

# AS-Interface

## Automation Made Simple

AS-Interface (ASi) is a globally standardized fieldbus system for the first level of automation. The abbreviation ASi stands for Actuator-Sensor Interface. ASi connects sensors and actuators with a controller via a single two-core profile cable. The yellow ASi cable transmits power and data at the same time. The main advantages of AS-Interface are, among others, dramatically less wiring, free choice of topology and cost-efficient integration of safety on the same infrastructure.

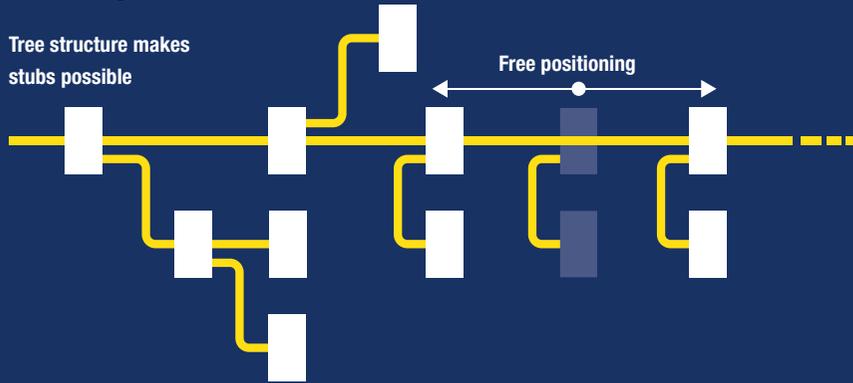
The latest ASi-5 generation can now handle larger data volumes at much higher transmission speeds and it enables intelligent sensors such as IO-Link to be integrated with ease.





## Advantages of AS-Interface

Tree structure makes stubs possible



### Cost-effective commissioning

Safe and error-free assembly of components is possible without training. The installation effort is significantly reduced. With ASInterface, there are hardly any cabling or assembly costs. Insert the cable, screw it tight, done.



### Just one cable for data and power

In contrast to parallel wiring, no complex cable harnesses are required. This considerably reduces material and assembly costs. The geometry of the profile cable also prevents reverse polarity.



### Advantages of AS-Interface

Free choice of topology – The AS-Interface network topology (physical structure of a fieldbus network) is freely selectable and every ASi module can be installed at any position. For example, it is possible to configure tree, star, ring or linear structures.



### Independent of system and manufacturer

The ASi technology is compatible with almost all common fieldbus systems. It does not matter whether PROFIBUS, PROFINET, CC-Link, EtherNet/IP etc. are used at the higher levels.

## Extremely simple installation, perfect contacting

Thanks to ASi piercing technology, it is possible to connect, replace, move or add modules. Benefits when using the profile cable include the following:

- ▶ **Very simple connection technology:** Modules pierce the insulation of the profile cable. At least four gold-plated needles pierce vertically and reliably through the rubber sheath into the cable, where the two cable wires come into contact.
- ▶ **Maximum safe contacting:** Two needles per wire penetrate the profile cable redundantly. Low contact resistance is also guaranteed.
- ▶ **Reduced installation effort:** There is no need for cutting or stripping and terminating the cable as with round cables. The profile cable is simply taken from the cable reel in the desired length.
- ▶ **Zero Euro connection costs:** Neither pre-assembled cables nor T-pieces are required to connect modules. This makes the retrofitting or conversion of systems unrivaled in terms of cost.

