

# 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

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