

VIPA System 300S - The High-Speed control system



The VIPA System 300S is - with SPEED7 technology - the fastest control system programmable with STEP[®]7 from Siemens. The maximum possible memory capacity for program and data is already integrated into the SPEED7-CPU. Thereby operating the CPUs is possible without any additional memory cards. It is possible to extend the working memory up to 2MByte or 8MByte with the VIPA MemoryConfigurationCard, if required. The System 300S-CPU's have an Ethernet interface for PG-/OP-communication as a standard. Depending on the CPU version a CP 343 for communication via Ethernet is integrated. Due to its very high performance and scalable memory the System 300S is suitable for mid to highest performance areas.



High-speed control system programmable with STEP[®]7 from Siemens

Features VIPA System 300S:

- Programmable with Step[®]7 from Siemens
- High-Speed-CPU's (see diagram)
- Integrated work memory - operation without additional memory card possible!
- Flexible work memory, expandable by inserting a MemoryConfigurationCard
- Integrated accumulator-backed RAM memory
- Supporting standard MMC cards for saving of program and data
- Speed-Bus for the expansion with High-Speed signal modules and communication processors
- Ethernet, Profibus-DP and MIP-Interface on board
- Designed like S7-300[®] from Siemens
- MMC Slot
- Real-time clock
- Synchronous use of VIPA and Siemens modules possible
- Centralised and decentralised use possible
- Modular expandable
- Centralized application with up to 32 modules directly at the CPU possible
- 24 months warranty
- UL-standard certification



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POWER SUPPLY



Fig.: 307-1BA00

Models:

- 307-1FB70 PS 307 with DC 24V 6...12A
- 307-1BA00 PS 307 with AC 100/240V, DC 24V, 2,5A

CPUs WITH SPEED7-TECHNOLOGY



Fig.: 314-6CF01

Models:

- 314-6BF01 CPU 314ST/PtP, 128kByte, expandable up to 2MByte work memory, (50% program/50% data), DI 8...16xDC 24V alarm capable DO 8...0xDC 24V, 0,5A, AI 4x12Bit, AO 2x12Bit, 1xPt100, 4 counter (100 kHz)
- 314-6CF01 CPU 314ST/DPM, 128kByte, expandable up to 2MByte work memory, (50% program/50% data), DI 8...16xDC 24V alarm capable DO 8...0xDC 24V, 0,5A, AI 4x12Bit, AO 2x12Bit, 1xPt100, 4 counter (100 kHz)
- 315-2AG10 CPU 315SB/DPM, 256kByte, expandable up to 2MByte work memory, (50% program/50% data), Ethernet-Interface for PG/OP-Communication, Profibus DP-Master
- 315-4NE11 CPU 315SN/NET, 256kByte, expandable up to 2MByte work memory, (50% program/50% data), Ethernet-Interface for PG/OP-Communication, Profibus DP-Master
- 317-2AJ11 CPU 317SE/DPM, 512kByte, expandable up to 8MByte work memory, (50% program/50% data), SPEED-Bus, Ethernet-Interface for PG/OP-Communication, Profibus DP-Master
- 317-4NE11 CPU 317SN/NET, 512kByte, expandable up to 8MByte work memory, (50% program/50% data), SPEED-Bus, Ethernet-Interface for PG/OP-Communication, Profibus DP-Master

DIGITAL INPUT MODULES



Fig.: 321-1BH01

Models:

- 321-1BH01 SM 321 with DI 16xDC 24V
- 321-1BL00 SM 321 with DI 32xDC 24V

DIGITAL INPUT MODULES SPEED-BUS



Fig.: 321-1BH70

Models:

- 321-1BH70 SM 321S with DI 16xDC 24V, parameterizable 2,56µs. 80ms
- 322-1BH70 SM 322S with DO 16xDC 24V, 0,5 A, 100kHz
- 323-1BH70 SM 323S DIO 16xDC 24V, 0,5A, DI parameterizable 2,56µs...80ms, DO 100kHz

