

AS-Interface | Entwicklung

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ASi-5 und ASi Highlights von Bihl+Wiedemann

Efficient diagnostics and maintenance with the Bihl+Wiedemann app

The new Bihl+Wiedemann app for mobile devices is now available in the App Store and Google Play Store. The app has been specially developed for use on smartphones and tablets to provide optimum support for service personnel on site. Whether for the diagnostics, maintenance or servicing of machines, the app offers quick access to all the necessary information and functions relating to the Bihl+Wiedemann solution and product portfolio that technical personnel need. With a simple and intuitive design, it enables immediate access to technical documents, data sheets, and diagnostic data, making day-to-day work considerably easier and faster

- Local device search: technical personnel can quickly search for the relevant devices in the network on site and connect to them easily.
- Web server access: service personnel can use the app to access the devices' web servers and view diagnostic data and settings directly.
- Product search via the Bihl+Wiedemann website: if more detailed product information is required, the app allows direct access to the product search function on the Bihl+Wiedemann website.
- Download function: all necessary documents, e.g. data sheets, can be downloaded directly via the app and made available offline.
- Easy access: a single login is all you need to use all functions.
- Saves time: the above-mentioned functions achieve one thing above all: time savings. All relevant information and data are immediately available without having to access different systems.

The Bihl+Wiedemann app was specially designed for use directly on machines and systems in which products from the German company are installed. Service personnel can connect to gateways via the app to carry out diagnostics or make settings. Thanks to easy access, the app enables seamless and fast access to all the necessary information, especially during maintenance or servicing work, greatly simplifying and speeding up work on site, making it much more efficient. Whether the app is used for smaller machines or complex systems makes no difference – it provides support in all application scenarios and therefore offers enormous added value.



ASi-5/ASi-3 Address Programming Device – simplicity for all ASi generations

With the modern ASi-5/ASi-3 Address Programming Device BW4925 from Bihl+Wiedemann, ASi devices of all generations can be easily integrated into ASi networks in the field. Optimized for convenient addressing of ASi-3 and ASi-5 modules, the device has an OLED color display, six robust buttons for easy operation, a long-lasting, powerful energy storage unit for fast charging even while in use and a USB-C connection as a PC and charging interface, and is supplied with a comprehensive range of accessories (addressing cables and power supply).

The clear display menu with plain text error messages in German and English, the display of operating and input functions, and the use of clear icons ensure a positive user experience. New functions, such as extended setting or diagnostic options or the ability to read out the SPIDs (Software Package IDs) of the connected modules, are regularly made available via free field updates. And in combination with the PC software ASIMON360, the advantages of decentralized addressing can be perfectly combined with those of central planning and parameterization when commissioning an ASi system with the ASi-5/ASi-3 Address Programming Device.



ASi-5/ASi-3 Fieldbus Gateways with ASi-5/ASi-3 Safety Monitor

Whenever safe signals and standard signals need to be collected in the field, safe high-end sensors have to be connected, more complex safety applications should be solved, a large number of safe bits from different nodes must be transmitted or diagnostic and additional information needs to be used, ASi-5 Safety is the perfect addition to ASi Safety at Work.

With the ASi-5/ASi-3 Fieldbus Gateways from Bihl+Wiedemann including integrated ASi-5/ ASi-3 Safety Monitor, the new safety generation of AS-Interface, which is compatible with all previous ASi devices and components and runs in parallel on the same infrastructure as ASi-3 Safety, can be easily integrated into existing applications. ASi-5/ASi-3 Gateways with ASi-5/ASi-3 Safety Monitor, Safe Link, OPC UA and web server are already available in various versions for PROFINET and EtherNet/IP, some with a safe fieldbus and local I/Os.

ASi-5/ASi-3 Safety Gateways for EtherNet/IP+Modbus TCP, CIP Safety over EtherNet/IP and for Safety over EtherCAT (FSoE) are new additions to the range. For both safe fieldbus solutions, four new variants will be available in the future, each for one or two ASi networks, with or without local I/Os: for CIP Safety these are the article numbers BWU3963, BWU3962, BWU3980 and BWU3979.

