... 690 V	7.5 ... 200 kW, compact device 250 ... 6000 kW, cabinet unit
<b>Energy recovery</b>	No
<b>Control modes</b>	V/f (linear, square law) Vector control with and without encoder (SLVC) Field-oriented control (FOC) with encoder and certification for explosion protection
<b>Ambient temperature</b>	0 to 40 °C
<b>Line filter</b>	Compact devices: with integrated line filter for environments according to IEC 61800-3 Category C2/C1 (optional) Cabinet units: with integrated line filter for environments according to IEC 61800-3 Category C3 Compact devices, cabinet units for IT line systems: with integrated line filter for environments according to IEC 61800-3 Category C4
<b>Braking chopper</b>	Yes
<b>Safety functions</b>	STO, ATEX-certified PTC thermistor input for explosion-protected motors
<b>Communication</b>	PROFIBUS DP, EtherNet/IP, Modbus TCP/IP, Modbus RTU, CANopen, on request: PROFINET
<b>TIA Portal connected</b>	No
<b>Controller</b>	SIMATIC ET200, SIMATIC S7-1500, SIMATIC PCS 7

### Recommended motors

SIMOTICS GP/SD (standard induction motors aluminum/cast iron)

SIMOTICS TN (trans-standard motors)

SIMOTICS XP (explosion-protected motors)



[siemens.com/sinamics-g180](https://www.siemens.com/sinamics-g180)



[siemens.com/dt-configurator](https://www.siemens.com/dt-configurator)

## SINAMICS G120X Flexible. Combinable. Application-specific.



Format	Built-in unit (compact)
Drive concept	AC/AC
Degree of protection	IP20, UL open type, IP21 (roof top kit)
Supply voltage/ power kW (hp)	
3AC 200 ... 240 V	0.75 ... 55 kW / 1 ... 75 hp
3AC 380 ... 480 V	0.75 ... 560 kW / 1 ... 700 hp
3AC 500 ... 690 V	3 ... 630 kW / 4 ... 700 hp
Energy recovery	No
Control modes	V/f (linear, square law, FCC, ECO), sensorless vector control (SLVC)
Ambient temperature	-20 °C to 45 °C (60 °C with derating <sup>1</sup> )
Line filter	According to IEC 61800-3, with integrated line filter for environments Category C3/C2; optional C1 with external filter B
Braking chopper	No
Safety functions	STO
Communication	PROFINET, PROFIBUS, EtherNet/IP, Modbus RTU, USS, BACnet MS/TP2, Wi-Fi via SINAMICS G120 Smart Access Module
TIA Portal connected	No, only via GSD file
Commissioning tools	BOP-2, IOP-2, G120 Smart Access Module, SIMATIC PCS7 and SIMATIC PDM
Controller	SIMATIC S7-1500/1200/400, Desigo PX

Recommended motors	SIMOTICS GP/SD (synchronous reluctance motors with aluminum/cast iron enclosures)
	SIMOTICS GP/SD (standard induction motors with aluminum/cast iron enclosures)
	SIMOTICS DP (smoke extraction motors)

<sup>1</sup>The max temperature is 55 °C for PN version drives

### Highlights

- The infrastructure drive for pump/fan applications in water/waste-water industries and building technology
- Seamless range of power ratings available in 9 frame sizes extending from 0.75 – 630 kW
- Simple selection and ordering using just one order number – and immediately ready to run
- Impressively efficient with specific industry and energy efficiency functions

### Applications



Pumping/  
Ventilating/  
Compress-  
ing

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[siemens.com/sinamics-selector](https://www.siemens.com/sinamics-selector)



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## SINAMICS S120 Universal. Precise. Safety Integrated.

### Highlights

- Modular system for high performance
- High degree of scalability, flexibility, combinability

