SIEMENS

SIMATIC NET

Product Information   **C79000-Z8964-C37-01**

Stand / Dated
6 / 98

CP 342-2 AS-Interface for the S7-300 Programmable Controller

This document contains information in English.

Hinweis / Note / Avertissement / Avvertenza /

Achtung

Vor der Inbetriebnahme Hinweise in der entsprechenden aktuellen Dokumentation beachten. Die Bestelldaten hierfür entnehmen Sie bitte den Katalogen oder wenden Sie sich an Ihre örtliche SIEMENS-Niederlassung. Die Inbetriebnahme ist solange untersagt, bis festgestellt wurde, daß die Maschine, in die diese Komponenten eingebaut werden soll, den Bestimmungen der Richtlinie 89/392/EWG entspricht.

Attention

Prior to startup you must observe the notes in the relevant documentation. For ordering data of the documentation please refer to catalogs or contact your local SIEMENS representative.
Startup must not take place until it is established that the machine, which is to accommodate this component, is in conformity the directive 89/392/EEC.

Attention

Avant la mise en service, respecter les instructions de la documentation actuelle correspondante. Pour les références de commande de la documentation, veuillez-vous reporter aux catalogues ou consulter votre agence locale SIEMENS. La mise en service est interdite tant que la machine dans laquelle est incorporé ce composant n'est pas conforme aux prescriptions de la directive 89/392/CEE.

Attenzione

Prima della messa in funzione, osservare attentamente le avvertenze riportate nella documentazione corrente. Per i dati di ordinazione consultare i cataloghi oppure rivolgersi alla locale fildale SIEMENS. La messa in funzione è vietata fino a quando non è stato accertato che la macchina, in cui il componente deve essere installato, non rispetta le disposizioni della direttiva 89/392/CCE.

Notes

This product information contains the latest information about installation and startup. Please make sure that you also read the instructions in the manual accompanying the CP 342-2. The AS-i power supply unit used must provide an extra-low voltage safely isolated from the mains power supply. This isolation can be implemented according to the following requirements:

➤ VDE 0100 Part 410 = HD 384-4-4 = IEC 364-4-41
(as functional extra-low voltage with safe isolation)
or

➤ VDE 0805 = EN60950 = IEC 950
(as safety extra-low voltage SELV) or

➤ VDE 0106 Part 101

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1   Technical Specifications of the Module

Bus cycle time	5 ms with 31 Slaves
Configuration	Using button on the front panel
Supported AS-i profiles	M0 (without FC "ASI-3422") M1 (with FC "ASI-3422")
AS-i interface connection	Via S7-300 front panel connector Terminal 17-18, 19-20
Address range	16 bytes in the analog area of the S7-300
Power supply	5 V DC via S7 backplane bus
Environmental conditions Operating temperature Transport and storage temperature Relative humidity	0 to 60°C -40°C to +70°C max. 95% at + 25°C
Current consumption from 5V from the AS-i cable	max. 200 mA max. 100 mA
Design Module format Dimensions (W x H x D) in mm Weight approx.	S7-300U format 40 x 125 x 115 250 g

2   Permitted Slots

Slots   The CP 342-2 can be used in all slots operated by the
                      S7-300 CPU. The CP is addressed like an analog mo-
                      dule with 16 input bytes and 16 output bytes.

Start Address   The start address of this 16 byte I/O area depends on
                      the slot. The address assignments are as shown below:

Rack 0								
Slot	4	5	6	7	8	9	10	11
CP 342-2 start address	256	272	288	304	320	336	352	368

Rack 1								
Slot	4	5	6	7	8	9	10	11
CP 342-2 start address	384	400	416	432	448	464	480	496

Rack 2								
Slot	4	5	6	7	8	9	10	11
CP 342-2 start address	512	528	544	560	576	592	608	624

Rack 3								
Slot	4	5	6	7	8	9	10	11
CP 342-2 start address	640	656	672	688	704	720	736	752

3   Installing the CP

☞ **When handling modules, please adhere to the
guidelines for handling devices sensitive to
electrostatic discharge ESD).**

☞ **Components and modules must only be inser-
ted and removed when the power supply is
turned off.**

Installation   The CP is inserted in any slot of the PLC (see Section
2). It is then secured by the screws in the casing.

