YASKAWA

VIPA 300S+

High-speed powered by SPEED7

www.yaskawa.eu..com

VIPA 300S+ - The system

300S+, powered by SPEED7, makes this system to one of the fastest and most efficient µController-based systems.

CPUs with SPEED7 technology

impress our customers and not only by their outstanding speed. By using the SPEED7 bus the reaction and signal processing were again considerably optimized.

Our unique memory management

allows memory adjustement by simply exchanging the MicroMemory-Card without needing to change the CPU. For the protection of your know-how our worldwide acknowledged Advanced KnowHow-Protect is available. The attractive selection of already integrated communication interfaces such as the integrated Ethernet/MPI and PtP interfaces as standard ensure comfort and flexibility in almost every situation.

Particularly useful

You can also operate our 300S+ CPUs without an additional memory card. If required the integrated work memory - depending on the type of CPU - can be expanded individually up to 8MB with our MCC (MemoryConfigurationCard). The 300S+ CPU simply grows with your programming. All 300S+ CPUs are equipped with Ethernet for the PG-/OP communication as standard.

Our 300S+ compact CPUs

with integrated SPEED7 technology and the I/O periphery directly on board, are particularly suitable for cost-conscious use. With their high-speed performance, the scalable memory and the outstanding communication our 300S+ can be used in almost all demanding applications.

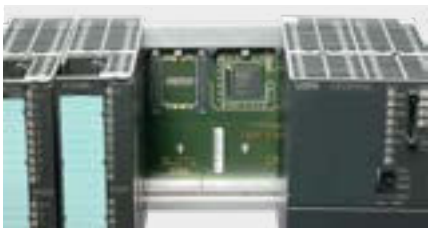
Ready-to-use front plugs

Suitable for the system VIPA 300S+ we additionally offer you ready-to-use front plugs. With them you not only save time but also a lot of money. With their different lengths you can save a lot of time during the installation of your system. They are available in a length of 2.5m up to 5m. Each wire is individually marked, so that no confusion can occur. Just test it right now and offer a set of ready-to-use front plugs with your next order.

SPEED bus

Standard-V bus

SPEED bus



- For very fast applications there is the patented and unique SPEED bus available in some selected CPUs.
- A clear competitive advantage for you and your application.

Interfaces

- Besides the MPI and PtP interface there is always of course an Ethernet-PG/OP interface available.
- This is standard with us and will always remain so.

Memory management

- You can expand your work memory by simply plugging in a MCC without having to change your CPU.
- 300S+ grows with your plant. A flexibility which is very difficult to find anywhere else.

Performance

- There are no limits in automation technology for you with the enormously high-performance SPEED7 chip.
- Performance, flexibility and communication friendliness.

User friendly

- All 300S+ controllers are programmable via SPEED7 Studio or via tools of other manufacturers.
- With us you decide which engineering tool you want to deploy!

Compatible

- Of course a mixed use of our modules and those of other manufacturers is also possible.
- This reduces your storage costs. Just think about it!