### Applications S120



Processing



Positioning



Machining



Moving

	S120	S120
	High-performance application	High-performance application
<b>Format</b>	Built-in unit Blocksize (modular)	Built-in unit Booksize (modular)
<b>Structure</b>	Control Unit + Power Module	Control Unit + infeed + Motor Module
<b>Drive concept</b>	AC/AC	DC/AC
<b>Degree of protection</b>	IP20	IP00 / IP20
<b>Supply voltage/ power kW (hp)</b>		
1/3AC 200 ... 240 V	0.55 ... 4 kW (0.75 ... 5 hp at 240 V)	–
3AC 200 ... 240 V	5.5 ... 55 kW (7.5 ... 60 hp at 240 V)	–
3AC 380 ... 480 V	0.55 ... 250 kW (0.75 ... 400 hp at 480 V)	1.6 ... 107 kW (1.5 ... 150 hp at 400 V)
3AC 500 ... 690 V	11 ... 250 kW (10 ... 400 hp at 600 V)	–
<b>Energy recovery</b>	No	Yes, depending on the infeed
<b>Control modes</b>	V/f control, vector control with/without encoder Servo control with encoder	
<b>Ambient temperature</b>	0 °C to 40 °C	
<b>Line filter</b>	With integrated line filter for environments according to IEC 61800-3 Category C3/C2  Without line filter for environments according to IEC 61800-3 Category C4	With integrated line filter for environments according to IEC 61800-3 Category C3/C2 (optional)  Without line filter for environments according to IEC 61800-3 Category C4
<b>Braking chopper</b>	Integrated braking chopper for PM240-2 Power Modules	Yes (optional)
<b>Safety functions</b>	STO, SS1, SBC, SOS, SS2, SLS, SSM, SDI, SLP, SP, SBT, SLA, SCA	
<b>Communication</b>	PROFINET, PROFIBUS DP, EtherNet/IP, USS (kein CU310), CANopen (CU320-2), Modbus TCP	
<b>TIA Portal connected</b>	Yes, PROFIsafe	
<b>Commissioning tools</b>	SINAMICS Startdrive, SCOUT, web server	
<b>Control systems</b>	SIMATIC, SINUMERIK, SIMOTION	
<b>Recommended motors</b>	SIMOTICS GP, SD, XP, DP, M, S, L, T	SIMOTICS GP, SD, XP, DP, M, S, L, T

[siemens.com/sinamics-s120](http://siemens.com/sinamics-s120)  
[siemens.com/sinamics-s120-innovation](http://siemens.com/sinamics-s120-innovation)



[siemens.com/dt-configurator](http://siemens.com/dt-configurator)



S120	S120 CM
<b>High-performance application</b>	<b>High-performance application</b>
Built-in unit Chassis (modular)	Cabinet unit
Control Unit + infeed + Motor	Control Unit + infeed + Motor Module
DC/AC	DC/AC
IP00 / IP20	IP20, optional: IP21, IP23, IP43, IP54
-	-
-	-
110 ... 3040 kW (150 ... 4370 hp at 460 V)	4.8 ... 3040 kW (5 ... 4370 hp at 460 V)
75 ... 6840 kW (75 ... 1250 hp at 575 V)	75 ... 5700 kW (75 ... 1250 hp at 575 V)
Yes, depending on the infeed	Yes, depending on the infeed
With integrated line filter for environments according to IEC 61800-3 Category C3/C2 (optional)	With integrated line filter for environments according to IEC 61800-3 Category C3/C2 (optional)
Without line filter for environments according to IEC 61800-3 Category C4	Without line filter for environments according to IEC 61800-3 Category C4
Yes (optional)	Yes (optional)
SIMOTICS SD, XP, DP, TN, HT, M	SIMOTICS GP, SD, XP, DP, TN, HT, M