The AS-i cable is connected to the terminals of the
front connector of the CP. It is connected to terminal
pairs 17, 18 or 19, 20 of the front connector. the termi-
nals are connected electrically by the CP 342-2 as fol-
lows: 17 with 19 and 18 with 20.

The assignment of the terminal pair and the polarity
are labeled on the front panel of the CP. The second
terminal pair is intended for connection of the AS-i po-
wer supply unit or for a branch of the AS-i cable. The
AS-i power supply unit can, however, be connected at
any point on the AS-i cable.

☞ **Noise immunity/grounding
To ensure that the CP 342-2 is immune to noi-
se, the PLC and the AS-i power supply unit
must be correctly grounded.**

4   Restrictions when Operating the CP 342-2

Remember the following restrictions when operating
the CP 342-2 in the ET200M system:

➤ Standard operation of the CP (without FC
"ASI_3422") is possible with all IM 153 modules
(exception: IM 153 with order number 6ES7 153-
1AA00-0XB0)

➤ Extended operation of the CP (with FC "ASI_3422)
is only approved with the IM 153-2 order number
6ES7153-2AA01-0XB0).

➤ When reading data record 1 (the "delta list") with
SFC "RD_REC", the error message 80C2 (hex)
(module temporarily overloaded) may appear spora-
dically. In this case, repeat the call in the cyclic pro-
gram.

➤ Read and write access is only possible using word
or double word access to even I/O addresses.
Example:
correct: L PIW 288
wrong: T PQB 288
wrong: L PIW 291

➤ The versions of the S7-CPUs listed in the manual
no longer apply. The CP 342-2 can only be used
with the following CPU versions:

CPU	Order No..	Version
312 IFM	6ES7 312-5AC00-0AB0	from A05
313	6ES7 313-1AD00-0AB0	from A03
314	6ES7 314-1AE01-0AB0	from A06
314 IFM	6ES7 314-5AE00-0AB0	from A01
315	6ES7 315-1AF00-0AB0	from A03
315-2DP	6ES7 315-2AF00-0AB0	from A03
614	6ES7 314-1AH00-0AB3	from A06

STEP 7 Configuration of the CP 342-2

When configuring in STEP 7, you can select the previous module (order no. 6GK7 342-2AH00-0XA0) for the CP 342-2 since the configuration data of the two modules are the same.

5   Further Support

Further Support   If you have questions about using the product and can-
not find the answers to your problem in the manuals or
in the online help, please contact your local repre-
sentative or distributor. You can obtain the addresses
as follows: in the catalog IK10, in CompuServe (go aut-
forum -> library area SINEC) and on the Internet
(http://www.ad.siemens.de).

Our hotline is also available for questions:

Tel. +49(911) 895–7000 (Fax -7001)

Our customer support on the Internet provides answers
to common questions. Under FAQ (Frequently Asked
Questions), you will find information about our range of
products.

The AUT home page is in the worldwide web under the
following address:

http://www.ad.siemens.de.

Notes on the CE Approval of SIMATIC NET Products

Product Name:	CP 342-2	6GK7342-2AH00-0XA0

EU Directive EMC89/336/EWG
The SIMATIC NET product listed above meets the requirements of the EU directive 89/336/EEC "Electromagnetic Compatibility".

The EU conformity certificates are available for the relevant authorities according to the EU guideline and are kept at the following address:

Siemens Aktiengesellschaft
Automation and Drives PT2D
Postfach 4848
D-90327 Nürnberg
Federal Republic of Germany

Area Of Application
The product meets the following requirements:

Area of Application	Requirements in terms of	
	Noise emission	Noise immunity
Industry	EN 50081-2 : 1993	**EN 50082-2 : 1995**

Installation Guidelines
The product meets these requirements providing you adhere to the installation instructions described in the following documentation:

1. CP 342-2 Manual
2. SIMATIC S7-300 System Manual
   or the ET 200M Manual

Notes for the Manufacturers of Machines

The product is not a machine in the sense of the EU directive on machines. There is therefore no conformity certificate for this product in terms of the EU directive on machines 89/392/EEC. If the product is part of the electrical equipment of a machine, the manufacturer of the machine must include the product in the conformity certification process.