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DIGITAL OUTPUT MODULES



Fig.: 322-1BH01

Models:

322-1BF01 SM 322 with DO 8xDC 24V, 2A
 322-1BH01 SM 322 with DO 16xDC 24V, 1A
 322-1BH41 SM 322 with DO 16xDC 24V, 2A
 322-1BL00 SM 322 with DO 32xDC 24V, 1A
 322-1HH00 SM 322 with DO 16xRelais, DC24V/AC 230V, 5A

DIGITAL OUTPUT MODULES SPEED-BUS



Fig.: 322-1BH01

Models:

322-1BF01 SM 322 with DO 8xDC 24V, 2A
 322-1BH01 SM 322 with DO 16xDC 24V, 1A
 322-1BH41 SM 322 with DO 16xDC 24V, 2A
 322-1BL00 SM 322 with DO 32xDC 24V, 1A
 322-1HH00 SM 322 with DO 16xRelais, DC24V/AC 230V, 5A

DIGITAL IN-/OUTPUT MODULES



Fig.: 323-1BL00

Models:

323-1BH00 SM 323 DIO 16xDC 24V, 1A
 323-1BL00 SM 323 DO 16xDC 24V, DO 16xDC 24V, 1A

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ANALOG INPUT MODULES



Fig.: 331-7KB01

Models:

- 331-1KF01 SM 331 with AI 8x13Bit, U/I/R/Pt/Ni100, Ni1000, 40 pol.
- 331-7KB01 SM 331 with AI 2x12Bit, Multiinput, U/I/R, Thermo, Pt/Ni100
- 331-7KF01 SM 331 with AI 8x12Bit, Multiinput, U/I/R, Thermo, Pt/Ni100

ANALOG INPUT MODULES SPEED-BUS



Fig.: 331-7AF70

Models:

- 331-7AF70 SM 331S with AI 8x16Bit, 0/4...20mA, 62,5µs per channel parameterizable, 32kByte Cache memory per channel to Trigger
- 331-7BF70 SM 331S with AI 8x16Bit, +/-10V, 62,5µs per channel parameterizable, 64kByte Cache memory per channel to Trigger

ANALOG OUTPUT MODULES



Fig.: 332-5HB01

Models:

- 332-5HB01 SM 332 with AO 2x12Bit, U/I
- 332-5HD01 SM 332 with AO 4x12Bit, U/I

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FUNCTION MODULES

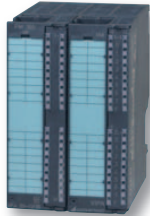


Fig.: 355-4SFoo

Models:

- 355-3SDoo FM 355 with 4 channels, U/I-measurement inputs
- 355-3SD1o FM 355 with 4 channels, Thermoelement/Pt100-measurement inputs
- 355-3SFoo FM 355 with 8 channels, U/I-measurement inputs
- 355-3SF1o FM 355 with 8 channels, Thermoelement/Pt100-measurement inputs
- 355-4SDoo FM 355 with 4 channels with output 8x DIO DC 24V, 0,5A, U/I-measurement inputs
- 355-4SD1o FM 355 with 4 channels with output 8x DIO DC 24V, 0,5A, Thermoelement/Pt100-measurement inputs
- 355-4SFoo FM 355 with 8 channels, with output 8x DIO DC 24V, 0,5A, U/I-measurement inputs
- 355-4SF1o FM 355 with 8 channels, with output 8x DIO DC 24V, 0,5A, Thermoelement/Pt100-measurement inputs

FIELD BUS MASTER MODULES SPEED-BUS



Fig.: 342-1DA7o

Models:

- 342-1CA7o CP 342S CAN, CANopen-Master, 320Byte, up to 127 CAN slaves
- 342-1DA7o CP 342S DP, Profibus-DP-Master, RS485, up to 125 Slaves
- 342-1IA7o CP 342S IBS240Byte, up to 128 subscribers, amount of process data: 1920 binary I/Os, SubD 9pole

COMMUNICATION PROCESSOR SPEED-BUS



Fig.: 343-1EX71

Models:

