

# service & SUPPORT

**Front Connector Selection for the different  
SIMATIC S7-300 Modules**

**SIEMENS**

FAQ

## Table of Contents

<b>1</b>	<b>Front Connector Selection for the different SIMATIC S7-300 Modules .....</b>	<b>2</b>
1.1	Available standard front connectors for SIMATIC S7-300 .....	3
1.2	SIMATIC S7-300 digital modules.....	5
1.3	SIMATIC S7-300 analog modules .....	10
1.4	SIMATIC S7-300 compact CPUs.....	14
1.5	SIMATIC S7-300 technology CPUs.....	15
1.6	Further components.....	16
1.7	Technical information on the topic .....	16
<b>2</b>	<b>History .....</b>	<b>16</b>

## 1 Front Connector Selection for the different SIMATIC S7-300 Modules

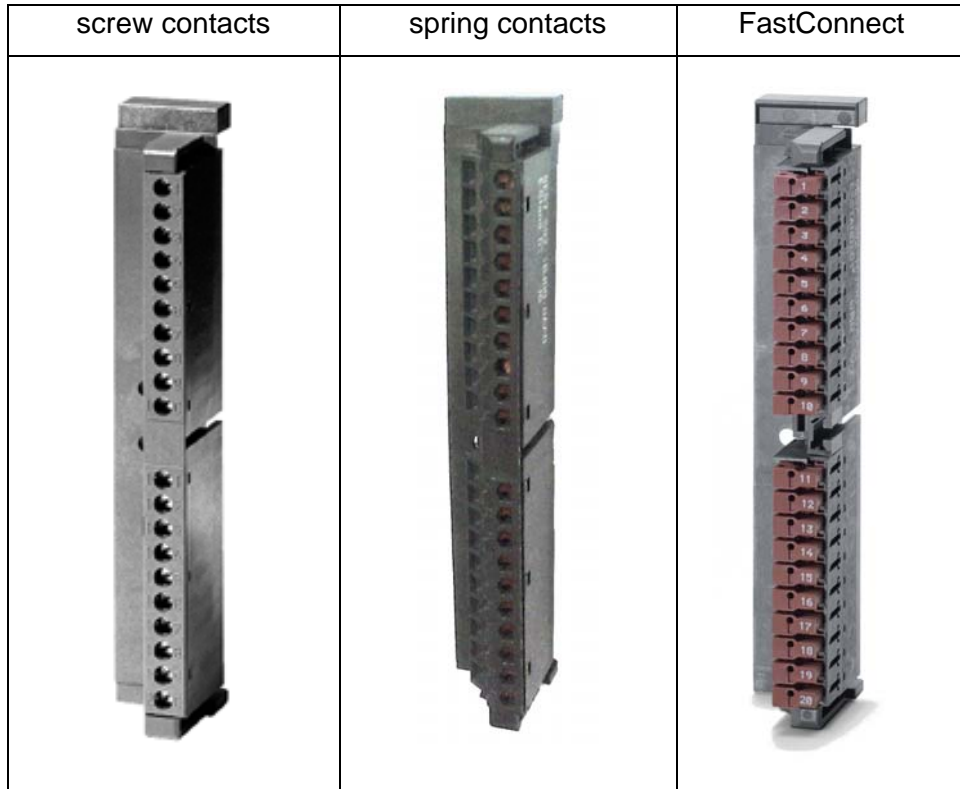
This document provides an overview of the different front connectors for signal modules of the SIMATIC S7-300. The included tables enable the user to quickly decide which front connector is available for a specific signal module. The document can also be used to select the front connectors for the S7-300 compact CPUs and S7-300 technology CPUs (with integrated signal modules).

### Note

For the different analog/digital modules, please refer to tables 2 through 8, the compact CPUs and technology CPUs are listed in tables 9 and 10.

### 1.1 Available standard front connectors for SIMATIC S7-300

Depending on the module, 20-pin or 40-pin front connectors are used. These front connectors are available with ...



The 20pin connectors is shown.

