Technical data: Standard CPUs   N = Product innovations

CPU	CPU 312	CPU 314 [1]	CPU 315-2 DP [1]	CPU 315-2 PN/DP [1]	CPU 317-2 DP	CPU 317-2 PN/DP [1]	CPU 319-3 PN/DP
Dimensions (mm)	40 x 125 x 130	40 x 125 x 130	40 x 125 x 130	40 x 125 x 130	40 x 125 x 130 **N**	40 x 125 x 130	120 x 125 x 130
Order No. group: 6ES7	312-1AE.	314-1AG.	315-2AH.	315-2EH.	317-2AK.	317-2EK.	318-3EL.
Firmware	V3.0			V3.2	V3.3 **N**	V3.2	V3.2
Memory							
Work memory	32 KB	128 KB	256 KB	384 KB	1 MB **N**	1 MB	2 MB
Instructions	10 K	42 K	85 K	128 K	340 K	340 K	680 K
Processing times							
Bit operation	0.1 µs	0.06 µs	0.05 µs		0.025 µs **N**	0.025 µs	0.004 µs
Word operation	0.24 µs	0.12 µs	0.09 µs		0.03 µs **N**	0.03 µs	0.01 µs
Fixed-point operation	0.32 µs	0.16 µs	0.12 µs		0.04 µs **N**	0.04 µs	0.01 µs
Floating-point operation	1.1 µs	0.59 µs	0.45 µs		0.16 µs **N**	0.16 µs	0.04 µs
Bit memories/timers/counters							
Bit memory	256 bytes		2 048 bytes		4 096 bytes		8 192 bytes
S7 timers/counters	256 / 256				512 / 512		2 048 / 2 048
IEC timers/counters	● *)						
Address ranges							
Number of I/Os (bytes)	1 024 / 1 024		2 048 / 2 048		8 192 / 8 192		
Process image I/O (bytes), max.	1 024 / 1 024		2 048 / 2 048		8 192 / 8 192		
Digital channels (central)	256	1 024					
Analog channels (central)	64	256					
DP interfaces							
DP master systems internal / CP 342-5	○ / ●		● / ●				
DP slaves			●				
Data set gateway [2]			●	●	●	●	
PROFINET interface							
PROFINET CBA				●		●	
PROFINET IO				●		●	
PROFINET with IRT				● [3]		● [3]	
Open User Communication (OUC)							
• TCP/IP				●		●	
• UDP				●		●	
• ISO-on-TCP (RFC 1006)				●		●	
Web server				●		●	

[1] As SIPLUS extreme component also for extended temperature range -25 ... +60/+70 °C and corrosive atmosphere/condensation
   (for further details, see page 98 or **www.siemens.com/siplus-extreme**)

[2] For explanation, see page 56 bottom right

*) Via SFB, number unlimited or limited by main memory