

# LamaPLC: Simatic S7 PLC types

## Simatic S7-1500 types

CPU	Performance segment	PROFIBUS interfaces	PROFINET interfaces	Work memory for software	Work memory for data	Processing time for bit operations	note
CPU 1511-1 PN	Standard CPU for smaller to mid-range applications 6ES7511-1AL03-0AB0	-	1	300 kB	1.5 MB	60 ns	
CPU 1511C-1 PN	Standard compact CPU for smaller to mid-range applications 6ES7511-1CK01-0AB0	-	1	175 kB	1 MB	60 ns	16 DI, 16 DO, 5 AI, 2 AO
CPU 1511F-1 PN	Fail-safe CPU for smaller to mid-range applications 6ES7511-1FL03-0AB0	-	1	450 kB	1.5 MB	60 ns	
CPU 1512C-1 PN	Standard compact CPU for smaller to mid-range applications 6ES7512-1CK01-0AB0	-	1	250 kB	1.5 MB	48 ns	32 DI, 32 DO, 5 AI, 2 AO
CPU 1513-1 PN	Standard CPU for mid-range applications 6ES7513-1AM03-0AB0	-	1	600 kB	2.5 MB	40 ns	
CPU 1513F-1 PN	Fail-safe CPU for mid-range applications 6ES7513-1FM03-0AB0	-	1	900 kB	2.5 MB	40 ns	
CPU 1513R-1 PN	Redundant CPU for mid-range applications 6ES7513-1RM03-0AB0	-	1	600 kB	2.5 MB	50 ns	
CPU 1515-2 PN	Standard CPU for mid-range to large applications 6ES7515-2AN03-0AB0	-	2	1 MB	4.5 MB	30 ns	
CPU 1515F-2 PN	Fail-safe CPU for mid-range to large applications 6ES7515-2FN03-0AB0	-	2	1.5 MB	4.5 MB	30 ns	
CPU 1515R-2 PN	Redundant CPU for mid-range applications 6ES7515-2RN03-0AB0 →	-	2	1 MB	4.5 MB	20 ns	
CPU 1516-3 PN/DP	Standard CPU for high-end applications and communication tasks 6ES7516-3AP03-0AB0	1	2	2 MB	7.5 MB	10 ns	

CPU	Performance segment	PROFIBUS interfaces	PROFINET interfaces	Work memory for software	Work memory for data	Processing time for bit operations	note
CPU 1516F-3 PN/DP	Fail-safe CPU for high-end applications and communication tasks 6ES7516-3FP03-0AB0	1	2	3 MB	7.5 MB	10 ns	
CPU 1517-3 PN/DP	Standard CPU for demanding applications and communication tasks 6ES7517-3AP00-0AB0	1	2	2 MB	8 MB	2 ns	
CPU 1517F-3 PN/DP	Fail-safe CPU for demanding applications and communication tasks 6ES7517-3FP00-0AB0	1	2	3 MB	8 MB	2 ns	
CPU 1517H-3 PN	Redundant CPU for demanding applications and communication tasks 6ES7517-3HP00-0AB0	1	2	2 MB	8 MB	4 ns	
CPU 1518-4 PN/DP	Standard CPU for high-performance applications, demanding communication tasks and very short reaction times 6ES7518-4AP00-0AB0	1	3	6 MB	60 MB	1 ns	
CPU 1518F-4 PN/DP	Fail-safe CPU for high-performance applications, demanding communication tasks and very short reaction times 6ES7518-4FP00-0AB0	1	3	9 MB	60 MB	1 ns	
CPU 1518-4 PN/DP MFP	Standard CPU for high-performance applications, demanding communication tasks and very short reaction times 6ES7518-4AX00-1AC0	1	3	6 MB	60 MB + 50 MB CPU Library	1 ns	
CPU 1518F-4 PN/DP MFP	Standard CPU for high-performance applications, demanding communication tasks and very short reaction times 6ES7518-4FX00-1AC0	1	3	9 MB	60 MB + 50 MB CPU Library	1 ns	
CPU 1518HF-4 PN	Redundant CPU for high-performance applications, demanding communication tasks and very short reaction times 6ES7518-4JP00-0AB0	1	3	9 MB	60 MB	4 ns	

color codes:

- black: standard CPU

- **blue:** compact CPU
- **orange:** fail-safe CPU
- **red:** redundand CPU

## PLC topics on lamaPLC

Page	Date	Tags
• <a href="#">Automation! v0.0</a>	2026/04/23 21:51	<a href="#">simatic</a> , <a href="#">programming</a> , <a href="#">automation</a> , <a href="#">plc</a> , <a href="#">tia portal</a> , <a href="#">s7</a> , <a href="#">s7 1500</a> , <a href="#">s7 1200</a>
• <a href="#">LamaPLC: Simatic datatypes</a>	2026/04/23 21:52	<a href="#">simatic</a> , <a href="#">s7</a> , <a href="#">scl</a> , <a href="#">datatype</a> , <a href="#">ieee 754</a> , <a href="#">string</a> , <a href="#">wstring</a> , <a href="#">s5time</a> , <a href="#">indirect addressing</a> , <a href="#">slice access</a> , <a href="#">plc</a> , <a href="#">tia cpu</a> , <a href="#">plc</a> , <a href="#">s7-1500</a> , <a href="#">simatic</a> , <a href="#">types</a> , <a href="#">1511-1</a> , <a href="#">1511c-1</a> , <a href="#">1511f-1</a> , <a href="#">1512c-1</a> , <a href="#">1513-1</a> , <a href="#">1513f-1</a> , <a href="#">1513r-1</a> , <a href="#">1515-2</a> , <a href="#">1515f-2</a> , <a href="#">1515r-2</a> , <a href="#">1516-3</a> , <a href="#">1516f-3</a> , <a href="#">1517-3</a> , <a href="#">1517f-3</a> , <a href="#">1517h-3</a> , <a href="#">1518-4</a> , <a href="#">1518f-4</a> , <a href="#">1518hf-4</a> , <a href="#">pn dp</a> , <a href="#">profinet</a> , <a href="#">profibus</a> , <a href="#">compact</a> , <a href="#">fail-safe</a> , <a href="#">redundand</a>
• <a href="#">LamaPLC: Simatic S7 PLC types</a>	2026/04/23 21:52	<a href="#">1515r-2</a> , <a href="#">1516-3</a> , <a href="#">1516f-3</a> , <a href="#">1517-3</a> , <a href="#">1517f-3</a> , <a href="#">1517h-3</a> , <a href="#">1518-4</a> , <a href="#">1518f-4</a> , <a href="#">1518hf-4</a> , <a href="#">pn dp</a> , <a href="#">profinet</a> , <a href="#">profibus</a> , <a href="#">compact</a> , <a href="#">fail-safe</a> , <a href="#">redundand</a>

[CPU](#), [PLC](#), [S7-1500](#), [Simatic](#), [types](#), [1511-1](#), [1511C-1](#), [1511F-1](#), [1512C-1](#), [1513-1](#), [1513F-1](#), [1513R-1](#), [1515-2](#), [1515F-2](#), [1515R-2](#), [1516-3](#), [1516F-3](#), [1517-3](#), [1517F-3](#), [1517H-3](#), [1518-4](#), [1518F-4](#), [1518-4](#), [1518F-4](#), [1518HF-4](#), [PN/DP](#), [Profinet](#), [Profibus](#), [compact](#), [fail-safe](#), [redundand](#)

This page has been accessed for: Today: 5, Until now: 360

From: <http://lamaplc.com/> - **lamaPLC**

Permanent link: [http://lamaplc.com/doku.php?id=simatic:s7\\_types](http://lamaplc.com/doku.php?id=simatic:s7_types)

Last update: **2026/04/21 20:46**