Table 1

	Connection system	Order number ( 1 unit per unit pack )	Order number ( 100 units per unit pack )
<b>20-pin front connector</b> for up to 16 I/O channels.	Screw contacts	6ES7 392-1AJ00-0AA0	6ES7 392-1AJ00-1AB0
	Spring contacts	6ES7 392-1BJ00-0AA0	6ES7 392-1BJ00-1AB0
	FastConnect	6ES7 392-1CJ00-0AA0	-
<b>40-pin front connector</b> for up to 32 I/O channels.	Screw contacts	6ES7 392-1AM00-0AA0	6ES7 392-1AM00-1AB0
	Spring contacts	6ES7 392-1BM01-0AA0	6ES7 392-1BM01-1AB0
	FastConnect	6ES7 392-1CM00-0AA0	-

At the modules with 64 I/Os the signals are connected to a terminal block. The terminal block itself is connected to the I/O module with a system cable.

Due for each I/O module two cables and two terminal blocks are required, there are always 2 units per unit pack.

Tabelle 2

	<b>Order number Kable ( 2 unit per unit pack )</b>	<b>Connection system</b>	<b>Order number Terminal Block ( 2 unit per unit pack )</b>
<b>64-pin front connector</b> for up to 64 I/O channels.	6ES7392-4BB00-0AA0 (1m) 6ES7392-4BC50-0AA0 (2,5m) 6ES7392-4BF00-0AA0 (5m)	Screw contacts	6ES7392-1AN00-0AA0
		Spring contacts	6ES7392-1BN00-0AA0

## 1.2 SIMATIC S7-300 digital modules

Below you find 3 tables containing descriptions of the different SIMATIC S7-300 digital modules with their corresponding front connector versions.

- Table 2 includes the SIMATIC S7-300 digital input modules.
- Table 3 lists the SIMATIC S7-300 digital output modules.
- Table 4 contains the mixed SIMATIC S7-300 digital modules.

Table 2: Digital input modules

Order number	Description	Required front connector version
6ES7 321-1BH02-0AA0	DIGITAL INPUT SM 321, OPTICALLY ISOLATED, 16DI, 24 V DC	20-PIN
6ES7 321-1BH10-0AA0	DIGITAL INPUT SM 321, GALVANICALLY ISOLATED, 16DI, 24 V DC, 0.05 MS INPUT DELAY	20-PIN
6ES7 321-1BH50-0AA0	DIGITAL INPUT SM 321, OPTICALLY ISOLATED 16DI, 24 V DC, SOURCE INPUT	20-PIN
6ES7 321-1BL00-0AA0	DIGITAL INPUT SM 321, OPTICALLY ISOLATED 32DI, 24 V DC	40-PIN
6ES7 321-1CH00-0AA0	DIGITAL INPUT SM 321, OPTICALLY ISOLATED, 16 DI, AC/DC 24 - 48V WITH ONE CHANNEL PER COMMON	40-PIN
6ES7 321-1CH20-0AA0	DIGITAL INPUT SM 321, OPTICALLY ISOLATED, 16 DI, DC 48 - 125V	20-PIN
6ES7 321-1FF01-0AA0	DIGITAL INPUT SM 321, OPTICALLY ISOLATED, 8 DI, 120V/230V AC	20-PIN
6ES7 321-1FF10-0AA0	DIGITAL INPUT SM 321, OPTICALLY ISOLATED, 8 DI, 120V/230V AC, WITH 1 POINT PER COMMON	40-PIN
6ES7 321-1FH00-0AA0	DIGITAL INPUT SM 321, OPTICALLY ISOLATED 16 DI, 120/230V AC	20-PIN
6ES7 321-1EL00-0AA0	DIGITAL INPUT SM 321, OPTICALLY ISOLATED, 32 DI, 120V AC	40-PIN
6ES7 321-7BH01-0AB0	DIGITAL INPUT SM 321, GALVANICALLY ISOLATED, 16 DI, DC 24V, PROCESS INTERRUPT, DIAGNOSTICS, FIT FOR ISOCHRONE MODE	20-PIN

