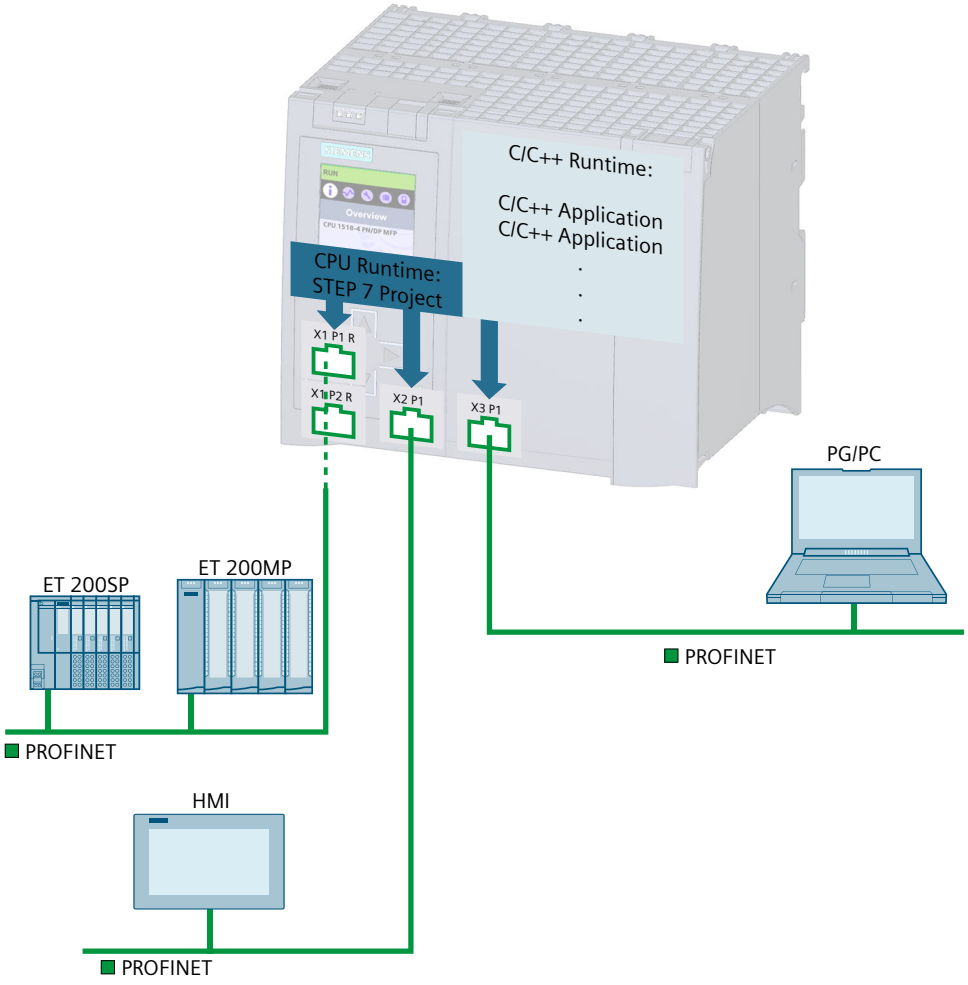


Figure 3-1 Overview of the performance segment

You create the C/C++ blocks (CPU function library for CPU Runtime) with the "Open Development Kit ODK 1500S" (ODK).

You can create the C/C++Runtime applications with the "Software Development Kit" (SDK).

Using the ODK and SDK provides you with the mechanisms of higher programming languages (e.g. object orientation) within a modern programming environment.

NOTE

To be able to use SIMATIC Industrial OS from firmware version V2.8.4 onwards, use the Open Development Kit 1500S Version V2.5 SP2 or higher. More information about the Open Development Kit 1500S Version V2.5 SP2 can be found on the Internet (https://support.industry.siemens.com/cs/ww/en/view/109782540).

With ODK, you program:

- Blocks in C/C++ that can be run synchronously in the execution cycle of the CPU (CPU function library for CPU Runtime)

Article number	6ES7518-4AX00-1AB0
Open IE communication	
• TCP/IP	Yes
– Data length, max.	64 kbyte
– several passive connections per port, supported	Yes
• ISO-on-TCP (RFC1006)	Yes
– Data length, max.	64 kbyte
• UDP	Yes
– Data length, max.	2 kbyte; 1 472 bytes for UDP broadcast
– UDP multicast	Yes; 128 multicast circuits (of which max. 5 via X1)
• DHCP	Yes
• DNS	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
• Encryption	Yes; Optional
Web server	
• HTTP	Yes; Standard and user pages
• HTTPS	Yes; Standard and user pages
• web API	
– Number of sessions, max.	200
– number of simultaneous HTTP calls, max.	4
– HTTP request body, max.	131 072 byte
OPC UA	
• Runtime license required	Yes; "Large" license required
• OPC UA Client	Yes; Data Access (registered Read/Write), Method Call
– Application authentication	Yes
– Security policies	Available security policies: None, Basic128Rsa15, Basic256Rsa15, Basic256Sha256
– User authentication	"anonymous" or by user name & password
– Number of connections, max.	40
– Number of nodes of the client interfaces, recommended max.	5 000
– Number of elements for one call of OPC_UA_NodeGetHandleList/OPC_UA_ReadList/OPC_UA_WriteList, max.	300
– Number of elements for one call of OPC_UA_NameSpaceGetIndexList, max.	20