# SIRIUS 3RW

soft starters

راه اندازهای نرم موتورهای الکتریکی

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹

تلفن: ۰۲۱-۸۸۶۴۱۴۹۳-۵ ۰۲۱-۴۱۹۰۷

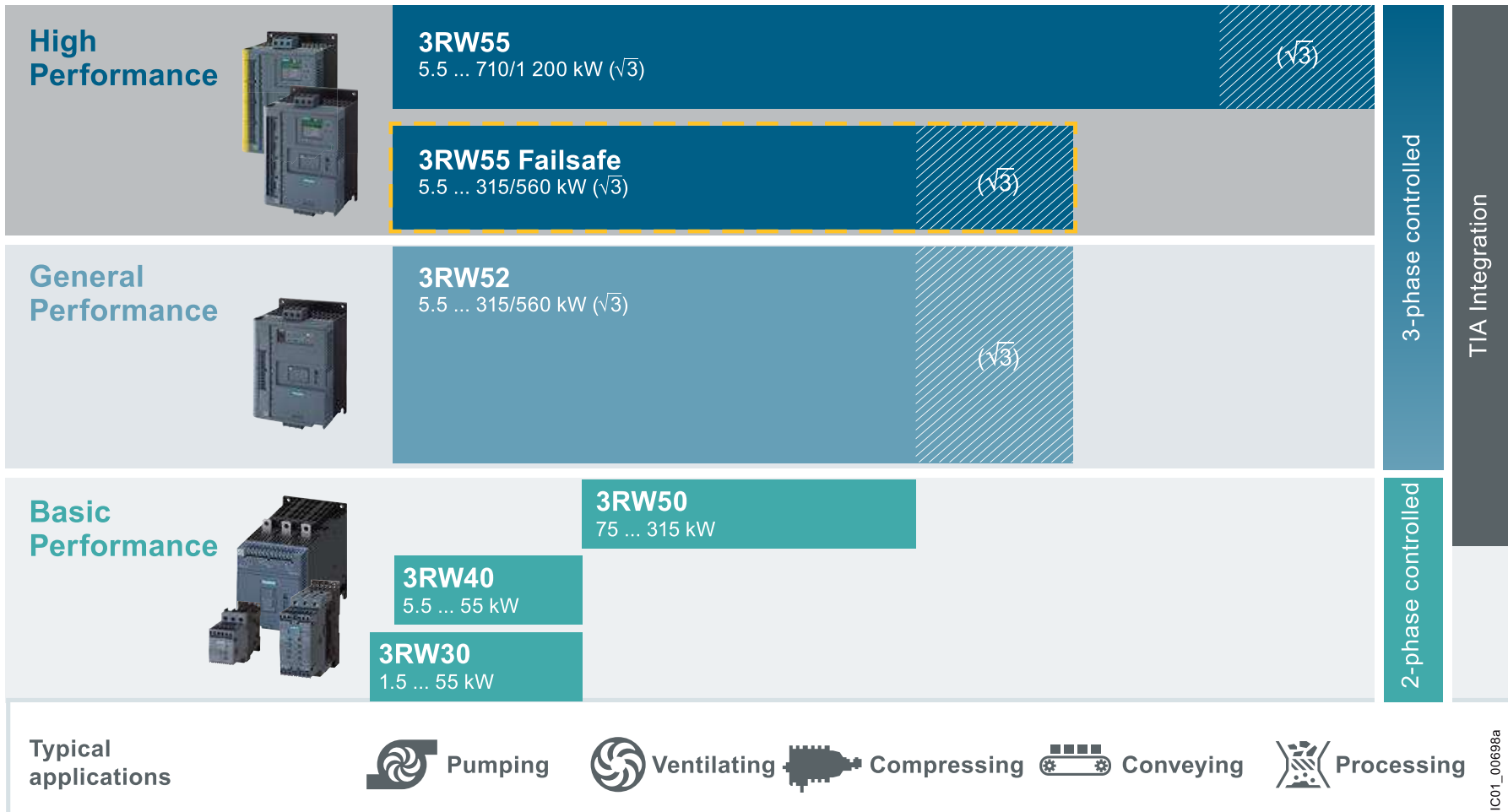


## Switching devices – Soft starters and solid-state switching devices SIRIUS 3RW soft starters

General data

### Overview

**SIRIUS 3RW soft starters – as versatile as your application**



IC01\_00698a



# SIEMENS

## MV SINAMICS DRIVE

درايو MV سري سيماميكس

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹

تلفن: ۰۲۱-۸۸۶۴۱۴۹۳-۵ ۰۲۱-۴۱۹۰۷



## SINAMICS Medium Voltage Drives

Discover why no other drive portfolio can match the flexibility and performance of our SINAMICS medium voltage drives. With systems in motor voltage classes from 1.4 kV to 13.8 kV, and power ratings from 150 kW to 85 MW, Siemens drives are built to provide the reliability, longevity and quality that modern applications demand – because in today's competitive market, downtime is not an option.

Due to complex project requirements, it is always recommended that users contact their local Siemens representative for more advanced assistance in selecting the correct drive for the application.

### Technical Specifications

	SINAMICS PERFECT HARMONY GH180	SINAMICS PERFECT HARMONY GH150	SINAMICS GM150	SINAMICS GL150	SINAMICS SH150	SINAMICS SM150	SINAMICS SL150
							