Order number	Description	Required front connector version
6ES7 321-7TH00-0AB0	SM 321 DIGITAL INPUT MODULE, 16 DI, 24V DC, CAPABLE OF DIAGNOSTICS, FOR CONTACTS (CONNECTED/UNCONNECTED), NAMUR SENSOR, 3/4-WIRE-BERO, WITH FLUTTER MONITORING, PULSE LENGTHENING, WIRE BREAK DETECTION, IM 153-2 INTERFACE MODULE REQUIRED	40-PIN
6ES7 321-7RD00-0AB0	DIGITAL INPUT SM 321, OPTICALLY ISOLATED, 4 DI, 24V DC, NAMUR/DIN 19234, F. SIGNALS F HAZARDOUS AREAS, CAPABLE OF DIAGNOST.,PTB-TESTED	20-PIN
6ES7 321-1BP00-0AA0	SIMATIC S7-300 DIGITAL INPUT SM321, OPTICALLY ISOLATED IN GROUPS OF 16, 64 DI,DC 24V, 3MS, SINKING/SOURCING	64-PIN
6AG1 321-1BH02-2AA0	SIPLUS S7-300 SM321: -25 ... +60 DGR C EN50155 CONFORMITY BASED ON 6ES7321-1BH02-0AA0	20-PIN
6AG1 321-1BL00-2AA0	SIPLUS S7-300 SM321: -25 ... +60 DGR C EN50155 CONFORMITY BASED ON 6ES7321-1BL00-0AA0	40-PIN
6AG1 321-1CH20-2AA0	SIPLUS S7-300 SM321: -25 ... +60 DGR C EN50155 CONFORMITY BASED ON 6ES7321-1CH20-0AA0	20-PIN
6AG1 321-1FF01-2AA0	SIPLUS S7-300 SM321: -25 ... +60 DGR C EN50155 CONFORMITY BASED ON 6ES7321-1FF01-0AA0	20-PIN
6AG1 321-7BH01-2AB0	SIPLUS S7-300 SM321: -25 ... +60 DGR C EN50155 CONFORMITY BASED ON 6ES7321-7BH01-0AB0	20-PIN

Table 3: Digital output modules

Order number	Description	Required front connector version
6ES7 322-1BF01-0AA0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 8 DO, 24V DC, 2A	20-PIN
6ES7 322-1BH01-0AA0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 16 DO, 24V DC, 0.5A, SUM OF OUTPUT CURRENTS 4A/GROUP (8A/MODULE)	20-PIN
6ES7 322-1BH10-0AA0	DIGITAL OUTPUT SM 322 HIGH SPEED, GALVANICALLY ISOLATED, 16 DO, 24V DC, 0.5A	20-PIN
6ES7 322-1CF00-0AA0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 8 DO, DC 48-125V, 1.5A	20-PIN
6ES7 322-1HF01-0AA0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 8 DO (RELAY OUTPUTS), 24V DC, 2A OR 230V AC	20-PIN
6ES7 322-1HF10-0AA0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 8 DO (RELAY OUTPUTS), 24V DC, 5A OR 230V AC, 5A, CONNECTOR W.SPRING TERMINAL CAN BE USED FROM 6ES7392-1BM01-0AA0	40-PIN
6ES7 322-1FF01-0AA0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 8 DO, 120/230V AC, 1A	20-PIN
6ES7 322-1FH00-0AA0	DIGITAL OUTPUT SM 321, OPTICALLY ISOLATED 16 DO, 120/230V AC, 1 A	20-PIN
6ES7 322-5FF00-0AB0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 8 DO, 120/230V AC, 2A, WITH 1 POINT PER COMMON AND SELECTABLE FAIL MODE	40-PIN
6ES7 322-1FL00-0AA0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 32 DO, AC 120V/230V, 1A, DOUBLE WIDTH HOUSING	20-PIN (2*)
6ES7 322-1BL00-0AA0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 32 DO, 24V DC, 0.5A, SUM OF OUTPUT CURRENTS 4A/GROUP (16A/MODULE)	40-PIN
6ES7 322-5GH00-0AB0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 16 DO (SOLID STATE RELAY), AC/DC 24 - 48V; 0.5A; 1.5A SURGE CURRENT, ONE CHANNEL PER COMMON	40-PIN
6ES7 322-1HH01-0AA0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED 16DO, RELAY CONTACTS	20-PIN
6ES7 322-8BF00-0AB0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 8 DO, 24V DC, 0.5 A (1 X 8 DO), SHORT-CIRCUIT PROTECTION, DIAGNOSTICS	20-PIN

