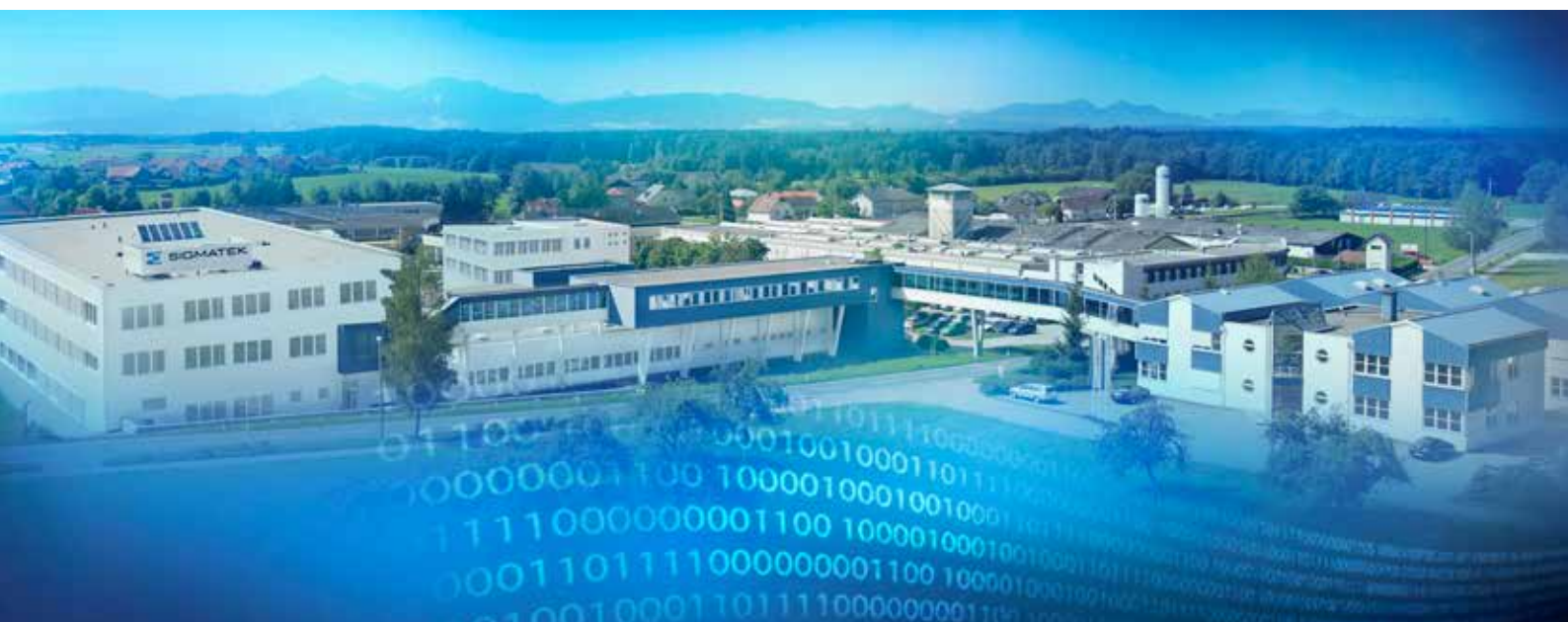


INNOVATIONS 2026





SIGMATEK: COMPLETE SOLUTIONS WITH ADDED VALUE

We live and love automation technology, and have done so for more than 35 years. Our complete, flexible automation solutions — consisting of hardware and software — are made in Austria and successfully in use around the globe in a wide variety of industries. As a medium-sized, owner-managed company, “active partnership” is an important factor for success. We support our customers in all aspects of automation, from solution finding and project planning to the end of the product life cycle.

SIGMATEK stands for state-of-the-art, modular automation solutions, industry-specific engineering expertise, and extensive customer support. In addition, we are willing to develop customized hardware if the right solution is not available in our extensive standard portfolio. This holistic view of the machine process makes it possible to sustainably reduce the time-to-market and the costs for engineering new machines.

VISUALIZE AND OPERATE

Our human-machine interfaces are modern, functional, and user-friendly. The choice is yours: built-in panels, HMIs for swing arm mounting, or mobile panels — in various display sizes, with different processors and interfaces.

You can use comfortable tools to create the visualization: LASAL SCREEN or the web-based LASAL VISUDesigner (HTML5, CSS3, JavaScript). Our HMIs with single or multi-touch screens, together with the compact S-DIAS control and I/O system, form an efficient solution for adaptive production machines. Mobile panels enable ergonomic operation on site – wired or wireless, with or without safety functions (SIL 3, PL e).