VIPA 300S+ at a glance

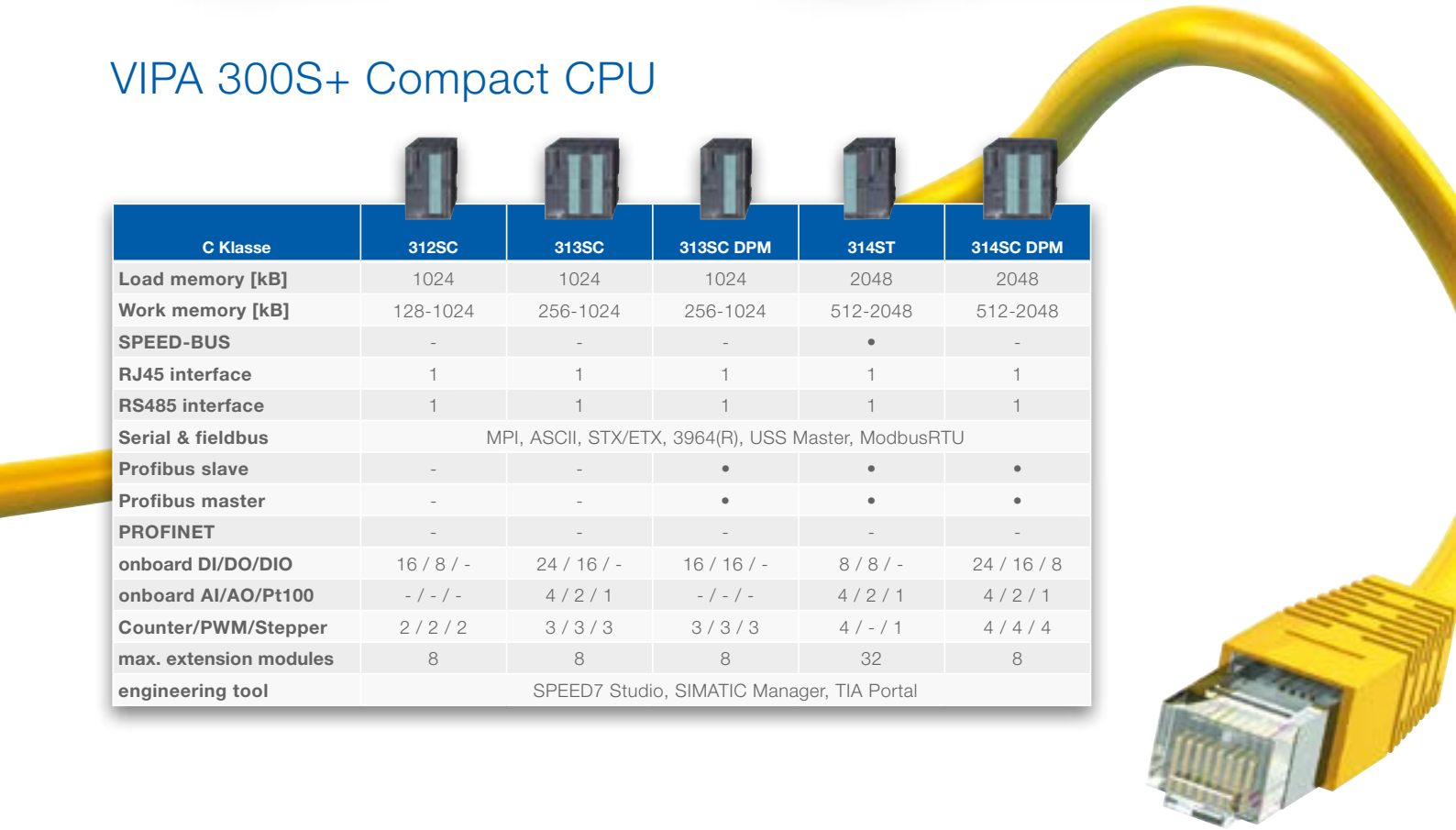
VIPA 300S+ Standard CPU

Standard CPUs	314SE	314SB DPM	315SB	315SN	315PN ECO	315PN	317SE	317SN	317PN
Load memory [kB]	1024	1024	4096	4096	1024	4096	8192	8192	8192
Work memory [kB]	256-1024	512-1024	1024-4096	1024-4096	512-1024	1024-4096	4096-8192	4096-8192	4096-8192
SPEED-BUS	-	-	-	-	-	-	•	•	•
RJ45 interface	1	1	1	2	2	2	1	2	2
RS485 interface	1	1	1	2	2	2	1	2	2
Serial & fieldbus	MPI, ASCII, STX/ETX, 3964(R), USS Master, ModbusRTU								
Profibus slave	•	•	•	•	•	•	•	•	•
Profibus master	•	•	•	•	•	•	•	•	•
PROFINET	-	-	-	-	•	•	-	-	•
max. extension modules	32	32	32	32	32	32	32	32	32
engineering tool	SPEED7 Studio, SIMATIC Manager, TIA Portal								