Order number	Description	Required front connector version
6ES7 322-5HF00-0AB0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 8 DO (RELAY OUTPUTS), 24V DC, 120 - 230V AC, 5A WITH INTEGR. SNUBBER F. IND. LOADS	40-PIN
6ES7 322-8BH01-0AB0	SM 322 DIGITAL OUTPUT MODULE, 16 DO, DC 24 V / 0.5A, CAPABLE OF DIAGNOSTICS, WIRE BREAK DETECTION TO 0 AND 1 SIGNAL, INTERFACE MODULE IM 153-2 NECESSARY	40-PIN
6ES7 322-5RD00-0AB0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 4 DO, 15V / 20MA, FOR SIGNALS FROM HAZARDOUSAREAS CAPABLE OF DIAGNOST., PTB-TESTED	20-PIN
6ES7 322-5SD00-0AB0	DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 4 DO, 24V DC, 10 MA, FOR SIGNALS FROM HAZARDOUSAREAS CAPABLE OF DIAGNOST., PTB-TESTED	20-PIN
6ES7 322-1BP00-0AA0	SIMATIC S7-300 DIGITAL OUTPUT SM322, OPTICALLY ISOLATED IN GROUPS OF 16, 64 DO, DC 24V, 0.3A, (SOURCING) TOTAL CURRENT 2A/GROUP 8A/MODULE	64-PIN
6ES7 322-1BP50-0AA0	SIMATIC S7-300 DIGITAL OUTPUT SM322, OPTICALLY ISOLATED IN GROUPS OF 16, 64DO, DC 24V, 0.3A M-WRITE TOTAL CURRENT 2A/GROUP 8A/MODULE	64-PIN
6AG1 322-1BH01-2AA0	SIPLUS S7-300 SM322: -25 ... +60 DGR C EN50155 CONFORMITY BASED ON 6ES7322-1BH01-0AA0	20-PIN
6AG1 322-1CF00-2AA0	SIPLUS S7-300 SM322: -25 ... +60 DGR C EN50155 CONFORMITY BASED ON 6ES7322-1CF00-0AA0	20-PIN
6AG1 322-1FF01-2AA0	SIPLUS S7-300 SM322: -25 ... +60 DGR C EN50155 CONFORMITY BASED ON 6ES7322-1FF01-0AA0	20-PIN
6AG1 322-1HF10-2AA0	SIPLUS S7-300 SM322: -25 ... +60 DGR C BASED ON 6ES7322-1HF10-0AA0	40-PIN
6AG1 322-8BF00-2AB0	SIPLUS S7-300 SM322: -25 ... +60 DGR C EN50155 CONFORMITY BASED ON 6ES7322-8BF00-0AB0	20-PIN

(2\*) = the necessary front connector version is required twice.



