

CPU S7-315 2PN/DP (Ref 502-00021A)



Introduction

The compact S7-315 2PN/DP CPU with medium to large program memory has been designed with the focus on factory automation for applications based on PROFIBUS DP and PROFINET.

The CPU has high processing performance in binary and floating-point arithmetic and provides many extensive system functions for diagnostics, parameterization, synchronization, alerting, time measurement, etc.

The PROFIBUS interface can be configured as master or slave and used for MPI.

The PROFINET interface can be configured for IO, CBA and PG/OP.

It has to be programmed with Step 7 V5.4 SP2 or higher.

A failsafe version is also available (315F).

Product features

CPU performance

- Internal RAM: 256 kb
- External Flash: Max. 8 Mb
- Bit instruction: 0,1 us
- Word instruction: 0,2 us
- Fixed-point arithmetic: 2 us
- Floating-point arithmetic: 3 us

PROFINET Ethernet interface

- Functionality: PROFINET IO, PROFINET CBA, PG/OP and S7 func.
- Additional functions: Routing, TCP/UDP/IP, Webserver
- Number of IO devices: 128
- Total I/O: 2048/2048
- Baudrate: 100 Mbps
- Galvanic isolation: Yes

PROFIBUS DP/MPI RS 485 interface

- Functionality: DP master, DP slave, MPI and S7 func.
- Additional functions: Routing / DP-V1 / SYNC+FREEZE / Isochronous
- Number of slaves: 124
- I/O per slave: 244/244
- Total I/O: 2048/2048
- Baudrate: Max. 12 Mbps
- Galvanic isolation: Yes
- Additional DP master CP cards: 4

Mechanical and Electrical Specifications

- Power supply: 20,4 – 28,8 VDC – 0,65 A
- Dimensions (WxHxD) : 80 x 125 x 130 mm
- Weight: 460 g

Others

- LEDs indicate errors and operating status such as RUN, STOP and start-up.