M0006997B

SANMOTION

MOTION CONTROLLER

C

NX 250/A

Ethernet Option Module

Project Engineering Manual

SANYO DENKI

E

ENGLISH

Notes on This Manual

At various points in this manual you will see notes and precautionary warnings regarding possible hazards. The meaning of the symbols used is explained below.

⚠ DANGER

- **DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.**

⚠ WARNING

- **WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.**

⚠ CAUTION

- **CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.**

CAUTION

- **CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property injury.**



This symbol reminds you of the possible consequences of touching electrostatically sensitive components.

Note

Notes on use of equipment and useful practical tips are identified by the "Notice" symbol. Notices do not contain any information that draws attention to potentially dangerous or harmful functions.

History

Modification from / to	Date	Modified pages	Description	Author
V1.0	140304			meis
V1.0 / V1.1	270406		New front view	meis

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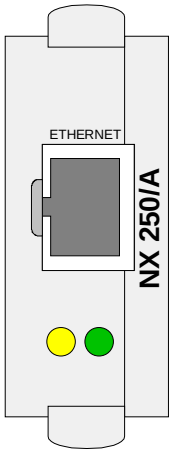
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1 Brief description

The NX 250/A constitutes an option module to be slotted into a CPU module of the type CP23x of the SANMOTION C control system. It contains the Ethernet-connection for the Ethernet Controller integrated into the CPU.

The front side provides a RJ-45 port for connection to a Ethernet network. The NX 250/A Ethernet option module can be integrated into a 10Mbit/s as well as a 100Mbit/s Ethernet.



NX 250/A Front view

Note:
The module's functionality is only guaranteed if used within a CP 23x/x.
The module is not designed for connection with foreign modules.

2 General safety instructions

CAUTION
• **Turn off the power supply before inserting or removing the module. Otherwise, the module can be destroyed or undefined signal states can lead to damage of the control system.**

3 Configuration

The configuration of the module is carried out by software. For that purpose, a file must be created with the configuration data in the initial development stage of the SANMOTION C system. In the final development stage of the SANMOTION C system, this file will be created by the configurator. The value for the configuration can then be entered with a configuration tool.

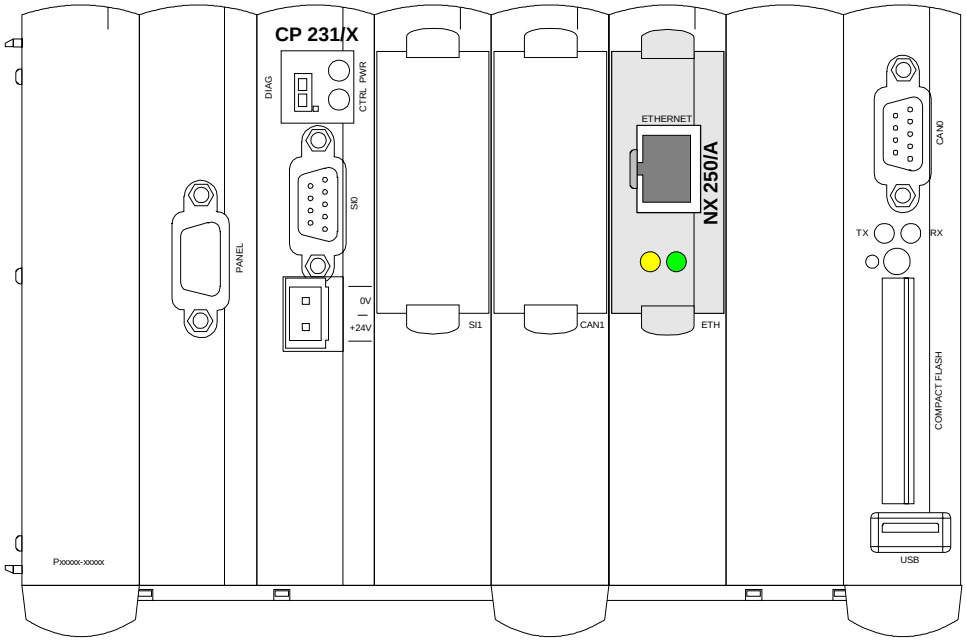
The Ethernet interface is designed for use with 10 and 100Mbit data transmission rates. The transmission rate is automatically configured at system start-up or after connection with a network.

Further information: See description of configuration data.

4 Installation instructions

The module has been designed for operation with a CP 23x/x, where it is inserted into the slot to the **right**.