Table 4: Mixed digital modules

Order number	Description	Required front connector version
6ES7 323-1BL00-0AA0	DIGITAL MODULE SM 323, OPTICALLY ISOLATED, 16 DI AND 16 DO, 24V DC, 0.5A, AGGREGATE CURRENT 4A	40-PIN
6ES7 323-1BH01-0AA0	DIGITAL MODULE SM 323, OPTICALLY ISOLATED, 8 DI AND 8 DO, 24V DC, 0.5A AGGREGATE CURRENT 2A	20-PIN
6ES7 327-1BH00-0AB0	DIGITAL MODULE SM 327, OPTICALLY ISOLATED, 8 DI AND 8 DX, 24V DC, 0.5A, 8DX CHANNELWISE PROGRAMMABLE AS DI OR DO	20-PIN
6AG1 323-1BH01-2AA0	SIPLUS S7-300 SM323: -25 ... +60 DGR C EN50155 CONFORMITY BASED ON 6ES7323-1BH01-0AA0	20-PIN

## 1.3 SIMATIC S7-300 analog modules

Below you find 4 tables containing descriptions of the different SIMATIC S7-300 analog modules with their respective front connector versions.

- Table 5 includes the SIMATIC S7-300 analog input modules.
- Table 6 lists the SIMATIC S7-300 analog output modules.
- Table 7 contains the mixed SIMATIC S7-300 analog modules.
- Table 8 includes a position decoder module.

Table 5: Analog input modules

Order number	Description	Required front connector version
6ES7 331-1KF01-0AB0	ANALOG INPUT SM 331, OPTICALLY ISOLATED, 8 AI, 13 BIT RESOLUTION, U/I/RESISTANCE/PT100, NI100, NI1000, LG-NI1000, 66 MS MODULE UPDATE	40-PIN
6ES7 331-7KF02-0AB0	ANALOG INPUT SM 331, OPTICALLY ISOLATED, U/I/THERMOCOUPLE/RESISTANCE INTERRUPT, DIAGNOSTICS; RESOLUTION 9/12/14 BITS, 8AI, REMOVE/INSERT W. BACKPLANE BUS	20-PIN
6ES7 331-7KB02-0AB0	ANALOG INPUT SM 331, OPTICALLY ISOLATED, 2 AI, 9/12/14 BITS RESOLUTION, U/I/THERMOCOUPLE/RESISTANCE, INTERRUPT, DIAGNOSTICS, REMOVE/INSERT W. BACKPLANE BUS	20-PIN
6ES7 331-7NF00-0AB0	ANALOG INPUT SM 331, OPTICALLY ISOLATED, 8 AI; +/-5/10V, 1-5 V, +/-20MA, 0/4 TO 20MA, 16 BIT (55 MS), 1 COMMON POINT(50 V COM.)	40-PIN
6ES7 331-7NF10-0AB0	ANALOG INPUT SM 331, OPTICALLY ISOLATED, 8 AI; +/-5/10V, 1-5 V, +/-20MA, 0/4 TO 20MA, 16 BIT, 1 COMMON POINT (60 V COM.), 4 CHANNEL MODE: 10 MS, 8 CHANNEL MODE: 23-95 MS	40-PIN
6ES7 331-7PF01-0AB0	ANALOG INPUT SM 331, OPT. ISOL., 2/3/4 WIRE, 8AI, RESISTANCE, PT100/200/1000 NI100/120/200/500/1000, CU10, PLUS CHARACTERISTICS ACCORDING TO GOST STANDARD 16 (INTERN 24) BIT, 50MS	40-PIN

