

## Overview



CP 343-2P / CP 343-2

The CP 343-2P communications processor is the AS-Interface master for the SIMATIC S7-300 and the ET 200M distributed I/O station, with user-friendly parameterizing options.

The CP 343-2 is the basic version of the module.

The CP 343-2P / CP 343-2 has the following characteristics:

- Connection of up to 62 AS-Interface slaves
- Integrated analog value transmission
- Supports all AS-Interface master functions according to AS-Interface Specification V3.0
- Status displays of operating states and indication of the readiness for operation of connected slaves by means of LEDs in the front panel
- Fault indications (including AS-Interface voltage fault, configuration fault) by means of LEDs in the front panel
- Compact enclosure in the design of the SIMATIC S7-300
- Suitable for AS-i Power24V (from product version 2/firmware version 3.1) and for Standard AS-i with 30 V voltage.
- Additionally for CP 343-2P: Supports the configuration of the AS-Interface-network with STEP 7 V5.2 and higher

### Benefits

- Shorter start-up times through simple configuration at the press of a button
- Design of flexible machine-related structures using the ET 200M distributed I/O system
- Enables diagnostics of the AS-Interface network
- Well suited also for complex applications thanks to connection options for 62 slaves and integral analog value processing
- Reduction of standstill and servicing times in the event of a fault thanks to the LED indicators:
  - Status of the AS-Interface network
  - Slaves connected and their readiness for operation
  - Monitoring of the AS-Interface mains voltage
- Lower costs for stock keeping and spare parts inventory because the CP can be used for the SIMATIC S7-300 as well as for the ET 200M
- With CP 343-2P additionally: Improved plant documentation and support for service assignments thanks to a description of the AS-Interface configuration in the STEP 7 project

- No need for the AS-i power supply unit with AS-i Power24V: The AS-Interface cable is powered through an existing 24 V DC PELV power supply unit. For decoupling, an AS-i data decoupling module S22.5 is required (e.g. 3RK1901-1DE12-1AA0), see [Catalog IC 10, Chapter 2 "Industrial communication" → "AS-Interface" → "Power supply units and data decoupling modules"](#)
- Operation with AS-Interface power supply unit IP20 (e.g. 3RX9501-0BA00), see [Catalog IC 10, Chapter 2 "Industrial communication" → "AS-Interface" → "Power supply units and data decoupling modules"](#) is also possible without restrictions

### Application

The CP 343-2P / CP 343-2 is the AS-Interface master connection for the SIMATIC S7-300 and ET 200M.

By connecting an AS-Interface, a max. of 248 DI / 248 DO can be accessed per CP when using 62 A/B slaves with 4DI / 4DO respectively.

The integrated analog processing function can be used to easily transfer analog signals (up to 62 A/B analog slaves with a max. of 2 channels each or up to 31 standard analog slaves, each with a max. of 4 channels per CP).

The CP 343-2P is an enhancement to the CP 343-2 and has exactly the same functions. An existing STEP 7 user program for a CP 343-2 can be used for a CP 343-2P without limitations. The two assemblies are merely configured differently in STEP 7 HW Config, whereby the CP 343-2P offers additional possibilities. We recommend the CP 343-2P for these reasons.

### Design

The CP 343-2P / CP 343-2 is connected like an I/O module to the S7-300. It has:

- Two terminal connections for connecting the AS-Interface cable directly
- LEDs in the front panel for indicating the operating state and functional readiness of all connected and active slaves
- Pushbuttons for switching over the master operating state and for adopting the existing ACTUAL configuration of the AS-i slaves as the TARGET configuration

The CP 343-2P / CP 343-2 supports all specified functions of the extended AS-Interface Specification V3.0.

The CP 343-2P / CP 343-2 each occupy 16 bytes in the I/O address area of the SIMATIC S7-300. The digital I/O data of the standard slaves and A slaves is saved in this area. The digital I/O data of the B slaves and the analog I/O data can be accessed with the S7 system functions for read/write data record.

If required, master calls can be performed with the command interface, e.g. read/write parameters, read/write configuration.

For more information, see <http://support.automation.siemens.com/WW/view/en/51678777>.

### Security information

The use of this product requires suitable protective measures (including network segmentation for IT security) in order to ensure safe plant operation; see [www.siemens.com/industrialsecurity](http://www.siemens.com/industrialsecurity).

**SIMATIC S7-300 advanced controller**

I/O modules

Communication

CP 343-2P / CP 343-2

**Overview** (continued)**Configuration**

All connected AS-Interface slaves are configured at the press of a button. No further configuration of the CP is required.

Additionally for CP 343-2P

The CP 343-2P also supports configuring of the AS-Interface network with STEP 7 V5.2 and higher. Specifying the AS-i configuration in HW-Config facilitates the setting of slave parameters and documentation of the plant. Uploading the ACTUAL configuration of an already configured AS-Interface network is also supported. The saved configuration cannot be overwritten at the press of a button and is therefore tamper-proof.

**Ordering data****Article No.****CP 343-2P communications processor****6GK7343-2AH11-0XA0**

- For connection of SIMATIC S7-300 and ET 200M to AS-Interface
- Configuration of the AS-i network using the SET key or STEP 7 (V5.2 and higher)
- Without front connector
- Corresponds to AS-Interface specification V3.0
- Dimensions (W × H × D / mm): 40 × 125 × 120

**CP 343-2 communications processor****6GK7343-2AH01-0XA0**

- Basic version for connection of SIMATIC S7-300 and ET 200M to AS-Interface
- Configuration of the AS-i network using the SET key
- Without front connector
- Corresponds to AS-Interface specification V3.0
- Dimensions (W × H × D / mm): 40 × 125 × 120

**Front connector, 20-pin**

- With screw terminals
- With spring-type terminals

**6ES7392-1AJ00-0AA0****6ES7392-1BJ00-0AA0**