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SINAMICS S210 Servo Drive System Sales Slides (v2.0)

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SINAMICS S210 Servo Drive System

The new high dynamic Servo Drive System

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The **SINAMICS S210 Servo Drive System** is a single axis AC/AC drive with enhanced features, connectivity and performance **for motion control applications in the midrange segment**.

Designed for high dynamic motion control applications which you find for example in the packaging or handling area.

The new servo drive system comprises the SINAMICS S210 servo drive, the **SIMOTICS S-1FK2 servo motor** in a **compact or high dynamic** version and a dedicated **“One-Cable-Connection”** between motor and drive.

Works perfectly together with a SIMATIC S7 controller like a S7-1500 or S7-1500T **to perform motion control tasks** like positioning, synchronous axis, gearing ...

Highlights

- PN IRT
- Safety Integrated: Basic and Extended functions via PROFIsafe
- Dedicated S-1FK2 motors (compact and high dynamic) with One-Cable-Connection
- Integrated Webserver and “One Button Tuning”
- UL Certification
- Integrated category C2 EMC-Filter



SINAMICS S210 Servo Drive System, Positioning within SINAMICS “Discontinuous Motion” Portfolio

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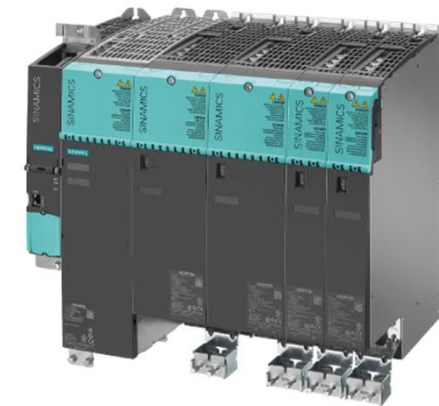
Basic: SINAMICS V90 Servo Drive System

Single axis AC/AC drive with **basic functionality** and connectivity for standard numeric and motion controllers



Midrange: SINAMICS S210 Servo Drive System

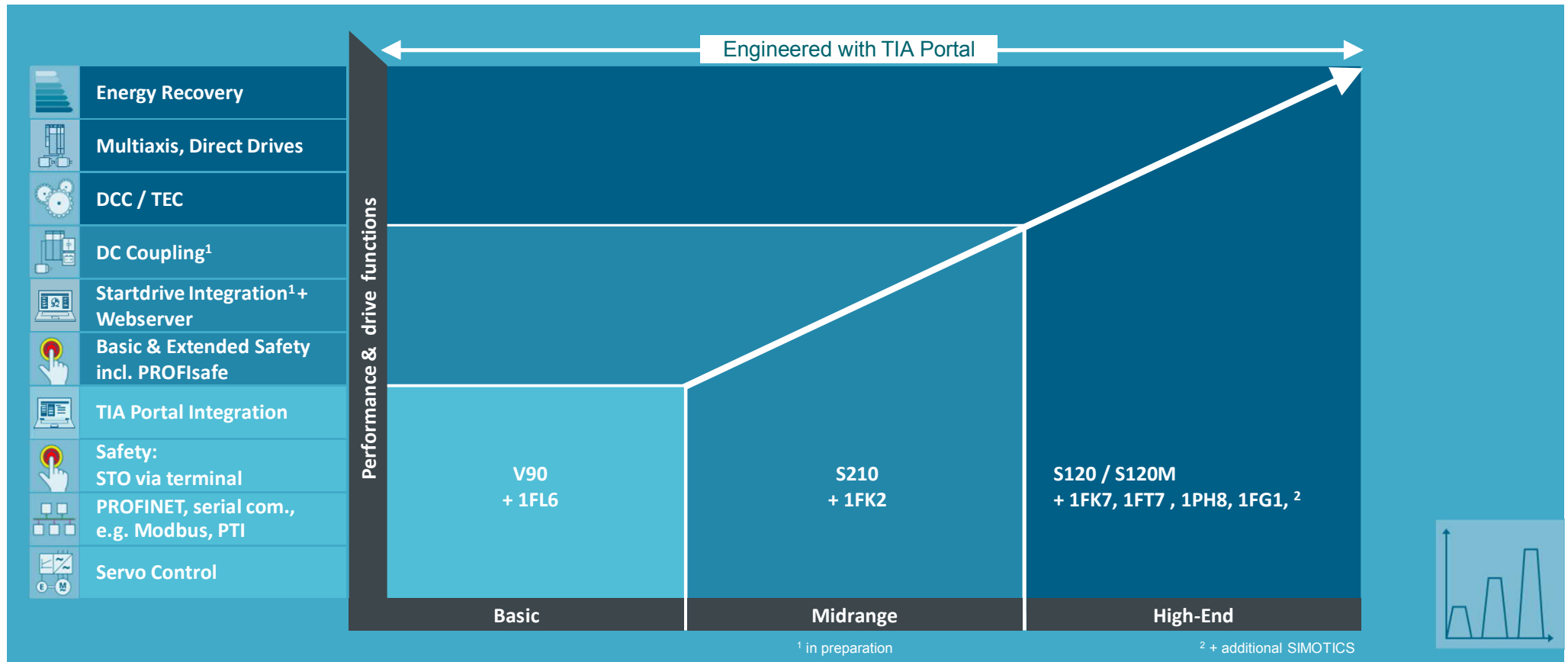
Single axis AC/AC drive with **high dynamic and performance** for motion applications in the mid range segment.