ET 0710 & ET 0711 COMPACT AND WEB-BASED

The 7-inch web HMIs are ideal for smaller machines with limited space. They combine a slim design with the latest processor architecture and a high-resolution 7-inch multi-touch display.

The ET 0710 comes in a plastic housing, making it ideal for price-sensitive applications that want to score points with modern HTML5 visualization. The ET 0711-02 has a black aluminum frame and steel housing.

Both web HMIs are equipped with a quad-core EDGE3 Technology processor (4x 1.6 GHz). Thanks to the projective capacitive glass surface, the fanless built-in panels can be operated precisely and intuitively with multi-finger gestures.

Variants with different interfaces are available, allowing you to select the panel or interfaces that best suit your requirements and thus achieve cost efficiency.

PRODUCT NAME	ET 0710	ET 0711-02
PROCESSOR	EDGE3 Technology Processor (4x 1.6 GHz), 2 GB LPDDR4 RAM, and 8 GB microSD (pSLC)	EDGE3 Technology Processor (4x 1.6 GHz), 2 GB LPDDR4 RAM, and 8 GB microSD (pSLC)
DESIGN	Plastic	Aluminum frame, steel housing
RESOLUTION	1.024 x 600 pixels	1.024 x 600 pixels
FRONT PROTECTION TYPE	IP65	IP65
INTERFACES	ET 0710: 1x Ethernet, 1x CAN, 1x USB 2.0 Type A, 1x USB 2.0 Type C, 1x RS485 ET 0710-01: in addition 1x Gigabit Ethernet, 1x CAN, 1x RS232, 1x LP-Bus, 1x M-Bus ET 0710-02: in addition 1x Ethernet, 1x CAN, 1x RS232	2x Ethernet (10/100) 2x CAN 1x USB 2.0 Type A 1x USB 2.0 Type C 1x RS485 1x RS232

Planned availability: Q1/2026

INTUITIVE OPERATION MEETS THE CONTEMPORARY SPIRIT

NewGen MULTITOUCH-HMI

Multi-touch operating panels give machines and systems a modern “face”. They enable clear visualizations and intuitive operating concepts that ensure a positive user experience.

Our new generation „xx20“ web panels are powerful, communicative, and high-quality, with a silver anodized aluminum frame around the glass front.

The slim widescreen HMIs are available in four display sizes from 10.1 to 21.5 inches and in two variants: as a built-in panel (ET) or for swing arm mounting (TP) – both with an IP65 front.

EVERYTHING IN VIEW

The HMIs of the xx20 series are the right choice for demanding visualizations. Their widescreen format – aligned in portrait or landscape format – provides a clear overview and freedom in the positioning of operating elements and content.

WEB VISUALIZATION

The new generation of built-in and swing arm mount HMIs are equipped with high-performance Intel® processors with four cores, plus 4 GB of DDR4 RAM and 128 GB of M.2 SATA mass storage.

In combination with the lean, Linux-based real-time operating system, fluid page loading is guaranteed – a particular advantage for web-based visualizations (HTML5, CSS3, JavaScript). An integrated web browser and server also contribute to this.

FLEXIBLE CONNECTIVITY

Communication standards such as OPC UA Client/Server and MQTT are naturally supported. The panels come as standard with two Gigabit Ethernet (10/100/1000) and two USB 3.0 Host (Type A) interfaces, as well as a short-term UPS.

INDUSTRIAL QUALITY

Both operating panel variants are IP65 protected at the front. On the back, the ET xx20 built-in panels comply with IP20 and the TP xx20 swing arm HMIs with IP54. These are designed for VESA 75/100 mounting.

SIGMATEK's high-quality multi-touch HMIs use state-of-the-art projective capacitive touch (PCT) technology, in which the sensors are protected and mounted on the back of the robust, continuous glass front.

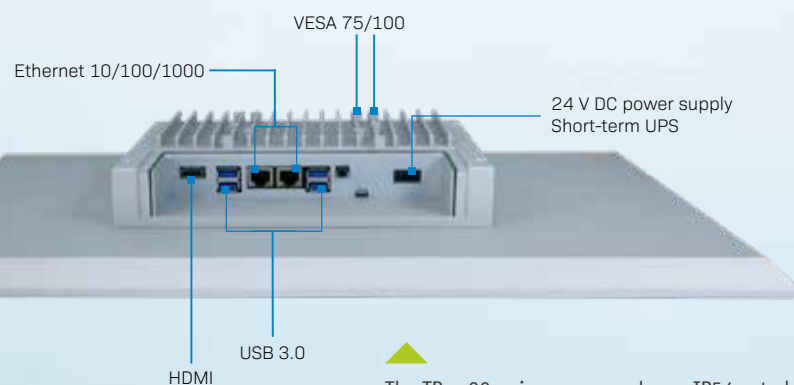
Multitouch inputs contribute to greater safety in the operation of machines and systems, for example by requiring two buttons to be pressed simultaneously.