Type of converter	Multi-cell voltage source inverter featuring SINAMICS PERFECT HARMONY technology (PH VSI)	Multi-cell voltage source inverter featuring M2C technology (M2C VSI) [Modular multilevel converter (M2C)]	Voltage source inverter with 3-level NPC and Diode Front End (DFE-VSI)	Current Source inverter with load-commutated inverter technology (LCI)	Multi-cell voltage source inverter with active front end (AFE) featuring M2C technology (M2C VSI)	Voltage source inverter with 3-level NPC and Active Front End (AFE-VSI)	Cycloconverter (CC)
Converter cooling	Air (A), water (W)	Air (A) incl. optional integral A/W and A/A-HEX, water (W)	Air (A), water (W)	Air (A), water (W)	Water (W)	Air (A), water (W)	Air (A), water (W)
Power range	A: up to 10 MVA W: up to 24.4 MVA	A: 4-35 MVA W: 4-47.6 MVA	A: 1-10.1 MVA W: 2-24 MVA	A: 1.4-30 MVA W: 6-85 MVA (higher on request)	W: 4-16 MVA	A: 3.4-5.8 MVA W: 4.6-31.5 MVA	A: 2.9-18.8 MVA W: 12-40 MVA
Transformer	Integrated transformer	Separate transformer	Separate transformer	Separate transformer	Separate transformer	Separate transformer	Separate transformer
Input section	A: 2Q (DFE) W: 2Q (DFE) and w/partial recharge	2Q (DFE)	2Q (DFE)	4Q	2Q (DFE) or 4Q (AFE)	4Q (AFE)	4Q
Type of motor	IM, SYN, PEM, WRIM	IM, SYN	IM, SYN, PEM	SYN	IM, SYN, PEM	IM, SYN, PEM	IM, SYN, PEM
Output voltage	A: 2.3 to 11 kV W: 4.0 to 11 kV	A: 4.16 to 13.8 kV W: 4.16 to 11 kV	2.3 to 4.16 kV 6.6 kV and Multi Motor	1.4 to 10.3 kV	3.3 to 7.2 kV	3.3 kV, 4.16 (IGBT only)	1.5 to 4 kV
Degree of protection	A: IP21 or IP42 (optional) W: IP54	IP43, IP44, IP54	A: IP22 or IP42 (optional) W: IP43 or IP54 (optional)	A: IP20, IP32, IP42 (on request) W: IP41, IP44	IP44	A: IP22 or IP42 (optional) W: IP43 or IP54 (optional)	A: IP20 (CoM: IP41) W: IP00
Standards	EN, IEC, CE, EAC, CSA, ANSI, UL, NEMA	EN, IEC, CE, EAC, CSA, ANSI, UL, NEMA	IEC, CE, EAC, CSA (on request)	IEC, CE, EN, EAC, CSA (on request)	IEC, CE, EAC, CSA (on request)	IEC, CE, EAC, CSA (on request)	IEC, EN, CE, EAC, CSA (on request)
Long cable capabilities	2300 m; longer distances on request	1000 m; longer distances on request	Option L08: up to 1000 m	Option L05: up to 1000 m	1000 m; longer distances on request	Option L10: up to 1000 m	

Features	SINAMICS PERFECT HARMONY GH180	SINAMICS PERFECT HARMONY GH150	SINAMICS GM150	SINAMICS GL150	SINAMICS SH150	SINAMICS SM150	SINAMICS SL150
Differentiating Features	⊕ Only 3 cables in & out	⊕ Separate transformer	⊕ Separate transformer	⊕ Highest power ratings	⊕ Highest flexibility	⊕ High dynamic	⊕ Low speed
	⊕ Cell redundancy	⊕ Cell redundancy	⊕ Marine & offshore duty	⊕ Control redundancy	⊕ Line friendly	⊕ High overload	⊕ Highest overload capability
	⊕ Motor friendly	⊕ Motor friendly	⊕ Small footprint (water-cooled)	⊕ Almost maintenance-free	⊕ Grid applications	⊕ Multi-motor dc-bus	⊕ Highest efficiency
Cell bypass	●	●			●		
Cell redundancy	●	●			●		
ProToPS™ warning system	●	On request					
Separate control cabinet design		●		●	●		●
Multi-axis						●	
Dynamic braking		On request	●		●	●	
Marine certification	Air-cooled only	On request	●	●	●	●	
Arc-fault-tested design	At certain ratings	●	●	●	●	●	●
Semiconductor technology	IGBT	IGBT	IGBT, IGCT	Thyristor	IGBT	IGBT, IGCT	Thyristor
Control system	Sensorless vector control (optionally with sensor), automatic motor identification, automatic startup	Closed-loop vector control	Closed-loop vector control	Closed-loop vector control	Closed-loop vector control, active front end (AFE) control, droop control for grid supply	Closed-loop vector control	Closed-loop vector control
Communication profiles	EtherNet IP, Modbus RTU, Modbus Ethernet, DeviceNet, ControlNet, PROFIBUS DP, PROFINET, Ethernet/IP	PROFINET (standard); optional: PROFIBUS DP, CAN-bus, Modbus Plus, Modbus RTU, Modbus TCP, DeviceNet, ControlNet	PROFIBUS DP, PROFINET (further profiles available on request)	PROFIBUS DP (standard); optional: PROFINET, CAN-bus, Modbus, DeviceNet	SH150: PROFINET (standard); optional: PROFIBUS DP, CAN-bus, Modbus Plus, Modbus RTU, Modbus TCP, DeviceNet, ControlNet	PROFIBUS DP, PROFINET (further profiles available on request)	PROFIBUS DP, PROFINET (further profiles available on request)
Reactive power compensation					●	●	
Synchronous bypass to grid	●	●	●	●	On request		
Fuseless		●	●	●	●	●	●
Multi-motor starting/sync transfer	●	●	●	●	●	●	