Order number	Description	Required front connector version
6ES7 331-7PF11-0AB0	ANALOG INPUT SM 331, OPTICALLY ISOLATED, 8 AI THERMOCOUPLE, TYPE B, E, J, K, L, N, R, S, T TXK/TXK(L) ACCORDING TO GOST 16 BIT, 50 MS	40-PIN
6ES7 331-7HF01-0AB0	ANALOG INPUT SM 331, GALVANICALLY ISOLATED, 8 AI, 14 BIT, 0.052MS/CHANNEL, CURRENT, VOLTAGE, INTERRUPTS, DIAGNOSTICS, FIT FOR ISOCHRON MODE IMPROVED DP-CYCLE TIME FOR ISOCHRON MODE	20-PIN
6ES7 331-7TF00-0AB0	ANALOG INPUT SM 331, 8AI, 0/4 - 20MA HART, FOR ET200M WITH IM 153-2 INTERFACE MODULE	20-PIN
6ES7 331-7RD00-0AB0	ANALOG INPUT SM 331, OPTICALLY ISOLATED, 4 AI, 0/4 UP TO 20 MA, 20 PIN, F. SIGNALS F. HAZARDOUS AREAS, CAPABLE OF DIAGNOST., PTB-TESTED	20-PIN
6ES7 331-7SF00-0AB0	ANALOG INPUT SM 331, OPTICALLY ISOLATED, 8 AI THERMOCOUPLE/4 AI PT100, F. SIGNALS F. HAZARDOUS AREAS, CAPABLE OF DIAGNOST., PTB-TESTED	20-PIN
6ES7 331-7TB00-0AB0	HART ANALOG INPUT SM 331, 2 AI, 0/4 - 20MA HART, FOR ET200M WITH IM153-2	20-PIN
6AG1 331-7KB02-2AB0	SIPLUS S7-300 SM331: -25 ... +60 DGR C BASED ON 6ES7331-7KB02-0AB0	20-PIN
6AG1 331-7KF02-2AB0	SIPLUS SM331: -25 ... +60 DGR C BASED ON 6ES7331-7KF02-0AB0	20-PIN
6AG1 331-7NF00-2AB0	SIPLUS SM331: -25 ... +60 DGR C BASED ON 6ES7331-7NF00-0AB0	40-PIN
6AG1 331-7NF10-2AB0	SIPLUS SM331 – 8AI: -25 ... +60 DGR C BASED ON 6ES7331-7NF10-0AB0	40-PIN
6AG1 331-7PF01-2AB0	SIPLUS SM331 8AI: -25 ... +60 DGR C BASED ON 6ES7331-7PF01-0AB0	40-PIN
6AG1 331-7TB00-4AB0	SIPLUS S7-300 EM321 HART FOR MEDIAL STRESS BASED ON 6ES7331-7TB00-0AB0	20-PIN

Table 6: Analog output modules

Order number	Description	Required front connector version
6ES7 332-5HD01-0AB0	ANALOG OUTPUT SM 332, OPTICALLY ISOLATED, 4 AO, U/I; DIAGNOSTICS; RESOLUTION 11/12 BITS, REMOVE/INSERT W. ACTIVE BACKPLANE BUS	20-PIN
6ES7 332-5HB01-0AB0	ANALOG OUTPUT SM 332, OPTICALLY ISOLATED, 2 AO, U/I; 11/12 BITS RESOL., REMOVE/INSERT WITH ACTIVE BACKPLANE BUS	20-PIN
6ES7 332-5HF00-0AB0	ANALOG OUTPUT SM 332, OPTICALLY ISOLATED, 8 AO, U/I; DIAGNOSTICS; RESOLUTION 11/12 BITS, REMOVE/INSERT W. ACTIVE BACKPLANE BUS	40-PIN
6ES7 332-7ND02-0AB0	SM 332 ANALOG OUTPUT CHANNEL TO CHANNEL ISOLATION, 4 AO, 16 BIT RESOLUTION, 0-10V, 1-5V, +/-10V, +/-20MA, 0/4 - 20MA, 20 PIN, FIT FOR ISOCHRON MODE IMPROVED DP-CYCLE TIME FOR ISOCHRON MODE	20-PIN
6ES7 332-8TF00-0AB0	ANALOG OUTPUT SM 332, 8AO, 0/4 - 20MA HART, FOR ET200M WITH IM 153-2 INTERFACE MODULE	20-PIN
6ES7 332-5RD00-0AB0	ANALOG OUTPUT SM 332, OPTICALLY ISOLATED, 4 AO, 0/4 UP TO 20 MA, FOR SIGNALS FROM HAZARDOUS AREAS CAPABLE OF DIANOST., PTB-TESTED	20-PIN
6ES7 332-5TB00-0AB0	HART ANALOG OUTPUT SM 332, 2AO, 0/4 - 20MA HART, FOR ET200M WITH IM153-2	20-PIN
6AG1 332-5HB01-2AB0	SIPLUS S7-300 SM332: -25 ... +60 DGR C EN50155 CONFORMITY BASED ON 6ES7332-5HB01-0AB0	20-PIN
6AG1 332-5HF00-2AB0	SIPLUS SM332: -25 ... +60 DGR C BASED ON 6ES7332-5HF00-0AB0	40-PIN

