

HIPERFACE DSL®: YOUR DIGITAL GATEWAY TO THE FUTURE

SICK OPENS ONE CABLE INTERFACE FOR SERVO MOTORS

Motor feedback systems

SICK
Sensor Intelligence.

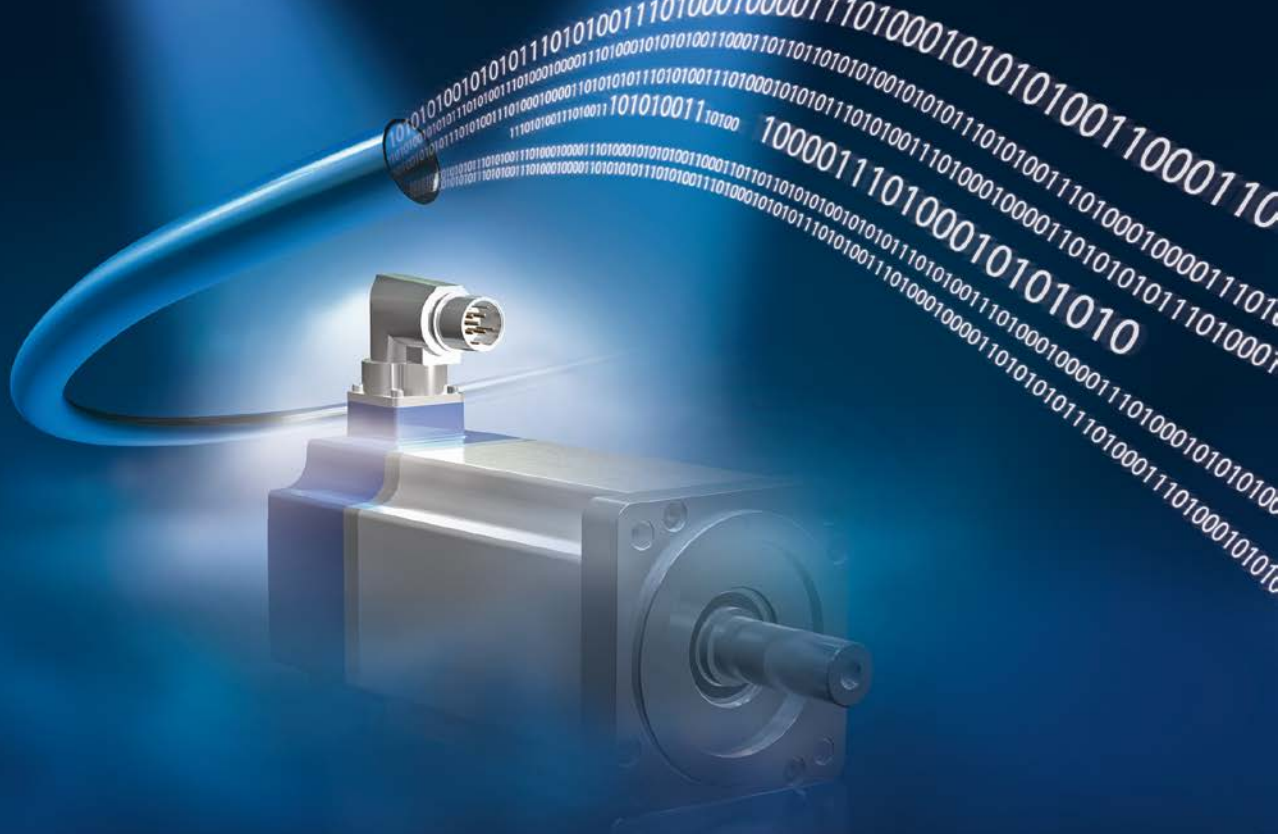
Reliable data transmission and networking is the cornerstone for the “intelligent factory of the future”. An open interface architecture plays an important role here. By opening HIPERFACE DSL®, SICK is now providing a safe, real-time and open communication interface for servo technology. This interface forms the basis for efficient processes and reliable movement monitoring of the servo drive.