جدول سازگاری درایوهای فشار متوسط: هر مدل درایو یا الکتروموتور برای هر کاربردی مناسب نمی باشد و باید مواردی چون قابلیت های درایو، نوع الکتروموتور، سطح ولتاژ شبکه و ... مد نظر قرار بگیرد.

SIMOTICS High-Voltage Series Motors	SINAMICS PERFECT HARMONY GH180	SINAMICS PERFECT HARMONY GH150	SINAMICS GM150	SINAMICS GL150	SINAMICS SH150	SINAMICS SM150	SINAMICS SL150
SIMOTICS HV C	●		●			●	
SIMOTICS HV M	●	●	●		●	●	
SIMOTICS HV Series H-compact	●		●				
SIMOTICS HV series A-compact PLUS	●						
SIMOTICS HV ANEMA	●	●	●				
SIMOTICS HV HP	●	●	●	●	●	●	●
SIMOTICS high-speed	●	●		●	●		
SIMOTICS HV Series Metals			●			●	●
Simotics ring motors							●
SIMOTICS HV Series Mining						●	●
SIMOTICS HV Series Ship			●	●	●	●	
SIMOTICS HV Series Injection Pump	●	●			●		



## جدول سازگاری با کاربری های مختلف:

	SINAMICS PERFECT HARMONY GH180	SINAMICS PERFECT HARMONY GH150	SINAMICS GM150	SINAMICS GL150	SINAMICS SH150	SINAMICS SM150	SINAMICS SL150
Pumps	●	●	●	●			
Fans	●	●	●	●			
Conveyors (downhill)					●	●	●
Conveyors (uphill)	●	●	●				●
Crushers	●		●				
Extruders	●		●	●			
Mixers	●		●				
Compressors	●	●	●	●	●		
Excavators			●				●
Kilns	●						
High-pressure grinders	●		●				
Vertical mills	●		●				
Horizontal mills (geared)	●		●			●	●
Horizontal mills (gearless)							●
Existing line motors	●	●		●	●		
Blast furnace blowers	●	●	●	●			
Pump storage				●	●		
Rolling mills						●	●
Propulsion		●	●	●	●		
Thrusters			●				
Mine winders						●	●
Boiler feed pumps	●	●	●	●			
Starting generators				●			
Starting blast furnace blowers				●			
Onshore power supply					●		
Test stands	●	●		●	●	●	
Shaft generators				●	●		
Shaft generator / booster				●	●		
LNG start/helper (all-electric)	●	●		●	●		

# SIEMENS

## SIMOTICS HV

الکتروموتورهای HV زیمنس

شرکت سیمی نصر ماد

آدرس: تهران، خیابان ولیعصر، بالاتر از میدان ونک، برج نگار، طبقه ۱۰، واحد ۹

تلفن: ۰۲۱-۴۱۹۰۷ ۰۲۱-۸۸۶۴۱۴۹۳-۵



**موتورهای SIMOTICS HV از ۱۵۰ کیلو وات الی ۱۰۰ مگا وات**  
 موتورهای SIMOTICS HV در دامنه ۱۵۰ کیلو وات الی ۱۰۰ مگا وات قابلیت طراحی دارد

- رنج سرعت: از ۷ rpm تا ۱۵۹۰۰ rpm
- رنج گشتاور: تا ۲۴۱۰ kNm
- استاندارد: NEMA , IEC
- سیستمهای خنک کنندگی متنوع
- حفاظت ضد انفجار
- درجه حفاظت: تا IP66
- امکان استفاده از رنگهای مخصوص برای کار در شرایط جوی نامساعد
- کاربرد در دمای زیر ۶۰ درجه سانتیگراد
- کیفیت و پیراسیون مطابق با استاندارد API
- سطوح ولتاژ فشار ضعیف و متوسط



## Medium-Voltage Drive Compatibility

No drive or motor is perfect for every application or challenge. In addition to our SIMOTICS HV high-voltage motors portfolio, Siemens also offers you the most extensive portfolio of medium-voltage drives from the SINAMICS family that have been crafted to work seamlessly with our high-voltage motors.

