■ Overview

CM 1243-2 communication module for S7-1200

The CM 1243-2 communication module is the AS-Interface master for the SIMATIC S7-1200 and has the following features:

- Connection of up to 62 AS-Interface slaves
- Integrated analog value transmission
- Supports all AS-Interface master functions according to the AS-Interface Specification V3.0
- Indication of the operating state on the front of the device displayed via LED
- Display of operating mode, AS-Interface voltage faults, configuration faults and peripheral faults via LED behind the front panel
- Compact enclosure in the design of the SIMATIC S7-1200
- Suitable for AS-i Power24V: in combination with the optional DCM 1271 data decoupling module, a standard 24 V power supply unit can be used
- Configuration and diagnostics via the TIA Portal

Design

The CM 1243-2 communication module is positioned to the left of the S7-1200 CPU and linked to the S7-1200 via lateral contacts.

It has:

- Terminals for two AS-i cables (internally jumpered) via two screw terminals each respectively
- One terminal for connection to the functional ground
- LEDs for indication of the operating state and fault statuses of the connected slaves

The screw terminals (included in scope of supply) can be removed to facilitate installation.

Function

The CM 1243-2 supports all specified functions of the AS-Interface Specification V3.0.

The values of the digital AS-i slaves can be activated via the process image of the S7-1200. During configuration of the slaves in the TIA Portal, the values of the analog AS-i slaves can also be accessed directly in the process image.

It is also possible to exchange all data of the AS-i master and the connected AS-i slaves with the S7-1200 via the data record interface.

Changeover of the operating mode, automatic application of the slave configuration and the re-addressing of a connected ASi slave can be implemented via the control panel of the CM 1243-2 in the TIA Portal.

The optional DCM 1271 data decoupling module has an integrated detection unit for detecting ground faults on the AS-Interface cable. The integrated overload protection also disconnects the AS-Interface cable if the drive power required exceeds 4 A.

Notes on safety

The use of this product requires suitable protective measures (e.g. network segmentation for IT security among others) in order to ensure safe plant operation, see www.siemens.com/industrialsecurity.

Configuration

To configure CM 1243-2, you require STEP 7 V11+ SP 2 or STEP 7 V12 or higher.

For STEP 7 V11+ SP2 or higher, the additional Hardware Support Package for CM 1243-2 is required. This is available via the Industry Online Support Portal, see http://support.automation.siemens.com/WW/view/en/54164095.

The software enables user-friendly configuration and diagnostics of the AS-Interface master and any connected slaves.

Alternatively, you can also apply the AS-Interface ACTUAL configuration at the "touch of a button" via the control panel integrated in the TIA Portal/STEP 7.

AS-Interface
Masters
Masters for SIMATIC S7

CM 1243-2 *NEW*

■ Benefits

- More flexibility and versatility in the use of SIMATIC S7-1200 as the result of a significant increase in the number of digital and analog inputs/outputs available
- Very easy configuration and diagnostics of the AS-Interface via the TIA Portal (STEP 7 V11+ SP2 or higher)

- 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, the AS-i DCM 1271 data decoupling module is required, see page 2/82
- LEDs for indication of fault statuses for fast diagnostics
- Monitoring of AS-Interface voltage facilitates diagnostics

■ Applications

The CM 1243-2 is the AS-Interface master connection for the 12xx CPUs of the SIMATIC S7-1200. Connection to the AS-Interface greatly increases the number of inputs and outputs available for S7-1200 (max. 496 DI / 496 DO on the AS-Interface per CM).

The integrated analog value processing also makes the analog values available at the AS-Interface for the S7-1200 (per CM up to 31 standard analog slaves, each with up to 4 channels, or up to 62 A/B analog slaves, each with up to 2 channels).

■ Selection and ordering data

Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
CM 1243-2 communication modules • AS-Interface masters for SIMATIC S7-1200 • Corresponds to AS-Interface Specification V3.0 • With screw terminals, removable terminals (included in the scope of supply) • Dimensions (W × H × D / mm): 30 × 100 × 75	A	**3RK7243-2AA30-0XB0**		1	1 unit	42C

3RK7243-2AA30-0XB0

■ Accessories

Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
5-pin screw terminal (spare part) for AS-i master CM 1243-2 and AS-i DCM 1271 data decoupling module • With screw terminals	B	**3RK1901-3MA00**		1	1 unit	42C

■ More information

Manual

Manual "AS-i Master CM 1243-2 and AS-i Data Decoupling Module DCM 1271 for SIMATIC S7-1200", see http://support.automation.siemens.com/WW/view/en/50414115/133300.