Opening sets new standards

When SICK introduced HIPERFACE DSL® to the market in 2011 new standards were set for efficient power and data transmission between the motor and drive. Opening HIPERFACE DSL® marks another innovative milestone in SICK’s history of interface expertise, thereby creating a new market standard.

HIPERFACE®
DSL

www.sick.com/hiperfacedsl



YOUR GATEWAY TO THE FUTURE

As an open interface, HIPERFACE DSL® combines all the advantages of a digital real-time interface – established One Cable Technology and an enormous increase in efficiency - and is therefore a foundation for Industry 4.0.

Expanded product diversity with HIPERFACE DSL®

By opening the interface, SICK is anticipating customer requirements for a wider range of motor feedback systems with HIPERFACE DSL®. For drive manufacturers, this results in access to an expanded range of products in rotary and linear environments as well as various performance ranges of motor feedback systems.

The security of an open, established interface

Countless manufacturers of motors and drives worldwide have already implemented HIPERFACE DSL® – proof of the high level of confidence in this innovative interface. Deciding on HIPERFACE DSL® reduces implementation effort for motion control customers to only one interface. At the same time, the customer has freedom in the choice of motor feedback systems. HIPERFACE DSL® therefore offers long-term investment security.

Customized connection to Industry 4.0

By opening HIPERFACE DSL®, SICK is supporting open system architectures which are the foundation for Industry 4.0, and is creating the prerequisites for smart drive technology. HIPERFACE DSL® makes it possible to slim down the system, increase integration density of data and functions and continuously monitor conditions.

HIPERFACE®
DSL

AN OVERVIEW OF HIPERFACE DSL®



Saves space when installing motors

The reduced number of required connections makes a more compact motor design possible. In the future, a smaller servo drive will also be possible in many applications.



Reducing the drag chain

Only one cable between the inverter and motor cuts the drag chain in half and enables rapid cabling and fewer sources of error.



Efficient installation

The reduced number of components simplifies installation and saves time and personnel costs for commissioning and maintenance.



Certified safety

HIPERFACE DSL® is characterized by increased resistance to interference and has safety technology certification for applications up to safety integrity level SIL3 (IEC 61508) and performance level e (EN ISO 13849-1). HIPERFACE DSL® can therefore be easily integrated into safety applications.



Condition monitoring

Continuous condition monitoring for the servo drive enables remote control of temperature, speed, LED current, supply voltage and rotation speed - throughout the entire service life. This increases machine availability and supports time management of the machine.



Sustainable mechanical engineering

HIPERFACE DSL® allow for compact control cabinets, fewer cables, lower weight and reduced material and energy consumption whilst achieving the same high level of performance. The One Cable Technology therefore makes an important contribution to sustainability in machine engineering.

MANY YEARS OF INTERFACE EXPERTISE

With the development of the SSI, HIPERFACE® and HIPERFACE DSL® interfaces, SICK has managed to set industry standards for over three decades. Long-standing partnerships in the area of motor feedback systems, paired with the strong innovation ability of SICK, have contributed to fulfilling customer requirements with customized solutions and anticipation of technological trends.

SSI interface



In **1985**, SICK developed the synchronous-serial SSI interface together with the former Max Stegmann GmbH (now a part of SICK). The patented open interface between absolute encoders and controls quickly became the established solution in industry. The SSI interface for the first time allowed fast data transmission of, for example, 24 bits through only 4 wires instead of through 24 wires, as was the case previously. This results in a dramatic decrease in costs by reducing the need for copper wires as well as increased flexibility and bending strength of the cable.

HIPERFACE® interface



In **1996**, SICK launched the HIPERFACE® interface, creating another market standard. This hybrid interface between motor feedback system and drive enables transmission of analog and digital signals. The HIPERFACE® interface reduces the previous three data cables for position, speed and commutation to one single cable. Furthermore, HIPERFACE® for the first time enabled the direct connection of all signals to the drive.

HIPERFACE DSL® interface



In **2011**, SICK presented the proprietary, purely digital HIPERFACE DSL® interface. In doing so, SICK set new standards and was the first company to establish One Cable Technology in drive technology.

In **2017**, SICK is opening the HIPERFACE DSL® interface.

You can find more information at: www.sick.com/hiperfacedsl