A different drive may be required for each motor depending on the operational requirements, motor type selected and any preference of drive technology. This table should provide you with a basic view of which drives and motors are compatible.

SINAMICS Medium-Voltage Drives	SIMOTICS HV C	SIMOTICS HV Series H-compact	SIMOTICS HV M	SIMOTICS HV M Slipping motors	SIMOTICS HV Series A-compact PLUS	SIMOTICS HV HP	SIMOTICS HV Specialized	SIMOTICS HV ANEMA
SINAMICS PERFECT HARMONY GH180	●	●	●	●	●	●	●	●
SINAMICS PERFECT HARMONY GH150	●	●	●	●	●	●	●	●
SINAMICS GM150	●	●	●	●	●	●	●	●
SINAMICS GL150	●	●	●	●	●	●	●	●
SINAMICS SM120 CM	●	●	●	●	●	●	●	●
SINAMICS SM150	●	●	●	●	●	●	●	●
SINAMICS SL150	●	●	●	●	●	●	●	●



## Application Compatibility

Below you will find many of our most commonly supported applications, but we are experienced and able to support numerous other low- and medium-voltage applications that are not listed here.

Motor capabilities can differ based on their configurations and the options selected so there may be exceptions to the suitability of the motor assignments listed here.

	SIMOTICS HV C	SIMOTICS HV Series H-compact	SIMOTICS HV M	SIMOTICS HV M Slipping motors	SIMOTICS HV Series A-compact PLUS	SIMOTICS HV HP	SIMOTICS HV Specialized	SIMOTICS HV ANEMA
Pumps	●	●	●	●	●	●	●	●
Fans	●	●	●	●	●	●	●	●
Blowers	●	●	●	●	●	●	●	●
Compressors	●	●	●	●	●	●	●	●
Extruders	●	●	●	●	●	●	●	●
Agitators / mixers	●	●	●	●	●	●	●	●
Crushers	●	●	●	●	●	●	●	●
Mills	●	●	●	●	●	●	●	●
Gearless mills	●	●	●	●	●	●	●	●
Excavators	●	●	●	●	●	●	●	●
Conveyors	●	●	●	●	●	●	●	●
Refiners	●	●	●	●	●	●	●	●
Winders	●	●	●	●	●	●	●	●
Kilns	●	●	●	●	●	●	●	●
Rolling mills	●	●	●	●	●	●	●	●
Main propulsion	●	●	●	●	●	●	●	●
Thrusters	●	●	●	●	●	●	●	●
Winches	●	●	●	●	●	●	●	●
Boiler fed pumps	●	●	●	●	●	●	●	●
Large ID fans	●	●	●	●	●	●	●	●
Large ICCC compressors	●	●	●	●	●	●	●	●
Blast furnace blowers	●	●	●	●	●	●	●	●
Injection pumps	●	●	●	●	●	●	●	●
Mine winders	●	●	●	●	●	●	●	●
High-speed compressor drives	●	●	●	●	●	●	●	●
Reciprocating compressors	●	●	●	●	●	●	●	●
LNG starter / helper	●	●	●	●	●	●	●	●