Table 7: Mixed analog modules

Order number	Description	Required front connector version
6ES7 334-0CE01-0AA0	ANALOG INPUT/OUTPUT SM 334, NON-ISOLATED, 4 AI/2 AO, 20-PIN, REMOVE AND INSERT WITH BACKPLANE BUS	20-PIN
6ES7 334-0KE00-0AB0	ANALOG MODULE SM 334, OPTICALLY ISOLATED, 4AI/2AO, 12 BIT, 0-10V F. PT100 (CLIMAT RANGE -120 - 155 DEGR.) AND 10 KOHM MEASURING RANGE	20-PIN
6AG1 334-0KE00-2AB0	SIPLUS S7-300 SM334: -25 ... +60 DGR C BASED ON 6ES7334-0KE00-0AB0	20-PIN
6ES7335-7HG01-0AB0	ANALOG MODULE SM 335, OPTICALLY ISOLATED U/I; DIAGNOSTICS; INTERRUPT, 4 AI 14 BIT RESOL., 4 AO 11/12 BIT	20-PIN

Table 8: Position decoder module

Order number	Description	Required front connector version
6ES7338-4BC01-0AB0	SIGNAL. MODULE FOR 3 SSI SENSORS FOR READ-IN OF POSITIONING VALUE WITH 2 FREEZE INPUTS , 20 PIN SUPPORTS ISOCHRONIE MODE	20-PIN

### 1.4 SIMATIC S7-300 compact CPUs

Below you find the different SIMATIC S7-300 compact CPUs and a technology CPU with integrated signal modules and their corresponding front connector versions.

Table 9: SIMATIC S7-300 compact controllers

Order number	Description	Required front connector version
6ES7 312-5BD01-0AB0 6ES7 312-5BE03-0AB0	CPU 312C, 10 DI/6 DO, 2 FAST COUNTERS (10 KHZ), INTEGRATED 24V DC POWER SUPPLY	40-PIN
6ES7 313-5BE01-0AB0 6ES7 313-5BF03-0AB0	CPU 313C, 24 DI/16 DO, 4AI, 2AO 1 PT100, 3 FAST COUNTERS (30 KHZ), INTEGRATED 24V DC POWER SUPPLY	40-PIN (2*)
6ES7 313-6BE01-0AB0 6ES7 313-6BF03-0AB0	CPU 313C-2 PTP, 16 DI/16 DO, 3 FAST COUNTERS (30 KHZ), INTEGRATED INTERFACE RS485, INTEGRATED 24V DC POWER SUPPLY	40-PIN
6ES7 313-6CE01-0AB0 6ES7 313-6CF03-0AB0	CPU 313C-2DP, 16 DI/16 DO, 3 FAST COUNTERS (30 KHZ), INTEGRATED DP INTERFACE, INTEGRATED 24V DC POWER SUPPLY	40-PIN
6ES7 314-6BF01-0AB0 6ES7 314-6BF02-0AB0 6ES7 314-6BG03-0AB0	CPU 314C-2 PTP, DI24/DO16; AI5/AO2 INTEGRATED; 4 PULSE OUTPUTS (2.5 KHZ); 4 CHANNEL COUNTING AND MEASURING WITH INCREMENTAL ENCODERS 24V (60 KHZ); INTEGRATED POSITIONING FUNCTION; MPI + PTP CONNECTOR (RS422/485 (ASCII, 3964(R), RK512	40-PIN (2*)
6ES7 314-6CF01-0AB0 6ES7 314-6CF02-0AB0 6ES7 314-6CG03-0AB0	CPU 314C-2DP, 24 DI/16 DO, 4AI, 2AO, 1 PT100, 4 FAST COUNTERS (60 KHZ), INTEGRATED DP INTERFACE, INTEGRATED 24V DC POWER SUPPLY	40-PIN (2*)
6AG1 312-5BD01-2AB0 6AG1 312-5BE03-2AB0	SIPLUS S7-300 CPU312C (32KB) -25 ... +60 DEGREES C BASED ON 6ES7 312-5BD01-0AB0 or 6ES7 312 5BE03-0AB0	40-PIN
6AG1 313-5BE01-2AB0 6AG1 313-5BF03-2AB0	SIPLUS S7-300 CPU 313C -25 ... +60 DEGREES C BASED ON 6ES7 313-5BE01-0AB0 or 6ES7 313-5BF03-0AB0	40-PIN
6AG1 313-6CE01-2AB0 6AG1 313-6CF03-2AB0	SIPLUS S7-300 CPU313C-2DP -25 ... +60 DEGREES C BASED ON 6ES7 313-6CE01-2AB0 or 6ES7 313-6CF03-0AB0	40-PIN