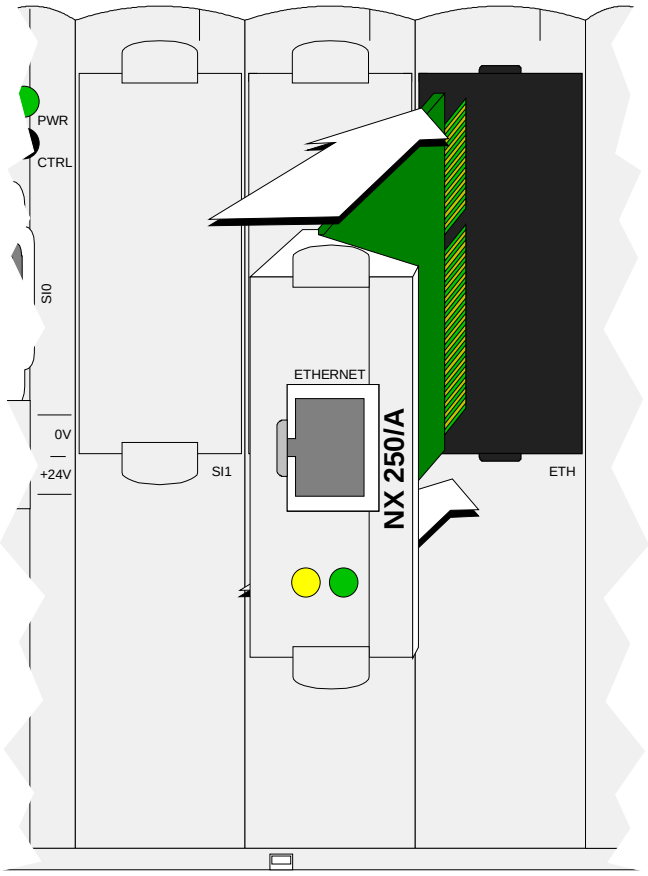
Example: Inserted in a CP 231/X



Note
*The option modules may **not** be plugged or removed, if the CP 23x/x switched on.*

Inserting option module into slot:

- Turn off power supply
- Remove blind module with screw driver
- Insert module in the right position (labelling "NX 250" must be on the right side) into the right-hand slot.

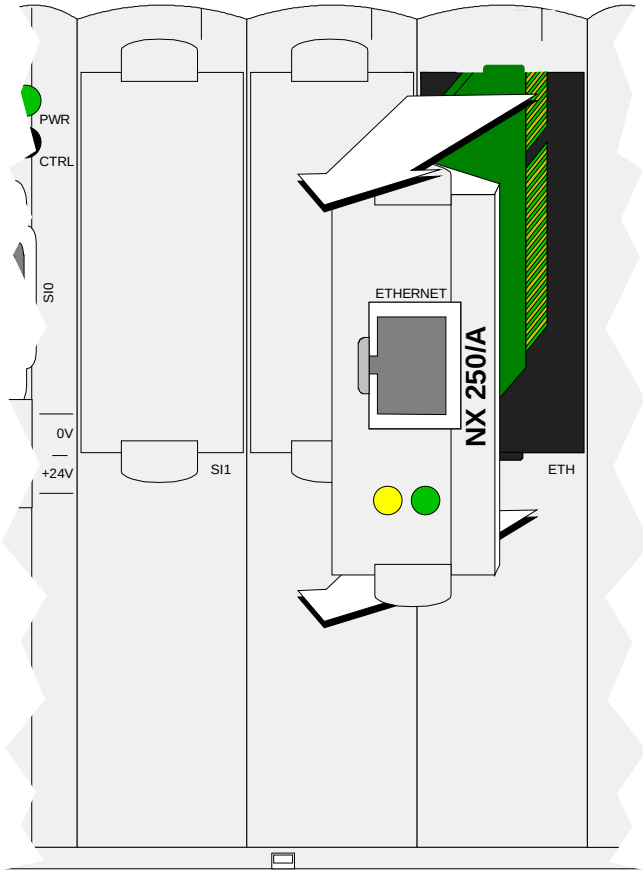


Inserting the NX 250 Ethernet option module

Removing an option module:

In reverse order:

- Turn off power supply
- Pull module from the slot.
- Insert blind module.



Removing the NX 250 Ethernet option module

5 Connections, wiring

Ethernet Interface (RJ45 connector)

Ethernet-connection: Modular plug, 8-pin (RJ 45 connector)

For further information on the Ethernet interface, the Ethernet cable and the routing:
See " SANMOTION C automation system"

6 Operation and displays

Ethernet status LEDs

The Ethernet-socket (RJ-45) provides one Link-Status-Led (green) and one Activity-Led (yellow). They light up during the sending or receiving of telegrams.
green: Lights up as soon as Ethernet connection is alive,
yellow: lights up when sending and receiving data.

7 Module response

Start-up after Power-On

The module is passive and is configured and activated through the HOST.

Reset

The module can be reset by the HOST without the HOST itself having to be reset.

8 Technical data

Interface to CP23x/x

Interface type	Media Independent Interface (MII)
Connection technology	CHAMP plug 30-pins
Power supply	5V
Module recognition	YES (Module given, YES/NO, no type recognized)

Ethernet interface:

Ethernet interface:	10/100 Mbit/s LAN
Number:	1
Connection:	Modular plug, 8-pin (RJ 45 connector)

Mechanics

Structure	No casing; only front plate mounted on print
Protection type	If module is slotted into CP23x/x, the CP23x/x fulfills IP20
Weight:	23 g

Standards:

The module conforms to the norms:

General information	
UL 508	UL – listed
Product standard for programmable controllers:	
IEC 61131-1:2003	General information
IEC 61131-2:2003	Hardware

Release
Revision A Aug.2005
Revision B Feb.2008

Precautions For Adoption

⚠ Cautions

The possibility of moderate or minor injury
and the occurrence of physical damage are assumed
when the precautions at right column are not observed.
Depending on the situation,
this may cause serious consequences.
Be sure to follow all listed precautions.

⚠ Cautions

- Be sure to read the instruction manual before using this product.
- Take sufficient safety measures and contact us before applying this product to medical equipment that may involve human lives.
- Contact us before adapting this product for use with equipment that could cause serious social or public effects.
- The use of this product in high motion environments where vibration is present, such as in vehicles or shipping vessels, is prohibited.
- Do not convert or modify any equipment components.

* Please contact our Business Division for questions and consultations regarding the above.

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