High-End: SINAMICS S120 Servo Drive

Modular DC/AC multi axis system with **most advanced drive based technology** and connectivity to high end numeric and motion controllers

The scalable SINAMICS Drives Portfolio for „Discontinuous Motion“

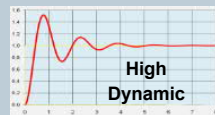


SINAMICS S210 Servo Drive System

The compact high performance single axis servo drive system

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Compact design -
High Performance



Easy commissioning
with integrated
Webserver



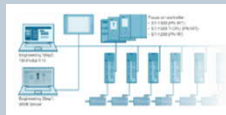
Simple installation with
One Cable Connection for
the motor



Ready for world wide
markets



Optimal together with
SIMATIC controller



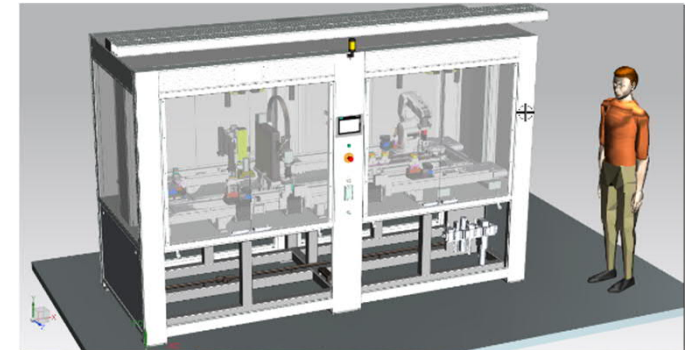
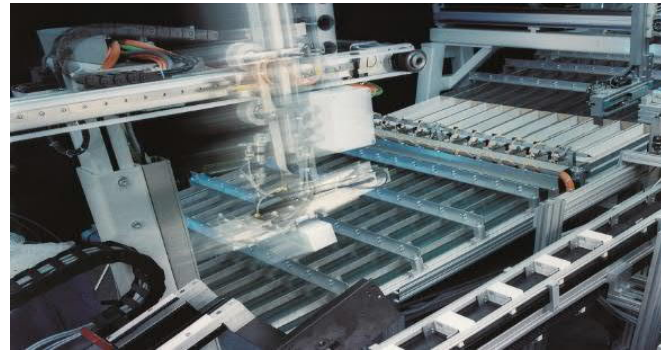
Integrated Safety
Functionality



SINAMICS S210 Servo Drive System

The drive for high dynamic performance applications

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Packaging, Printing, Converting, Plastics

- Packaging machines
- Printing machines
- Labeling machines
- ...

Handling, Moving...

- Pick and Place machines
- Rotary tables
- Stacking machines
- ...