10.1 inch	1280 x 800 pixels
15.6 inch	1920 x 1080 pixels
18.5 inch	1920 x 1080 pixels
21.5 inch	1920 x 1080 pixels

HTML

5



The TP xx20 swing arm panels are IP54-rated on the back and designed for VESA 75/100 mounting.

Advantages at a glance

- 10.1 to 21.5 inches as built-in and swing arm variants
- Optimized price/performance ratio
- For standard and complex applications with web visualization
- High-quality industrial displays
- Two Ethernet interfaces for easy vertical integration
- Short-term UPS
- Linux-based real-time OS
- Long-term availability

CPU, I/O, SAFETY

The SIGMATEK control system offers the right CPU for every application: compact S-DIAS CPU modules and high-performance CPU units for DIN rails. The scalability and consistency of the application software is a given. The S-DIAS system offers unique packing density. In addition to a wide range of digital and analog I/O modules, the series also includes motion and seamlessly integrated safety technology: Our safety technology is designed to transmit safety-related signals via Black Channel over any communication media. For wired solutions, a single cable is sufficient for safety and standard communication. However, transmission can also be wireless, for example via WiFi.

Based on S-DIAS, the X-DIAS I/O modules are the right choice for customer-specific wiring boards. P-DIAS modules are available for IP67 requirements.



MODULE VARIETY FOR TAILOR-MADE SOLUTIONS

S-DIAS

The modular S-DIAS control and I/O system is the right choice for flexible automation solutions. Whether CPU power, dynamic drive technology, safety, precise measurement technology, or special functions.

AM 821: ANALOG MEETS FLEXIBILITY

The AM 821 combines eight analog differential inputs (0–10 V, 16 bits) and two analog outputs (0–10 V, 12 bits) in a compact module and enables precise measurement of analog sensor signals. Each input and output can be individually switched between current and voltage signals (0–20 mA, 4–20 mA, and 0–10 V). The high resolution and compact design make the module the perfect choice for applications with mixed sensor requirements.

EC 122: ETHERCAT CONNECTIVITY

The EC 122 connection module allows S-DIAS modules to be integrated into an EtherCAT bus system. In addition to one EtherCAT input and one EtherCAT output, the EC 122 also provides power for 32 modules. It automatically detects the connected S-DIAS modules (standard and safety I/Os). The compact inter-



face module provides the EtherCAT slave configuration and handles data exchange between EtherCAT and the S-DIAS system bus. Compared to the EC 121, the EC 122 provides 9 times the amount of process data and is therefore also suitable for Safety over EtherCAT requirements.

SCP 211: SUPPORTS FSOE

The SCP 211 safety controller now offers a master for the FSoE (FailSafe over EtherCAT) safety protocol. This master functionality allows FSoE slave devices from different manufacturers to be integrated into an S-DIAS safety application, where they can be safely controlled and monitored.

Data is transmitted either via EtherCAT or VARAN.

The SCP 211 can be configured as an FSoE master and the safety application can be designed in the LASAL SAFETYDesigner graphical tool. To do this, the ESI files of the FSoE slave devices are read in. For user-friendly creation of safety-related applications, the library contains over 50 safety function blocks (based on the PLC-open standard) such as emergency stop, safety door monitoring, muting, two-hand operation, interpolation, etc.

The safety program is configured once with all possible optional modules and can

then be combined as desired, i.e., there is one safety program for all expansion stages of a machine.

For users, the addition of FSoE to the SCP 211 enables flexible and broad implementation of safety-related functions from manufacturer-independent safety components, for example with controls, motion, robotics, and AGVs.

S-DIAS Safety can also be used as a stand-alone solution. This makes it possible to expand existing systems with safety functions easily and, if necessary, gradually.



FSoE Master

MOTION CONTROL

Our modern motion control system is ideal for machine building: servo drives, frequency converters, compact motion modules for DIN rails, motors, gearboxes, and software work together perfectly and are seamlessly integrated into the control system. Central parameterization in the control simplifies commissioning and service, while real-time Ethernet ensures maximum precision and synchronization. Engineering is simple, as ready-made motion software components are available. The result is highly dynamic and precise motion sequences from a single source. Safety up to SIL 3, PL e is integrated and TÜV-certified.



NEW DRIVE MODULES AND AUTO-TUNING

SERVODRIVES M

The DIAS Drive 2000 series combines high power density and flexibility in controlling servo motors in a highly compact design. Two new drive modules and user-friendly automatic controller optimization increase efficiency.

