

Overview



- Expansion modules for SIMATIC S7-modular Embedded Controller EC31
 - EM PCI-104 for additionally accommodating up to 3 PCI-104 cards
 - EM PC with additional PC interfaces and slots for memory media

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Technical specifications

	6ES7677-1DD60-1AA0 EM PCI-104	6ES7677-1DD50-2AA0 EM PC
General information		
Hardware product version	01	01
Input current		
from expansion bus	100 mA	580 mA
Power losses		
Power loss, typ.	2.4 W; Without inserted PCI-104 cards	9 W
Power loss, max.		14 W
Hardware configuration		
Integrated power supply	Yes	No
Interfaces		
Number of USB interfaces	0	2
serial interface	0	1x V.24 (RS232)
Industrial Ethernet		
• Industrial Ethernet interface		Onboard, 10/100/1 000 Mbit/s, RJ45
Ambient conditions		
Operating temperature		
• Min.	0 °C	0 °C
• max.	50 °C	50 °C
Dimensions		
Width	120 mm; Without bus connector extension bus	80 mm; Without bus connector extension bus
Height	125 mm; Without external voltage connecting terminal	125 mm
Depth	115 mm	115 mm
Weights		
Weight, approx.	0.5 kg	0.4 kg

Ordering data

Article No.

EM PCI-104 expansion module	6ES7677-1DD60-1AA0
For fitting up to 3 additional PCI-104 cards	
EM PC expansion module	6ES7677-1DD50-2AA0
Additional connection options: 1 DVI-I interface, 2 USB interfaces, 1 Gigabit Ethernet interface, 1 serial interface, 1 slot for CF card, 1 slot for SD card/Micro Memory Card	

S7-mEC
Erweiterungsmodul EM PCI-104

6ES7677-1DD40-1AA0
6ES7677-1DD60-1AA0

Diese Produktinformation enthält **wichtige Informationen zu EM PCI-104**.
Die Produktinformation ist Bestandteil des gelieferten Produkts und die darin enthaltenen Aussagen sind in Zweifelsfällen in der Verbindlichkeit anderen Aussagen übergeordnet.

This Product Information contains **important information on EM PCI-104**.
The Product Information is part of the product supplied and the information in it should be considered more up-to-date if uncertainties arise.

Cette information produit contient des **informations importantes sur EM PCI-104**.
L'information produit fait partie du produit livré et, en cas de doute, c'est à elle que vous devez vous reporter.

Support of expansion modules

The expansion modules EM PCI-104 and EM PC are modules in the S7-mEC modular Embedded Controller system. They are supported by the Embedded Controllers:

- EC31, EC31-RTX and EC31-HMI/RTX as of release 01/2009
- EC31-RTX F as of release 07/2009

For Information on updating the software for Embedded Controllers of earlier releases please contact your SIEMENS partner.

Documentation

Information on the expansion modules is available in the operating instructions S7-mEC.

Before you commission the system, carefully read the information in the operating instructions and the current product information.

The operating instructions s7-mec_operation_manual_en-US is available on the DVD "S7-mEC Software and Documentation", which is delivered with the Embedded Controller. It is also available for download on the Internet at

<http://support.automation.siemens.com/WW/view/en/28593854/133300>

You will also find the latest information on the product here.



WARNING

For operation in potentially explosive atmospheres:

Explosion hazard!

Do not use any PCI-104 cards without necessary approvals for the respective potentially explosive atmosphere.

PCI-104 cards that you install in the EM PCI-104 must meet the necessary requirements individually or in combination for the respective potentially explosive atmosphere.

If one of these requirements is not met by one individual PCI-104 card or several PCI-104 cards in combination, then this approval will no longer be valid for the potentially explosive atmosphere.

Module replacement EM PCI-104

ATTENTION

Changes to the hardware settings:

During the EM PCI-104 module replacement of older versions with EM PCI-104 6ES7677-1DD60-1AA0, the PCI-104 cards are treated as new hardware. Hardware settings of the PCI-104 cards, such as IP or PROFIBUS addresses, are discarded and must be configured again.

Proceed as follows for the module replacement:

1. Remove the old EM PCI-104 expansion module.
2. Remove the PCI-104 cards contained in it.
3. Install the PCI-104 cards in the new EM PCI-104 expansion module. Ensure that the jumpers for the power supply are set correctly (same as the old setup).
4. Mount the new EM PCI-104 expansion module on the Embedded Controller.
5. Switch the Embedded Controller on.
6. If the EWF is activated on the Embedded Controller, deactivate it before you reconfigure the interfaces.
7. For PCI-104 Ethernet cards: Set the properties of the network connections in the Windows Control Panel again.
8. For PCI-104 Ethernet and PROFIBUS cards: Set the properties of the network interfaces in the Configuration Editor (Index, IF slot of WinLC).
9. Recommendation: Load the configuration data of the project from STEP 7 to the S7-mEC in order to ensure that the configuration is re-established correctly.
10. Additional PCI-104 cards, such as COM or USB interfaces: Check the settings (for example, USB drive name) and correct them if necessary.
11. After the initialization of the hardware, Windows may request a restart. Restart the Embedded Controller if you are prompted to do so.
12. If the dialog for selecting the terminal bus (SIMATIC Shell) opens after the module replacement, confirm with OK.
13. After completion of the interface configuration, activate the EWF, if required.

UL approval

ATTENTION

Observing the boundary conditions for UL approval when using the EM PCI-104

In order to meet the UL approval criteria, plug-in PCI-104 cards must only be supplied via the power supply of the EM PCI-104 expansion module. Direct power supply of a PCI-104 card is not permitted in accordance with UL guidelines.
