



# **SINAMICS G115D** Versatile. Rugged. Distributed.

Innovative system solutions for horizontal motion control applications. usa.siemens.com/sinamics-g115d

# **SINAMICS G115D** Less effort. More performance.

The SINAMICS G115D is more than just another drive —it's an optimally matched system solution consisting of a highly efficient geared motor and an innovative, low-profile drive. The system has been optimized exclusively for energy- and cost-efficient horizontal motion applications such as conveyor belts, sorting systems, baggage and freight conveyor systems, warehouse and distribution logistics, mail sorting and parcel distribution.

#### The most important advantages include:

One complete system that's extremely easy to configure and easy to install

All components are included and pre-configured from the factory

True worldwide drive / motor solution, with up to IE4 system efficiency and minimum space requirement

Full TIA integration and MindSphere connectivity

Prepared for operation under harsh conditions

- Down to −30° C for deep freeze applications
- Degree of protection up to IP66 or UL Type 4X

Extremely versatile

- Wall- and motor-mounted versions
- Identical electronic module for easy replacement

Simple on-site service of mechanical and electronic modules without touching existing installed wiring





# I The new distributed drive system

### SINAMICS G115D is versatile

SINAMICS G115D stands for simple configuration, easy ordering and easy commissioning. As a comprehensive distributed drive system, it's the simple solution to challenge all the horizontal conveyor applications.

G115D is fully implemented in the Totally Integrated Automation (TIA) environment which seamlessly connects hardware, software and services. All of the individual components are harmonized and coordinated with one another.

### SINAMICS G115D is rugged

With its robust design, users benefit from a high degree of protection up to IP66 (or UL Type 4X) so that G115D can be operated in harsh environments while maintaining space requirements with a reduced drive size.

G115D offers reliable operation with extended temperature range from -30 to  $55^{\circ}$  C (-22 to  $131^{\circ}$  F), enabling operation in deep-freeze applications without the need of additional components.

#### SINAMICS G115D is distributed

The G115D drive system belongs to a family of distributed drives. The distributed system approach allows users to individually control motors closer to the application process saving space, reducing the number of motor cables and improving electromagnetic compatibility behavior and heat losses.

# Fields of application

SINAMICS distributed drives are ideally suited for industrial conveyor systems and help you save not only wiring and installation costs, but also room in control cabinets. Our distributed drives rely on proven technology and are perfect for use in the automotive industry, distribution logistics, airports, consumer packaged goods and every other industrial environment where long distances and space have to be considered.





#### Intralogistics

Conveyor technology is essential for the organization, control, implementation and optimization of the internal goods and material flow, as well as for logistics in industry and trade. Choose from our flexible and efficient solutions for your conveyor technology requirements including:

Rollers, belt and chain conveyors, corner turntables, turntables, travelling trolleys



#### Automotive

Conveyor technology is needed at many stations within automotive production processes for transporting car parts. Rely on the most modern solutions for every conveyor technology requirement. For example:

Roll conveyors, turntables, travelling trolleys



#### Airports

Airport services depend heavily on conveyor technology. Efficient baggage handling systems increase throughput and help to manage steadily rising demands while fulfilling laws and regulations. Keep your airport running with solutions such as:

Baggage handling systems, tray-based conveyor lines/systems for baggage, cargo handling systems, sortation systems



#### Food and beverage

Choosing the right components for machines increases both flexibility and efficiency in food production. Optimize your service with complete conveyor solutions including:

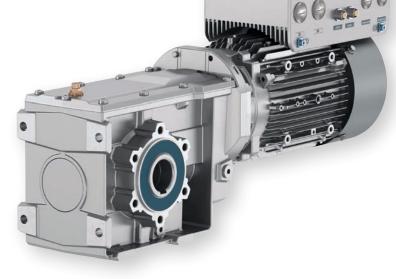
Conveyor belts, cross belt sortation systems, gapping belt conveyors

## Very economical today and tomorrow

Lifecycle costs in intralogistics depend largely upon the efficient design, commissioning and operation of conveyor belt drive systems. With its unique combination of gearbox, motor and drive, the new SINAMICS G115D enables easy project planning and commissioning with proven software tools and is supplied completely assembled by our factory. Its Smart Access Module (SAM) provides wireless system connectivity for added convenience.

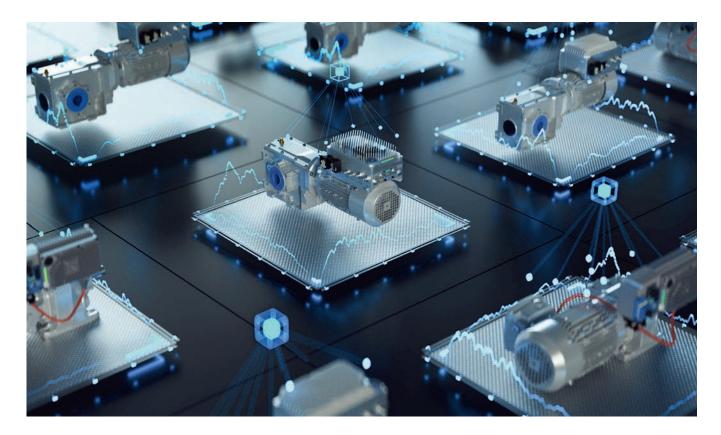
Wherever a growing number of demands, parcel deliveries and more have to be handled while space is becoming increasingly scarce, the SINAMICS G115D comes into its own. It's a very compact and reliable solution with the ability to optimize performance based upon the application requirements.