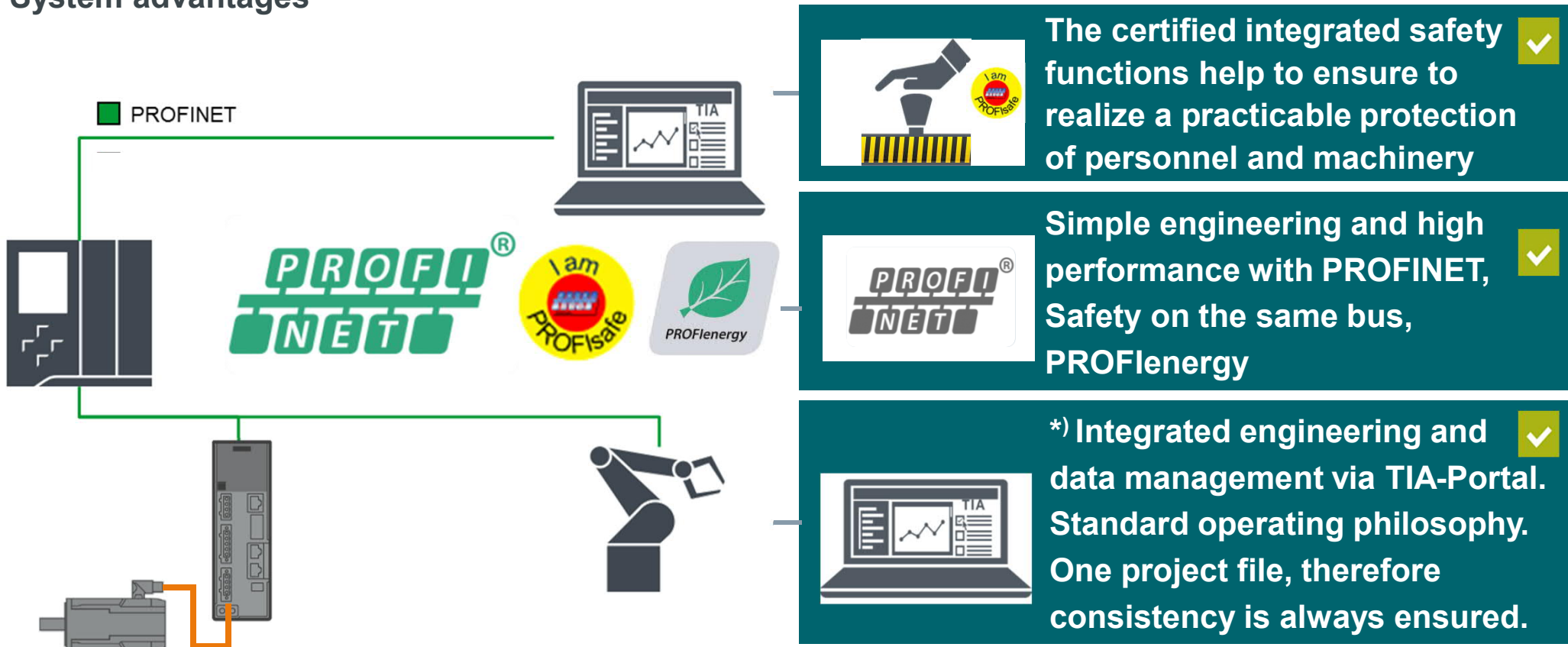
General Machine Building

- Assembling machines
- Chip sorting machines
- Bonding machines
- ...

Added Value with SINAMICS S210 Servo Drive System

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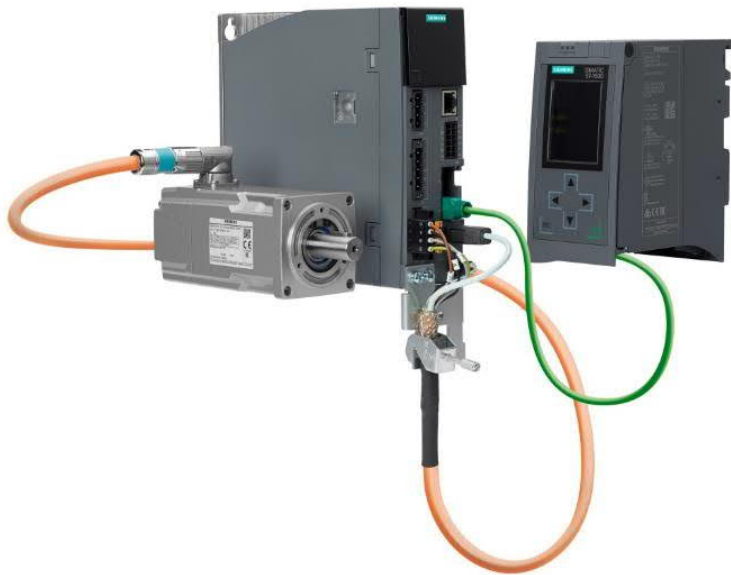
System advantages