Technical Specifications	Compact motors		Modular motors			High-power motors		
	SIMOTICS HV C	SIMOTICS HV Series H-compact	SIMOTICS HV M	SIMOTICS HV M Slipping motors	SIMOTICS HV Series A-compact PLUS	SIMOTICS HV HP	SIMOTICS HV Specialized	SIMOTICS HV ANEMA
<b>Type of motor</b>	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous	Asynchronous/Synchronous	Asynchronous/Synchronous	Asynchronous
<b>Power range</b>	0.15 – 3.2 MW (tube cooled up to 7.1 MW)	0.15 – 2.2 MW	0.5 – 29 MW	0.315 – 4.5 MW	0.25 – 7.35 MW	1.8 – 70	1 – 100 MW and more	200 – 18,000 HP
<b>Voltage range</b>	0.38 – 11 kV	0.38 – 11 kV	0.38 – 13.8 kV	3 – 11 kV	0.675 – 11 kV	3.3 – 13.8 kV	13.8 kV	0.38 – 13.8 kV
<b>Frequency</b>	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
<b>Shaft height</b>	315 – 560 mm (tube cooled 710 – 900 mm)	315 – 560 mm	450 – 900 mm	355 – 630 mm	315 – 630 mm	900 – 1,600 mm	on request	630 – 710 mm and frame size 449 – 800 inch
<b>Number of poles</b>	2 – 8	2 – 12	2 – 12	4 – 8	2 – 16	2 – 16	on request	2 – 16
<b>Speed</b>	up to 3,600 rpm (higher on request)	up to 3,600 rpm	up to 4,800 rpm (higher on request)	up to 1,800 rpm	up to 3,600 rpm	up to 3,600 rpm (higher on request)	16,000 rpm	up to 3,600 rpm
<b>Torque</b>	up to 24 kNm (tube cooled up to 45 kNm)	up to 16 kNm	up to 201 kNm	up to 43 kNm	up to 60 kNm	up to 700 kNm	40,000 kNm	up to 80 kNm
<b>Enclosure</b>	Cast iron, welded steel	Cast iron	Cast iron, welded steel	Cast iron	Cast iron	Welded steel	Welded steel	Cast iron, welded steel
<b>Bearings</b>	Antifriction bearings, Sleeve bearings	Antifriction bearings, Sleeve bearings	Antifriction bearings, Sleeve bearings	Antifriction bearings	Antifriction bearings, Sleeve bearings	Sleeve bearings	Antifriction bearings, Sleeve bearings, Magnetic bearings	Antifriction bearings, Sleeve bearings
<b>Cooling type</b>	IC411, IC415, IC71W (tube cooled: IC511, IC516)	IC411, IC416	IC611, IC616, IC666, IC81W, IC86W, IC01	IC611, IC616	IC611, IC616, IC81W, IC86W, IC01	IC81W, IC86W, IC616, IC666, IC01, IC31, WPII	IC86W, IC81W, IC616, IC37, IC75W	IC01, IC411, IC416, IC71W, IC81W, IC86W, IC611, IC616, IC666
<b>Type of construction</b>	IMB3, IMB35, IMV1	IMB3, IMB35, IMV1	IMB3, IMV1	IMB3	IMB3, IMB35, IMV1	IM1001, IM1101, IM1205, IM1305	on request	IMB3, IMB35, IMV1
<b>Degree of protection</b>	IP55, IP56, IP65, IP66	IP55, IP56, IP65	IP23, IP55, IP56 nonheavy sea	IP55	IP23, IP24W, IP55	IP54, IP55, IP56	IP23 – IP56	IP23, IP24, IP24W, IP54, IP55
<b>Explosion protection</b>	Ex db, Ex db eb, Ex ec, Ex tc	Ex ec, Ex tc	Ex pxb, Ex pzc, Ex ec	–	Ex ec	Ex pxb, Ex pzc, Ex ec, CL I Div.2	Ex pxb, Ex pzc, Ex ec	Ex pxb, Ex pzc, Ex ec
<b>Basic standards</b>	IEC, EN	IEC, EN	IEC, EN	IEC	IEC, EN	IEC, EN, NEMA	IEC, EN, NEMA	NEMA
<b>Efficiency</b>	up to 97.8%	up to 97.3%	up to 98%	up to 96.7%	up to 97.5%	up to 98.8%	up to 98% and more	up to 98%
<b>Certifications</b>	UL, CSA, EAC, CCC, CE/ATEX, IEXEx	UL, CSA, EAC, CCC, CE/ATEX, IEXEx	UL, CSA, EAC, CCC, CE/ATEX, IEXEx	UL, CSA, EAC, CCC, CE/ATEX, IEXEx	UL, CSA, EAC, CCC, CE/ATEX, IEXEx	UL, CSA, EAC, CCC, CE/ATEX, IEXEx	UL, CSA, EAC, CCC, CE/ATEX, IEXEx	UL, CSA, EAC, CCC, CE/ATEX, IEXEx
<b>Features</b>	SIMOTICS HV C	SIMOTICS HV Series H-compact	SIMOTICS HV M	SIMOTICS HV M Slipping motors	SIMOTICS HV Series A-compact PLUS	SIMOTICS HV HP	SIMOTICS HV Specialized	SIMOTICS HV ANEMA
<b>Differentiating Features</b>	<ul style="list-style-type: none"> <li>Revolutionary cooling concept</li> <li>Best-in-class power density</li> <li>Highest degree of flexibility</li> </ul>	<ul style="list-style-type: none"> <li>High degree of standardization</li> <li>Huge installed base</li> <li>Sleeve bearings over the whole range available</li> </ul>	<ul style="list-style-type: none"> <li>High performance with low operating costs</li> <li>High power density for a wide range of applications</li> <li>Optimized for converter operation</li> </ul>	<ul style="list-style-type: none"> <li>Designed for heavy starting under rough ambient conditions</li> <li>Perfect for cement and mining applications</li> <li>Competitive slipping design</li> </ul>	<ul style="list-style-type: none"> <li>Focused on the essentials</li> <li>Proven quality</li> <li>Flexible and robust design</li> </ul>	<ul style="list-style-type: none"> <li>Extremely flexible concept</li> <li>Maximum quality and availability</li> <li>Efficiency close to 99%</li> </ul>	<ul style="list-style-type: none"> <li>Customer-specific design</li> <li>Tailor-made according to customer requirements</li> <li>High speed up to 15,900 rpm in the Megawatt range</li> </ul>	<ul style="list-style-type: none"> <li>Specific for NEMA standard</li> <li>High performance design</li> <li>API standard designs</li> </ul>

