	Module	Article no.	As of product version
Active bus modules (BM)	Bus module (BM) PS/IM	6ES7650 8PA00-xAA0	01
	Bus module (BM) 2x40	6ES7650 8PC00-xAA0	01
	Bus module (BM) IM/IM	6ES7650 8PB00-xAA0	01

x = 1: Module with conformal coating for use under elevated ambient conditions

x = 0: Standard module

Convention: In the following, the designation IM 650 is used in the operating instructions for the 650-8PH interface module.

For new versions of the ET 200PA SMART components, we reserve the right to enclose product information containing current information about the respective module or the operating instructions.

This product information can also be found on the Internet (http://support.automation.siemens.com). Search there for "ET 200PA SMART", for example.

Approvals, standards and certificates

See section "Standards and approvals".

Position in the Information Landscape

This manual contains a complete description of the ET 200PA SMART Distributed I/O system.

If you are using I/O modules from the S7-300 series of modules, you can find information on them in the following manuals:

Manual	Contents
Automation System S7-300, Module Data (http://support.automation.siemens.com/WW/view/en/8859629)	• General technical specifications • Power supply modules • Digital modules • Analog modules • Order numbers for S7-300
ET 200M Signal Modules for Process Automation (http://support.automation.siemens.com/WW/view/en/7215812)	• Overview of the use in process automation • Parameter assignment with *SIMATIC PDM* • Digital input module • Digital output module
ET 200M Distributed I/O Device HART Analog Modules (http://support.automation.siemens.com/WW/view/en/22063748)	• HART analog modules • Expanded input data (HART auxiliary variables)

2.2.3 Arrangement of the modules for the function "Change During Operation" and / or "Redundancy"

Arrangement rules

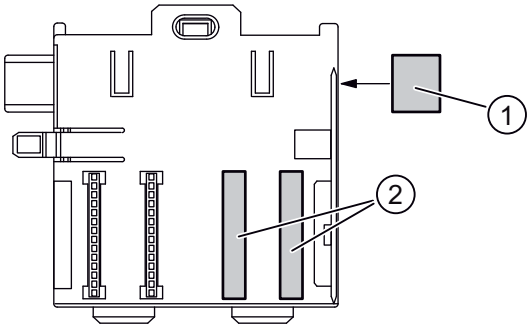
The following rules apply to the arrangement of the modules in an ET 200PA SMART:

- An ET 200PA SMART must be mounted on one rack only (mounting rail). It is not permitted to use interface modules to connect to other racks.
- You may insert a maximum of 12 assemblies to the right of the IM 650.
- You must plug the IM 650 and all modules into active bus modules.

Note

The active bus modules 6ES7650 8PA00-xAA0 and 6ES7650 8PB00-xAA0 have yellow markings for easier identification. The purpose of these markings is to indicate that only IM 650 interface modules may be plugged into these bus modules.

- Use the mounting rails for "Module replacement in runtime" (only these allow mounting of the active bus modules).
- Close unused slots with the backplane bus cover. Close the last bus module with the bus module cover. The bus module cover is included with the bus module BM PS/IM or BM IM/IM. The backplane bus cover has to be ordered.



① Bus module cover
② Backplane bus cover

Figure 2-3 Example: Bus module 2 x 40 (6ES7 650 8PC00-0AA0)

- To use the ET 200PA SMART in the intrinsically safe area, use the Ex partition - preferably between the modules in the intrinsically safe area and the modules in the non-intrinsically safe area.

Restrictions

Use of the high-accuracy time stamp (1 ms accuracy) is only possible with 8 modules. In the ET 200PA SMART, you may use a maximum of 8 input modules after the IM 650 interface module for this.