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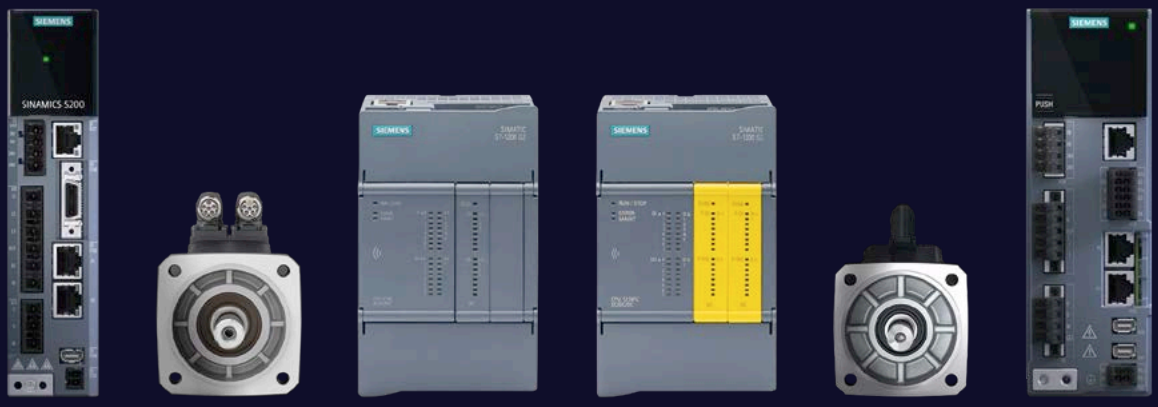

EFFICIENT MOTION CONTROL

Scalable motion control systems for basic automation applications

siemens.com/servodrives

A fantastic handshake for **basic automation systems**

Siemens offers a holistic system approach for motion control applications in the field of basic automation with its single-axis servo drive systems, SINAMICS S200, S210, and the new controller SIMATIC S7-1200 G2.

+ Performance and scalability

- Enhanced processing power with dedicated communication performance and extended memory
- Supports up to 31 PROFINET devices and synchronized program execution with PROFINET IRT
- High drive performance due to a fast current controller

+ Efficient motion control

- Control of single axes, coordinated axes, and simple kinematics
- Integrated motion control technology objects simplifying configuration
- Drive-integrated basic positioner function, SINAMICS EPOS

+ Flexible machine safety

- A cost-optimized fail-safe safety hardware portfolio
- PROFIsafe communication for safe data exchange between the controller and the drive system for safety applications
- Drive-integrated basic and extended safety functionality up to SIL3, PLe and Category 4

+ Increased data transparency

- Near Field Communication (NFC) for wireless access to diagnostic and device data of the PLC
- SINAMICS Smart Adapter for wireless access between the drive-integrated webserver and mobile devices or to the SINAMICS Startdrive engineering software
- Drive-integrated webserver for easy commissioning

Teamwork makes the automation application work

Configure your efficient motion control system for basic automation systems:

	SINAMICS S200 servo drive system SIMATIC S7-1200 G2 controller		SINAMICS S210 servo drive system SIMATIC S7-1200 G2 controller
			
What is your Motion Control application?	Moving, positioning, processing, handling		
TIA Portal – The Technology Objects (TO) of SIMATIC S7-1200 G2	**Kinematics** **Cam** **Cam Track** **Measuring Input** **External Encoder** **Speed Axis** **Synchronous Axis** **Output Cam** **Positioning Axis**		
Your controller for basic automation applications	SIMATIC S7-1200 G2 SIMATIC S7-1200(F) G2 **New** 		**SIMATIC S7-1200 G2** **SIMATIC S7-1200(F) G2** **New** 
The ideal servo motor	**SIMOTICS S-1FL2**		**SIMOTICS S-1FK2** **SIMOTICS S-1FT2** **SIMOTICS S-1FS2**
The matching cables	Dual-cable for SH20/30/40[1], up to 30 m		One Cable Solution, up to 50 m
The optimum servo drive	**SINAMICS S200 Basic**	**SINAMICS S200**	**SINAMICS S210**
Voltage range	1/3AC 200 V: 0.1-1 kW	1/3AC 200 V: 0.1-1 kW 3AC 400 V: 0.2-7 kW	1AC 200 V: 0.1-0.75 kW 3AC 200/400 V: 0.4-7 kW
Speed controller	125 µs		62.5 µs
Communications	PROFINET IRT 250 µs		
Motion control functions	SINAMICS EPOS basic positioner function via drive, Technology objects (TO) via controller		
Safety Integrated functions	–	STO via terminal (SIL3, PLe and Category 4)	Basic: STO, SS1-t, SBC Extended[2]: SS1, SLS, SSM, SDI, SS2, SOS, SBT, SLA via PROFIsafe (SIL3, PLe and Category 4)
PROFIsafe/PROFIenergy	–	–	☑
Integrated EMC filter	–	–	☑
DC-Link coupling	–	–	☑ (For 3AC units)
Add the digital twin of the drive train to your machine simulation	DriveSim Designer Software		DriveSim Designer, DriveSim Engineer Software[2]
TIA Selection Tool – configuration of your Motion Control solution	The Software TIA Selection Tool guides users quickly and easily to error-free device selection and configuration in every automation project: **siemens.com/tia-selection-tool**		

[1] Not all listed, [2] License required

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