This is achieved, for example, by monitoring the number of deliveries in a given time with the Analyze MyDrives MindSphere app, by streamlining workflows, and by predicting future downtime. And in terms of energy efficiency, SINAMICS G115D is optimized for asynchronous IE3 and IE4 reluctance motors, which can also be monitored very easily with Analyze MyDrives.



## **Designed for success** clever ideas from a reliable partner

The SINAMICS G115D is not only equipped with very reliable components, it also features a service-friendly design. The new electronic module is a good example of this. It's identical for the wall- and motor-mounted versions and can be easily disconnected and replaced for offline service without disconnecting any of the installed wiring. This drastically increases the availability of the entire system and optimizes your operating costs.



# **Ready for the Cloud** advanced connectivity for improved operation

The SINAMICS G115D can be easily connected to MindSphere, the open IoT operating system from Siemens, to deliver operation and condition data for further analysis and optimization purposes.

To achieve this, data is sent either directly from the SIMATIC S7-1500 PLC controller, the MindConnect IoT 2040 device or the SIMATIC IPC227E interface. Once in the Cloud, data can be processed with Analyze MyDrives or any third-party App to obtain valuable insights and suggestions for improved operation.





### **Easy configuration** available tool set-up for the SINAMICS G115D

### **DT Configurator**

The Siemens Drive Technology Configurator (DT Configurator) supports you when selecting the optimum product version for your specific application. Pre-selected product groups, precise navigation with selection menus or direct product selection through entry of the article number makes configuration quick, efficient and convenient.

siemens.com/dt-configurator

### **TIA Selection Tool (SIZER)**

The TIA Selection Tool helps you to quickly and easily identify the optimum configuration for planning your project. Without detailed product knowledge needed, the TIA Selection Tool supports project planners, beginners and experts alike.

#### siemens.com/tst









# Our service package extended coverage for up to 4 years

#### **Dedicated service package**

To further reduce lifecycle costs, we offer special service packages for registered SINAMICS G115D solutions. These service packages extend the period for repair or replacement up to 4 years for both wall-mounted and motor-mounted systems. In addition, the first half-year after the normal 18 months warranty period is free-of-charge with online product registration. Afterwards, additional extended coverage is available as an option offering maximum investment protection and expert support over the entire lifecycle of the drive system.



#### Your advantages

- Security for up to 4 years, with six months free-of-charge service with online product registration
- Maximum investment protection
- Expert support over the entire drive system's lifecycle

Standard warranty 18 months from shipment (12 months from operation)

+ 6 months free-of-charge with product registration + 1 year extended coverage

**Register online** 

Register your SINAMICS G115D online and obtain our service package free-of-charge for the first six months:

myregistration.siemens.com



# | Technical information





	SINAMICS G115D motor-mounted	SINAMICS G115D wall-mounted
Target group and applications	Horizontal motion—simple conveyor technology for intra-logistics, airports, automotive and food and beverage	
Supply voltage and power range	3AC 380–480V: 0.37–4 kW/0.5–5 hp FSA up to 1.5 kW, FSB up to 4 kW	3AC 380–480V: 0.37–7.5 kW/0.5–10 hp FSA up to 1.5 kW, FSB up to 4 kW, FSC up to 7.5 kW
EMC	EMC Category C2/removal of functional grounding (IT system) possible	
Degree of protection	IP55 (limited by motor) or optional IP65/UL rating follows geared motor (compact system)	IP65 (connector version) or IP66 (gland version)/UL type 4X
Cooling	Convection	Convection $\ge$ 4 kW with fan (FSC size)
Ambient temperatures	$-30$ to $40^{\circ}$ C/to $55^{\circ}$ C ( > $40^{\circ}$ C with derating)	
Motor cable length	-	15 m (EMC Category C2)
Motor control	U/f, FCC, ECO, SLVC sensorless vector control	
Overload capability	200% 3 s, 150% 57 s, every 300 s	
Inputs/outputs	4 DI, 2 DO (can also be used as DI), 1 F-DI (from 2DI), HTL-Encoder interface (from 2DI)	
Communication	PROFINET, EtherNet/IP, AS-I or IO controlled	
I/O configuration	Selectable and pre-defined I/O macro configurations	
Fixed setpoints	Up to 16 fixed setpoints selected via digital inputs	
Ramp functions	Ramps (up/down) can be set separately; Rounding-off ramp function to guarantee soft starting and stopping; Available ramp switchover in operation	
Brake control	180V DC motor holding brake available as standard; optional AC 400V brake for wall-mounted DC braking	
Application functions	Integrated firmware functions for conveyor technology (conveyors, corner turntable, corner table, travelling trolley)	
Logical functions	Yes, integrated free function blocks (FFB)	
Safety Integrated	STO SIL 2 / PROFIsafe	
Memory card (SD card)	Yes	
TIA Portal integration	Yes, complete system (including G115D drive and 2KJ8 geared motor)	
Web-server	Yes, via SINAMICS Smart Access Module (SAM)	

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