

SIMATIC S7-300

Central processing units

Technology CPUs

Overview CPU 315T-3 PN/DP



- SIMATIC CPU with integral Technology/Motion Control functionality
- With full standard CPU 315-2 PN/DP functionality (except for CBA)
- For cross-industry automation tasks in series machine, special machine and plant construction
- Ideal for synchronized motion, such as coupling to a virtual/real master, gear synchronization, cam disk, path interpolation, or print mark compensation
- 3D path interpolation with different kinematics
- Position and pressure-regulated hydraulic axes
- Used as central controller in production lines with central and distributed I/O
- With integrated I/O for high-speed technology functions (e.g. camming, reference point acquisition)
- PROFIBUS DP (DRIVE) interface for isochronous connection of drive components
- PROFINET interface with 2-port switch
- PROFINET I/O controller for operating distributed I/O on PROFINET
- One common S7 user program for control and motion control tasks (no additional programming language necessary for motion control)
- "S7 technology" option package required (version V4.2 SP3 and higher)

SIMATIC Micro Memory Card (8 MB) required for operation of the CPU.

Overview CPU 317T-3 PN/DP



- SIMATIC CPU with integral Technology/Motion Control functionality
- With full standard CPU 317-2 PN/DP functionality (except for CBA)
- For cross-industry automation tasks in series machine, special machine and plant construction
- Ideal for synchronized motion, such as coupling to a virtual/real master, gear synchronization, cam disk, path interpolation, or print mark compensation
- 3D path interpolation with different kinematics
- Position and pressure-regulated hydraulic axes
- Used as central controller in production lines with central and distributed I/O
- With integrated I/O for high-speed technology functions (e.g. camming, reference point acquisition)
- PROFIBUS DP (DRIVE) interface for isochronous connection of drive components
- PROFINET interface with 2-port switch
- PROFINET I/O controller for operating distributed I/O on PROFINET
- One common S7 user program for control and motion control tasks (no additional programming language necessary for motion control)
- "S7 Technology" option package required (version V4.2 SP3 and higher)

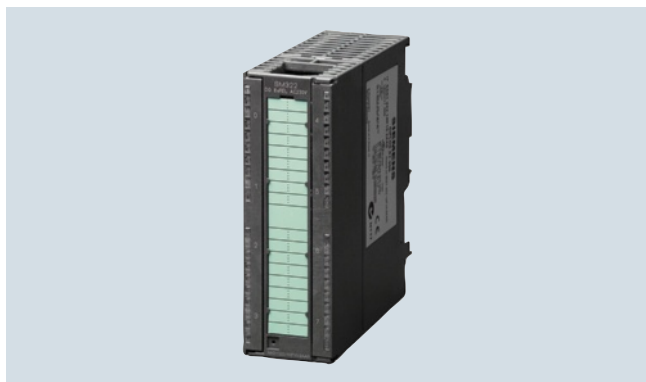
SIMATIC Micro Memory Card (8 MB) required for operation of the CPU.

SIMATIC S7-300

SIPLUS S7-300 digital modules

SIPLUS S7-300 SM 322 digital output modules

Overview



- Digital outputs
- For connecting solenoid valves, contactors, small-power motors, lamps and motor starters

Note:

SIPLUS extreme products are based on Siemens Industry standard products. The contents listed here were taken from the respective standard products. SIPLUS extreme-specific information was added.

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Technical specifications

The technical data correspond to those of the based-on modules apart from the values listed in the table:

	6AG1322-1BF01-2XB0	6AG1322-8BF00-2AB0	6AG1322-1BH01-2AA0	6AG1322-1BL00-2AA0
Based on	6ES7322-1BF01-0XB0	6ES7322-8BF00-0AB0	6ES7322-1BH01-0AA0	6ES7322-1BL00-0AA0
Ambient conditions				
Operating temperature				
• Min.	-25 °C	-25 °C; = Tmin	-25 °C	-25 °C; = Tmin
• max.	70 °C; = Tmax; 60 °C @ UL/cUL use	70 °C; = Tmax; 60 °C @ UL/cUL use	70 °C; = Tmax; for use on railway vehicles according to EN50155, the rated temperature range -25 ... +55 °C (T1) or 60 °C @ UL/ULhaz/ATEX/FM use applies	70 °C; = Tmax; for use on railway vehicles according to EN50155, the rated temperature range -25 ... +55 °C (T1) or 60 °C @ UL/ULhaz/ATEX/FM use applies
Extended ambient conditions				
• Relative to ambient temperature-atmospheric pressure-installation altitude	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)			
• Relative humidity	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)			
- with condensation, maximum				
• Resistance				
- to biologically active substances/conformity with EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!			
- to chemically active substances/conformity with EN 60721-3-3	Yes; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!			
- to mechanically active substances/conformity with EN 60721-3-3	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!			
Ambient conditions				
Operating temperature				
• Min.	-25 °C	-25 °C	0 °C; = Tmin	-40 °C
• max.	70 °C; = Tmax; for use on railway vehicles according to EN50155, the rated temperature range -25 ... +55 °C (T1) or 60 °C @ UL/ULhaz/ATEX/FM use applies	60 °C	60 °C; = Tmax	70 °C; = Tmax; for use on railway vehicles according to EN50155, the rated temperature range -25 ... +55 °C (T1) or 60 °C @ UL/UL hazardous use applies
Extended ambient conditions				
• Relative to ambient temperature-atmospheric pressure-installation altitude	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m)			
• Relative humidity	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)			
- with condensation, maximum				
• Resistance				
- to biologically active substances/conformity with EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!			

Technical specifications (continued)

	6AG1322-1CF00-7AA0 6ES7322-1CF00-0AA0	6AG1322-1HF10-2AA0 6ES7322-1HF10-0AA0	6AG1322-5HF00-4AB0 6ES7322-5HF00-0AB0	6AG1322-1FF01-7AA0 6ES7322-1FF01-0AA0
Extended ambient conditions				
• Resistance				
- to chemically active substances/conformity with EN 60721-3-3	Yes; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!			
- to mechanically active substances/conformity with EN 60721-3-3	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!			
	6AG1322-5FF00-4AB0 6ES7322-5FF00-0AB0	6AG1322-1FH00-7AA0 6ES7322-1FH00-0AA0	6AG1322-1HH01-2AA0 6ES7322-1HH01-0AA0	
Ambient conditions				
Operating temperature				
• Min.	0 °C; = Tmin	-40 °C; = Tmin	-40 °C	
• max.	60 °C; = Tmax	70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use	70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use	
Extended ambient conditions				
• Relative to ambient temperature-atmospheric pressure-installation altitude	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m)	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m)	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m)	
• Relative humidity				
- with condensation, maximum	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)		100 %; RH incl. condensation/frost (no commissioning under condensation conditions)	
• Resistance				
- to biologically active substances/conformity with EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!			
- to chemically active substances/conformity with EN 60721-3-3	Yes; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!			
- to mechanically active substances/conformity with EN 60721-3-3	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!			

Ordering data

SIPLUS S7-300 SM 322 digital output modules

Extended temperature range and exposure to media

8 outputs, 24 V DC, 2 A	6AG1322-1BF01-2XB0
16 outputs, 24 V DC, 0.5 A	6AG1322-1BH01-2AA0
32 outputs, 24 V DC, 0.5 A	6AG1322-1BL00-2AA0
8 outputs, 48 to 125 V DC, 1.5 A	6AG1322-1CF00-7AA0
8 outputs, 120/230 V AC, 1 A	6AG1322-1FF01-7AA0
16 outputs, 120/230 V AC, 1 A	6AG1322-1FH00-7AA0
8 outputs, relay contacts, 5 A	6AG1322-1HF10-2AA0
16 outputs, relay contacts, 8 A	6AG1322-1HH01-2AA0
8 outputs, 24 V DC, 0.5 A, diagnostics-capable	6AG1322-8BF00-2AB0

Article No.

Article No.

Exposure to media

8 outputs, 120/230 V AC, 2 A
8 outputs, relay contacts, 5 A, with RC filter, overvoltage protection

Conforms to EN 50155

16 outputs, 24 V DC, 0.5 A, high speed
32 outputs, 24 V DC, 0.5 A
8 outputs, relay contacts, 5 A
16 outputs, relay contacts, 8 A
8 outputs, 24 V DC, 0.5 A, diagnostics-capable

Accessories

6AG1322-5FF00-4AB0
6AG1322-5HF00-4AB0

6AG1322-1BH01-2AA0

6AG1322-1BL00-2AA0

6AG1322-1HF10-2AA0

6AG1322-1HH01-2AA0

6AG1322-8BF00-2AB0

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