*) in preparation

Top highlights SINAMICS S210 & SIMOTICS S-1FK2

The new midrange servo drive system



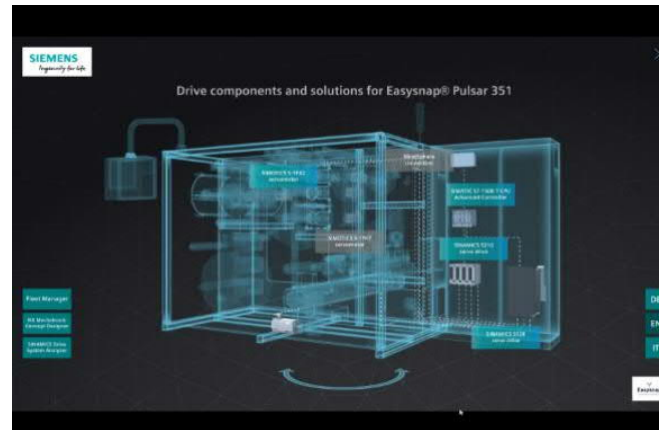
Feature / Function
<ul style="list-style-type: none"> • Dedicated S-1FK2 motors (Compact or high dynamic) • PROFINET IRT (250 μs)
<ul style="list-style-type: none"> • Safety integrated functions via PROFIsafe
<ul style="list-style-type: none"> • Integrated Webserver • “One Button Tuning” • TIA Portal (via GSD)^{*)}
<ul style="list-style-type: none"> • One-Cable-Connection (OCC) • Integrated C2 EMC-Filter
<ul style="list-style-type: none"> • 1AC 230V (200-240V) 0.05 - 0.75kW • UL Certification

Benefit
 <ul style="list-style-type: none"> • Increased performance
 <ul style="list-style-type: none"> • Fulfills high demands for safety
 <ul style="list-style-type: none"> • Easy engineering
 <ul style="list-style-type: none"> • Saves time on installation
 <ul style="list-style-type: none"> • Ready for various markets

^{*)} Full integration in preparation

Reference Easysnap The one hand opening technology

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Packaging machine to fill liquid products into sachets (320PC/min)

- SINAMICS S210 Servo Drive System
- SINAMICS S120 Servo Drive (C/D Type) with SIMOTICS S-1FK7
- SIMATIC S7-1500T controller
- SIMATIC ET200SP

Customer:
Easysnap Technology S.r.l. (Italy)

Industry: Packaging

Benefits for the customer:

- **Product:** Performance and Dimensions of the S210 drive system is very important for the customer. In the future this will **reduce the required cabinet dimensions**.
- **Digitalization:** Significant benefits seen in digitalization is related to the data collection and analytics. For example the **predictive maintenance via Mindsphere**. For the future it is planned to start with **virtual commissioning and presentation of the machine via the digital twin**.
- **Siemens Brand:** The customer is interested to use Siemens because the Siemens brand is strongly present in the machine market and some of their customers ask to equip the machine with Siemens products.

SINAMICS S210 servo drive system easy, high performant and safe

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Technical Data



SINAMICS S210 (6SL3210-5H...)



- Voltage: 1AC 200-240V
- Power: 100W-750W
- PN IRT (250 μ s), current cont. 62,5 μ s, PROFIsafe
- Safety functions: STO, SS1, SBC, ext safety: SS1, SS2, SOS, SLS, SSM, SDI, SBT, SLA
- Removable terminals
- Side-by-side mounting
- 300% overload
- Integrated C2 EMC-Filter
- Integrated brake resistor
- DI: 1 F-DI (2 DI), 2 DI for measuring probes
- Integrated WEB-Server