Order number	Description	Required front connector version
6AG1 314-6CF02-2AB0 6AG1 314-6CG03-2AB0	SIPLUS S7-300 CPU 314C-2DP -25 ... +60 DEGREES C BASED ON 6ES7 314-6CF02-0AB0 or 6ES7 314-6CG03-0AB0	40-PIN (2*)

(2\*) = the necessary front connector version is required twice.

### 1.5 SIMATIC S7-300 technology CPUs

The following table lists the technology CPUs and their respective front connector versions.

Table 10: SIMATIC S7-300 technology CPU

Order number	Description	Required front connector version
6ES7315-6TH13-0AB0 6ES7315-6TG10-0AB0	CPU 315T-2 DP, CENTRAL PROCESSING UNIT FOR PLC AND TECHNOLOGY, 1 <sup>st</sup> INTERFACE MPI/DP 12MBIT/S, 2 <sup>ND</sup> INTERFACE DP(DRIVE), INTEGRATED I/O	40-PIN
6ES7317-6TK13-0AB0 6ES7317-6TJ10-0AB0	CPU 317T-2 DP, CENTRAL PROCESSING UNIT FOR PLC AND TECHNOLOGY, 1 <sup>st</sup> INTERFACE MPI/DP 12MBIT/S, 2 <sup>ND</sup> INTERFACE DP(DRIVE), INTEGRATED I/O	40-PIN

### 1.6 Further components

The raised front door (6ES7 328-0AA00-7AA0) is available for the S7-300 I/O modules with 40-pin front connector.

See also <http://support.automation.siemens.com/WW/view/en/29073068>

Machine-printable labeling sheets for I/O modules of the SIMATIC S7-300 and S7-400, including FMs, allow professional and convenient machine labeling of SIMATIC modules using standard laser printers.

S7-300: <http://support.automation.siemens.com/WW/view/en/11978022>

S7-400: <http://support.automation.siemens.com/WW/view/en/11765788>

In addition, front connectors for fully modular connection are available. These front connectors allow you to connect connection modules via one or two ribbon cable connectors, for example SIMATIC TOP connect. For information on fully modular connection, please refer to chapter 4 of the ST 70 product catalog:

[http://www.siemens.com/automation/salesmaterial-as/catalog/en/st70\\_n\\_e.pdf](http://www.siemens.com/automation/salesmaterial-as/catalog/en/st70_n_e.pdf)

See also <http://support.automation.siemens.com/WW/view/en/10805804/133200>

### 1.7 Technical information on the topic

- For wiring front connectors, please refer to chapter 6.5
- For labeling, please refer to chapter 6.7
- For grounding (shield connecting element), please refer to chapter 6.8

in the S7-300 CPU 31xC and CPU 31x: Installation manual:

<http://support.automation.siemens.com/WW/view/en/13008499>

## 2 History

Tabelle 2-1 History

Version	Date	Changes
V1.0	11.09.2008	First issue
V2.0	15.10.2008	Actualization and 64 channel connectors added