PROFIBUS CANopen INTERBUS

VIPA 300S+ Compact CPU

C Klasse	312SC	313SC	313SC DPM	314ST	314SC DPM
Load memory [kB]	1024	1024	1024	2048	2048
Work memory [kB]	128-1024	256-1024	256-1024	512-2048	512-2048
SPEED-BUS	-	-	-	•	-
RJ45 interface	1	1	1	1	1
RS485 interface	1	1	1	1	1
Serial & fieldbus	MPI, ASCII, STX/ETX, 3964(R), USS Master, ModbusRTU				
Profibus slave	-	-	•	•	•
Profibus master	-	-	•	•	•
PROFINET	-	-	-	-	-
onboard DI/DO/DIO	16 / 8 / -	24 / 16 / -	16 / 16 / -	8 / 8 / -	24 / 16 / 8
onboard AI/AO/Pt100	- / - / -	4 / 2 / 1	- / - / -	4 / 2 / 1	4 / 2 / 1
Counter/PWM/Stepper	2 / 2 / 2	3 / 3 / 3	3 / 3 / 3	4 / - / 1	4 / 4 / 4
max. extension modules	8	8	8	32	8
engineering tool	SPEED7 Studio, SIMATIC Manager, TIA Portal				



PROFINET®

Modbus

AS-i

VIPA 300S+ modules

Standard bus modules

Digital Input	8x	16x	32x
DC 24 V	-	•	•
AC 120/230	-	•	-
Digital Output	**8x**	**16x**	**32x**
DC 24 V, 2 A	•	•	-
DC 24 V, 0.5 A	-	•	•
DC 24 V, 0.5 A (Manual operation)	-	•	-
Relay DC 30 V, 0.5 A / AC 230 V, 0.5 A	-	•	-
AC 120/230 V	•	-	-
Digital In-/Output	**8x**	**16x**	**32x**
16x DIO (1 A), parameterizable	-	•	-
8x DI, 8x DO (1 A)	-	•	-
16x DI, 16x DO (1 A)	-	-	•
Analog Input	**2x**	**8x**	
Voltage, Current, Resistance, Resistance thermometer (13 Bit)	-	•	
Voltage, Current, Resistance, Resistance thermometer (12 Bit)	•	•	
Analog Output	**2x**	**4x**	
Voltage, Current	•	•	
Analog In-/Output			**6x**
4x AI, 2x AO, Resistance, Voltage			•
CPs			
RS232, PtP		•	
RS422/485, PtP		•	
Fieldbus module | Slave			
PROFIBUS (RS485)		•	
Actor/sensor interfaces			
AS-i master		•	

SPEED bus modules

Digital Input	8x	16x
DC 24 V	-	•
Digital Output	**8x**	**16x**
DC 24 V, 0.5 A	-	•
Digital In-/Output	**8x**	**16x**
16x DIO	-	•
Analog Input	**8x**	**16x**
Current, (Osc & FIFO function)	•	-
Voltage, (Osc & FIFO function)	•	-
CPs		
2x RS422/485, PtP	•	
Ethernet CP	•	
Fieldbus module | Master		
CANopen	•	
PROFIBUS	•	
INTERBUS	•	
INTERBUS 2x RS422	•	

SPEED7 gives the edge

Chips FROM the assembly line

Chips FOR the assembly line

And what gives you the leading edge? Speed, SPEED7, to be rather!

The SPEED7 technology offers developers a kit for a high-performance top automation system on a open STEP7 architecture that can be developed within a very short time.

SPEED7 is our technology platform

- SPEED7 is the basis of all existing and future systems.
- The SPEED7 technology is fully in our hand and ensures sustainability and guarantees that all our products are perfectly matched to each other also in the future.
- The SPEED7 chip gives you the highest performance, the most flexible communication and an intelligent memory management.

SPEED7 is therefore...

- ... a flexible automation platform
- ... one of the fastest STEP7 PLC processors worldwide!
- ... a guarantee for maximum speed and highest clock rates
- ... an upgrade of existing systems to the latest level

Don't you have this chip already in one of your products?

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