Features	SIMOTICS HV C	SIMOTICS HV Series H-compact	SIMOTICS HV M	SIMOTICS HV M Slipring motors	SIMOTICS HV Series A-compact PLUS	SIMOTICS HV HP	SIMOTICS HV Specialized	SIMOTICS HV ANEMA
Differentiating Features	+ Revolutionary cooling concept	+ High degree of standardization	+ High performance with low operating costs	+ Designed for heavy starting under rough ambient conditions	+ Focused on the essentials	+ Extremely flexible concept	+ Customer-specific design	+ Specific for NEMA standard
	+ Best-in-class power density	+ Huge installed base	+ High power density for a wide range of applications	+ Perfect for cement and mining applications	+ Proven quality	+ Maximum quality and availability	+ Tailor-made according to customer requirements	+ High performance design
	+ Highest degree of flexibility	+ Sleeve bearings over the whole range available	+ Optimized for converter operation	+ Competitive slipring design	+ Flexible and robust design	+ Efficiency close to 99%	+ High speed up to 15,900 rpm in the Megawatt range	+ API standard designs



## جدول سازگاری درایوهای فشار متوسط:

هر مدل درایو یا الکتروموتور برای هر کاربردی مناسب نمی باشد و باید مواردی چون قابلیت های درایو، نوع الکتروموتور، سطح ولتاژ شبکه و ... مد نظر قرار بگیرد شرکت زیمنس برای کنترل و راه اندازی موتورهای SIMOTICS HV درایوهای خانواده SINAMICS را پیشنهاد می کند که شرکت سیمی نصر ماد توانایی تامین انواع درایوهای خانواده SINAMICS را دارد.

SINAMICS Medium-Voltage Drives	SIMOTICS HV C	SIMOTICS HV Series H-compact	SIMOTICS HV M	SIMOTICS HV Series A-compact PLUS	SIMOTICS HV HP	SIMOTICS HV Specialized	SIMOTICS HV ANEMA
SINAMICS PERFECT HARMONY GH180	●	●	●	●	●	●	●
SINAMICS PERFECT HARMONY GH150			●		●	●	●
SINAMICS GM150	●	●	●		●	●	●
SINAMICS GL150					●	●	●
SINAMICS SM120 CM	●	●	●		●	●	●
SINAMICS SM150	●	●	●		●	●	●
SINAMICS SL150					●	●	●

## جدول سازگاری با کاربری های مختلف:

	SIMOTICS HV C	SIMOTICS HV Series H-compact	SIMOTICS HV M	SIMOTICS HV M Slipring motors	SIMOTICS HV Series A-compact PLUS	SIMOTICS HV HP	SIMOTICS HV Specialized	SIMOTICS HV ANEMA
Pumps	●	●	●	●	●	●	●	●
Fans	●	●	●	●	●	●	●	●
Blowers	●	●	●		●	●	●	●
Compressors	●	●	●		●	●	●	●
Extruders	●	●	●			●		●
Agitators / mixers	●	●	●					●
Crushers	●	●	●	●				●
Mills	●	●	●	●	●		●	●
Gearless mills							●	
Excavators	●	●	●				●	
Conveyors	●	●	●	●	●		●	●
Refiners	●	●	●			●		●
Winders	●	●						●
Kilns	●	●	●					●
Rolling mills	●	●	●				●	
Main propulsion			●	●	●			●
Thrusters	●	●	●	●	●			●
Winches	●	●						●
Boiler fed pumps			●			●	●	●
Large ID fans			●			●		●
Large IGCC compressors			●			●	●	●
Blast furnace blowers						●	●	
Injection pumps						●	●	
Mine winders							●	
High-speed compressor drives							●	
Reciprocating compressors	●		●					
LNG starter / helper							●	