SIMOTICS S-1FK2 (1FK21...) HD (1FK22...) CT



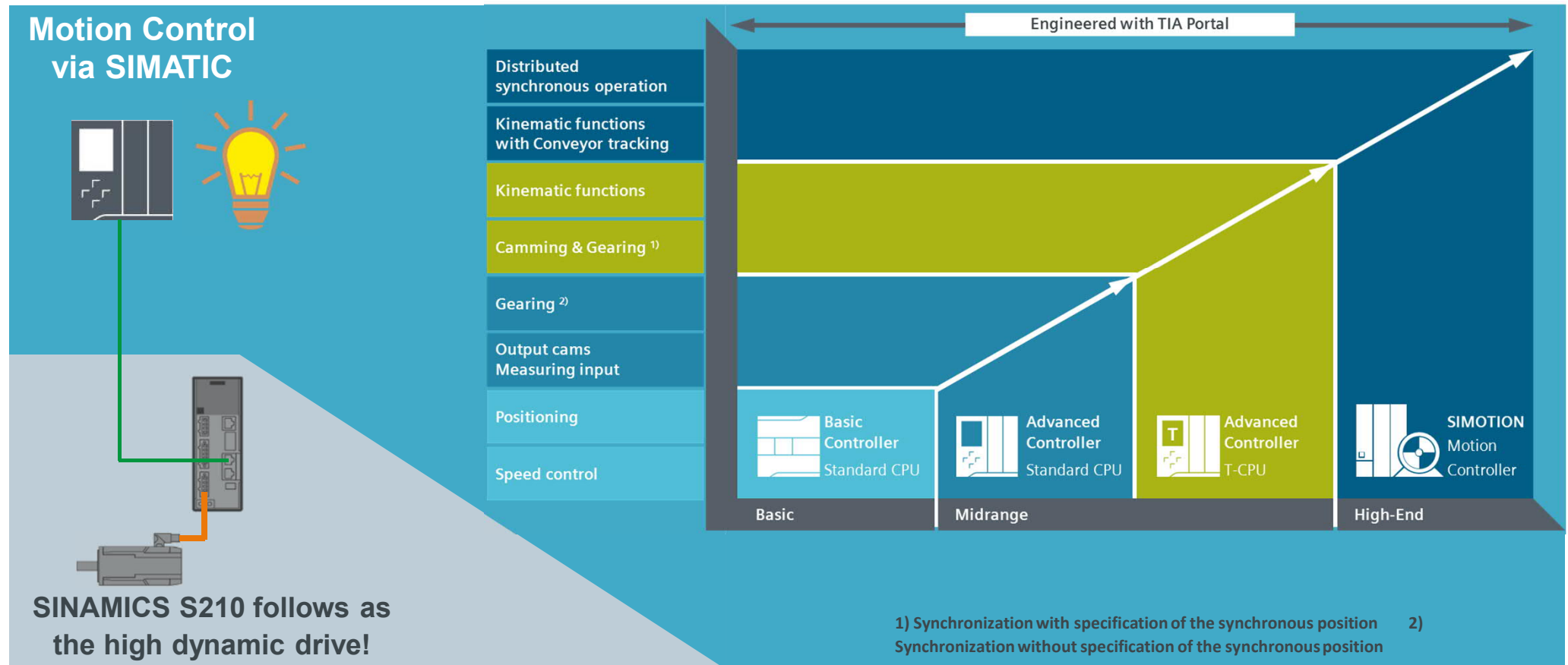
- Torque: 0,16-2,4Nm
- Power: 50W-750W
- High Dynamic (HD) or Compact (CT) in shaft height 20, 30, 40mm
- Encoder: 22 Bit Abs. Single or Multiturn
- Protection Degree: IP64, optional IP65
- Plain or feather key shaft
- With or without holding brake
- Ready to use in North-America (cURus)

One Cable Connection (6FX5002-8QN...) (6FX8002-8QN...)



- Individual cable lengths up to 50m can be ordered
- SPEED-CONNECT fast connection system with rotatable motor connector
- Flexible cables with small bending radii
- Trailing cable version available
- Small and compact M12 connector for motor SH20/30mm (only 25mm in height)
- Extension cables and mounting flange available

Motion Control via SIMATIC S7 & SIMOTION controller and PROFINET



SINAMICS S210 servo drive system, off to a fast start. Precise and reliable in operation. Perfect together with SIMATIC.

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Advantages of S210 servo drive system

- **Compact in dimensions**
- **High performance of drive and motor**
- **Fast installation of drive and motor via one cable connection (OCC)**
- **Easy commissioning using the web server and “One Button Tuning”**
- **Integrated safety functions**
- **Optimal together with SIMATIC controller**

**Drives, motors and controllers.
All from a single source.
Matching perfectly.**

SINAMICS S210 Servo Drive System

The new high dynamic Servo Drive System from Siemens

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