Even if the devices are not currently intended for use in ASi-5 Safety applications, users can immediately benefit from the advantages of the new gateways, which have the same price level as comparable models with ASi-3 Safety Monitor. These advantages include functional improvements, especially the modern 16 gigabyte Chip Card, on which a complete project can now be saved, such as the safety and hardware configuration, parameter data of connected devices and user comments from ASIMON360.



Now also available: ASi-5 Safety Input Module BWU4393 in a small IP67 housing and the first ASi-5 Safety Multi I/O Module BWU4277

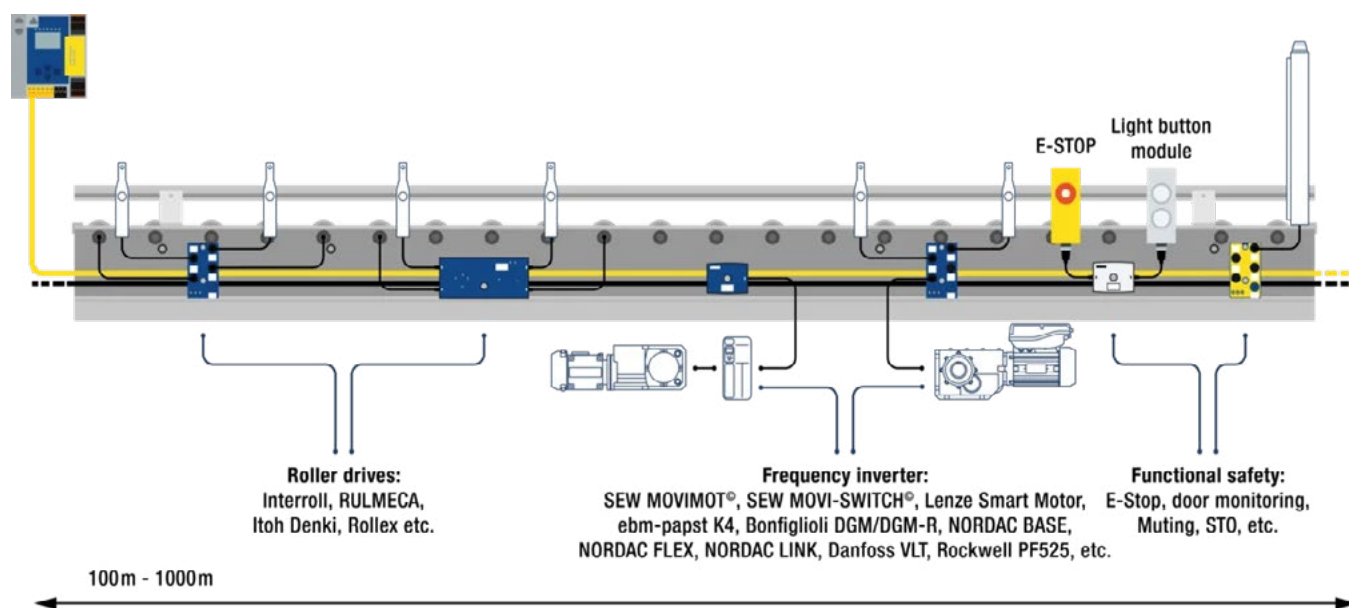
The range of ASi-5 Safety modules from Bihl+Wiedemann continues to grow. ASi-5 Safety modules in large IP67 and in IP20 housings, each with 12 standard signals and two safe inputs for floating contacts, for OSSDs and for the combination floating contact/OSSD, have been available since the Hannover fair, as has the ASi-5 Safety Muting Module BWU4411, with which various muting solutions up to SIL3/ PLe can be realized simply, efficiently, and much more cost-effectively than with comparable Ethernet-based solutions. Bihl+Wiedemann is now expanding its portfolio for the SPS fair in this area with the ASi-5 Safety Input Module BWU4393 for floating contacts with two safe inputs and 4 standard signals, which can be used as input or output signals depending on the configuration, in a compact IP67 housing.