- 343-1EX71 CP 343S TCP/IP - Ethernet-CP 343, 4tier Switch, TCP/IP and S7-Communication

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FIELDBUS SLAVE MODULES

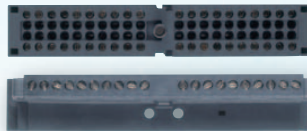


Fig.: 353-1DP01

Models:

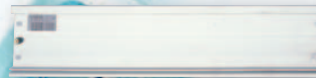
- 153-1AA03 IM153DP RS485, configuration via HW configurator from Siemens
- 353-1CA00 IM353CAN, Tx/Rx-PDO 10/10
- 353-1DP01 IM353DP RS485, configuration via GSD-data from VIPA, up to 32 modules

ACCESSORIES FOR SYSTEM 300S



Front connector

- 20 - 40 pole



35mm DIN rail

- 160mm - 2000mm
(further lengths on request)



SPEED-Bus

- BP 391 - SPEED-Bus, DIN rail, 530mm with integrated High-SPEED rear panel bus for up to 10 expansion slots



MCC953-Memory Configuration Card

- 32kByte up to 8MByte

Accessories for System 300S:

- 355-0AM00 FM 355, Summing point with front connector 40pole screw contact in connection with thermo elements
- 355-0BM00 FM 355, Summing point with front connector 40pole cage clamps in connection with thermo elements

- 392-1AJ00 Front connector, 20pole with screw contact
- 392-1AM00 Front connector, 40pole with screw contact
- 392-1BJ00 Front connector, 20pole with cage clamps
- 392-1BM00 Front connector, 40pole with cage clamps
- 392-9AJ00 Front connector, 20pole with screw contact Eco pack: 100 pieces
- 392-9AM00 Front connector, 40pole with screw contact Eco pack: 100 pieces

- HB141D Manual System 300S, German, Rev. 05/30
- HB141E Manual System 300S, English, Rev. 05/30

- 390-1AB60 DIN rail 160mm
- 390-1AE80 DIN rail 482mm
- 390-1AF30 DIN rail 530mm
- 390-1AJ30 DIN rail 830mm
- 390-9AB60 DIN rail 160mm, Eco pack: 100 pieces
- 390-9AE80 DIN rail 482mm, Eco pack: 32 pieces
- 390-9AF30 DIN rail 530mm, Eco pack: 32 pieces
- 390-9AJ30 DIN rail 830mm, Eco pack: 20 pieces
- 390-9BC00 DIN rail 2000mm, Eco pack: 10 pieces

- 391-1AF10 BP 391 SPEED-Bus, DIN rail, 530mm, 2xEs
- 391-1AF30 BP 391 SPEED-Bus, DIN rail, 530mm, 6xEs
- 391-1AF50 BP 391 SPEED-Bus, DIN rail, 530mm, 10xEs
- 391-1AF80 BP 391 SPEED-Bus, DIN rail, 530mm, 16xEs
- SW355 Projecting package for FM 355 temperature control modules

- 953-1LE00 Memory expansion 32kByte, 16kByte program/16kByte data for SPEED7-CPU
- 953-1LF00 Memory expansion 64kByte, 32kByte program/32kByte data for SPEED7-CPU
- 953-1LG00 Memory expansion 128kByte, 64kByte program/64kByte data for SPEED7-CPU
- 953-1LH00 Memory expansion 256kByte, 128kByte program/128kByte data for SPEED7-CPU
- 953-1LJ00 Memory expansion 512kByte, 256kByte program/256kByte data for SPEED7-CPU
- 953-1LK00 Memory expansion 1MByte, 512kByte program/512kByte data for SPEED7-CPU
- 953-1LL00 Memory expansion 2MByte, 1MByte program/1MByte data for SPEED7-CPU
- 953-1LM00 Memory expansion 4MByte, 2MByte program/2MByte data for SPEED7-CPU
- 953-1LP00 Memory expansion 8MByte, 4MByte program/4MByte data for SPEED7-CPU