Article number	6ES7518-4AX00-1AB0
• vertical installation, min.	0 °C
• vertical installation, max.	40 °C; Display: 40 °C, at an operating temperature of typically 40 °C, the display is switched off
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
configuration / header	
configuration / programming / header	
Programming language	
– LAD	Yes
– FBD	Yes
– STL	Yes
– SCL	Yes
– CFC	Yes
– GRAPH	Yes
Know-how protection	
• User program protection/password protection	Yes
• Copy protection	Yes
• Block protection	Yes
Access protection	
• protection of confidential configuration data	Yes
• Password for display	Yes
• Protection level: Write protection	Yes
• Protection level: Read/write protection	Yes
• Protection level: Write protection for Failsafe	No
• Protection level: Complete protection	Yes
• User administration	Yes; device-wide
programming / cycle time monitoring / header	
• lower limit	adjustable minimum cycle time
• upper limit	adjustable maximum cycle time
Open Development interfaces	
• Size of ODK SO file, max.	9.8 Mbyte

Article number	6ES7518-4AX00-1AB0
Dimensions	
Width	175 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	2 093 g

General technical specifications

You can find information on the general technical specifications, such as standards and approvals, electromagnetic compatibility, protection class, etc., in the S7-1500, ET 200MP (https://support.industry.siemens.com/cs/ww/en/view/59191792) system manual.

Dimensional drawing

A

This section contains the dimensional drawing of the module on the mounting rail, as well as a dimensional drawing with the front panel open. Keep to the dimensions when installing in cabinets, control rooms, etc.

Dimension drawings of the CPU 1518-4 PN/DP MFP

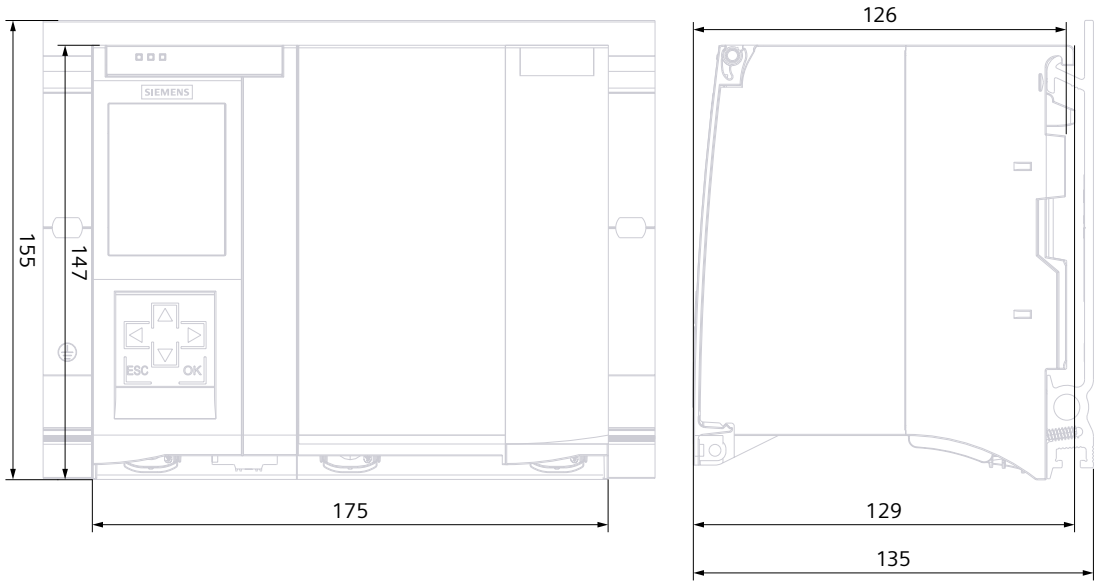


Figure A-1 Dimension drawing of the CPU 1518-4 PN/DP MFP, front and side view

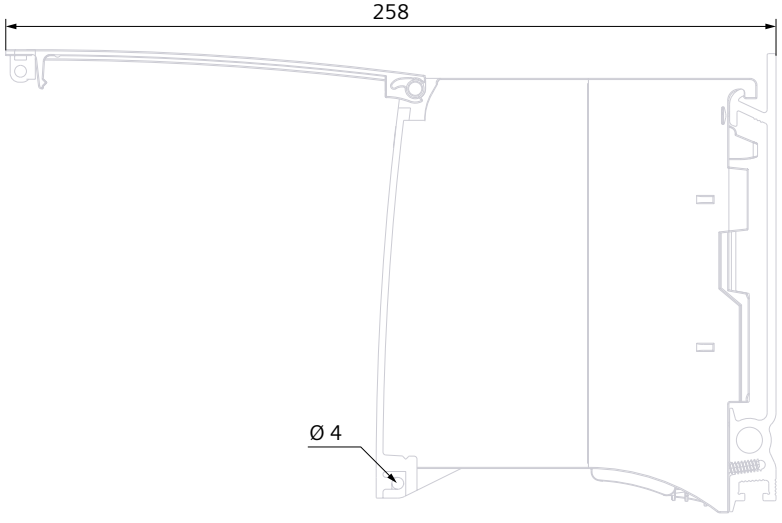


Figure A-2 Dimension drawing CPU 1518-4 PN/DP MFP, side view with open front panel