Another new addition to Bihl+Wiedemann's ASi-5 Safety range is BWU4277, the first ASi-5 Safety Multi I/O Module in IP20. The module's 14 inputs can be used either as up to 14 one channel safe inputs, as up to seven two-channel safe inputs (with adjustable test pulse width), or as up to 14 digital inputs. The two-channel safe inputs can be used for floating contacts, complementary switches or OSSDs. Furthermore, the two safe inputs SI13 and SI14 can optionally be used as EDM inputs as a feedback loop for contactor monitoring.

In addition to the (safe) inputs, the module also has two electronic safe outputs (two release circuits) with increased availability. The safe outputs can also be configured here as standard outputs if required. The first ASi-5 Safety Multi I/O Module from Bihl+Wiedemann, which uses just one single ASi-5 address, not only impresses with its extensive features, which optimize the costs for safe inputs and outputs on ASi, but also offers considerable savings potential in the control cabinet with a module width of just 22.5 mm.

New ASi-5 module expands drive solutions for motorized rollers, DC motors and frequency inverters

Bihl+Wiedemann already has an extensive range of motor modules for a variety of drive solutions with ASi-5 and ASi-3, both for the control of motorized rollers and for DC motors and frequency inverters. And the portfolio continues to grow with the ASi-5 Motor Module BWU4974 for controlling the Lenze i550 motec frequency inverter. The active distributor, which is supplied via the yellow ASi profile cable in a 35 mm high IP67 housing suitable for installation in a cable duct, is connected to the drive via a 4-pole, D-coded M12 cable plug. The frequency inverter is controlled via Modbus TCP. As with all ASi-5 and ASi-3 drive solutions for Lenze, BWU4974 is also a plug-and-play solution whose pin assignment has been adapted to the Lenze i550 motec.



IO-Link and the cloud: simple configuration of IO-Link devices and convenient IT interfaces for cloud connection

The connection of IO-Link Devices to higher-level systems or a cloud is greatly simplified by the ASi-5 Modules with integrated IO-Link Master from Bihl+Wiedemann. On the one hand, users benefit from the simplicity and cost efficiency of the wiring system AS-Interface, saving valuable resources during planning, installation, and commissioning. On the other hand, the user-friendly Software-Suites ASI-MON360 and ASI Control Tools360 make it extremely easy to parameterize a large number of IO-Link devices.

And thanks to the integrated IT interfaces such as OPC UA or REST API, the increasingly important additional information – whether from a single or several hundred IO-Link devices or ASi nodes – is available in uncomplicated, bundled form and without burdening the control system under just one node – the gateway. With this solution, Bihl+Wiedemann offers flexible and future-proof connection of IO-Link devices. This significantly simplifies the seamless exchange of information between the IO-Link device level and higher-level systems – a key factor for modern automation and networking in Industry 4.0 applications.



ASi-5 counter modules: more functions and an expanded product range

Bihl+Wiedemann's product range of ASi-5 Counter Modules now also includes the ASi-5 Counter Module BWU4996, which, as an active distributor, is perfectly suited for installation in cable ducts thanks to its flat design (35 mm deep), in addition to various variants with protection rating IP20 and IP67, each with four digital counter inputs that can be individually configured and parameterized. The module is equipped with two digital counter inputs that can be individually configured and parameterized as two two-channel or two one-channel inputs, making it ideal for implementing small applications even more flexibly and efficiently. All ASi-5 counter modules in the range work with counter frequencies up to a maximum of 250 kHz while enabling the connection of pulse counters and encoders (24 V).

In addition to the flexibility in using the modules thanks to the typical ASi individual parameterization and drastically reduced wiring effort in the field, additional functions ensure that many different applications can be realized cost-effectively with the ASi-5 counter modules. For example, the user can now choose between a 32-bit value range and fast transmission of two or four independent 16-bit counter values in just 1.27 ms. And in addition to various counter functions, frequency and period duration measurements with and without filtering are now also possible, enabling simple piece goods counting, positioning tasks or speed measurements, to name just a few.