Designed for dynamic multi-axis applications, the MDD 2000 servo drives offer maximum power density: up to 3 axes, supply, power filter, brake resistor and DC-Link circuit are packed into a width of 75 mm, a height of 240 mm, and a depth of 219 mm.

HIGHLY PRECISE AND USER-FRIENDLY

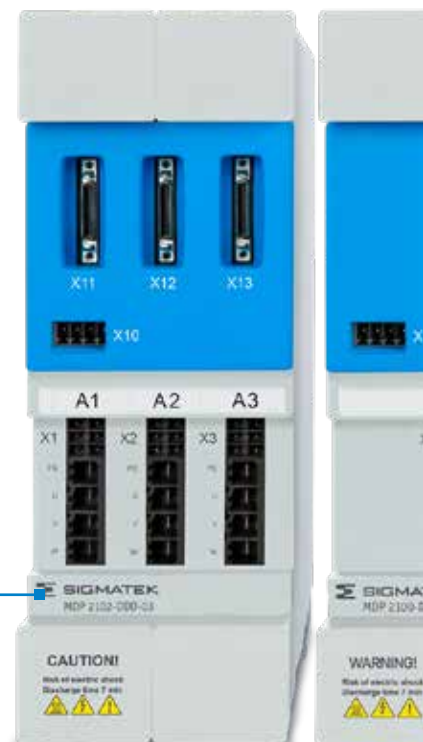
Very short controller cycle times of 62.5 µs give the DIAS drives excellent servo performance. The overload factor is up to 300 percent. In addition to high precision, the drives feature single-cable technology, numerous TÜV-certified safety functions, and easy handling.

FLEXIBLE COMPLETE SYSTEM

The MDD 2000 series has a modular design: Combined supply/axis modules (MDP) with 1, 2, or 3 integrated axes in different sizes and performance classes can be used as compact drives or combined with any axis expansion modules (MDD) to form a multi-axis network.

MDP 2102-DDD-03

- Supply/Drive Module
- 1-phase with 230 V AC, 1.3 kW
- Rated current: 3x 7 A
- Peak current: 3x 15 A
- A lot of safety functions integrated
- Hiperface DSL and universal encoder



MDD 2000

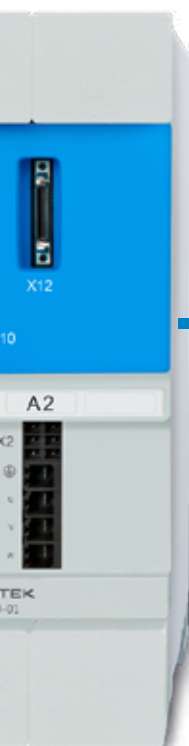
ability for
e modu-
efficiency.

For tailor-made drive solutions, the flexible servo system can be operated in single-phase or three-phase mode with 200/240 V AC or 380/480 V AC. The configuration is modular in a toolkit system with clever connection mechanics.

SAFETY AND SINGLE-CABLE SOLUTION

Many safety functions are integrated as standard: STO, SOS, SS1, SS2, SLS, SSM, SMS, SBC, SLP, SLI, SCA, SMA, SLA, SDI.

The MDD 2000 drives come with the Hiperface DSL single-cable solution. There are many modules that also have a universal interface for EnDat 2.1, Hiperface, resolver, Sin/Cos, TTL, BiSS-C, and Tamagawa.



MDP 2100-D-01

- Supply/Drive Module
- 3-phase with 480 V AC, 4 kW
- Rated current: 1x 5 A
- Peak current: 1x 15 A
- A lot of safety functions integrated
- Hiperface DSL and universal encoder



Planned availability: Q1/2026



AUTO-TUNING MDD 2000

The auto-tuning function in LASAL accelerates the commissioning of servo axes enormously. Instead of time-consuming parameterization and multiple re-adjustments of current, speed, and position controllers, optimization now takes place at the touch of a button.

AUTOMATIC CONTROLLER OPTIMIZATION

Parameterization is fully automated in the PLC and in the drive itself and covers the entire control chain: the parameters for the current controller, the speed controller, the position controller, and the torque feedforward control. The MDD 2000 servo drive records the necessary measurement data, and the PLC performs the mathematical evaluation. This includes Discrete Fourier Transforms (DFT) including the calculation of Bode diagrams using Sweep Frequency Response Analysis (SFRA), as well as the setting, optimization, and validation of the controller parameters according to specified criteria.

For the user, autotuning is conveniently accessible via a visualization object (VOV). The user selects the control loop to be tuned, defines the tuning range, and starts the fully automatic run. The tuning is performed by the algorithm without any further intervention by the user.

SYNCHRONOUS TUNING OF MULTIPLE AXES

In complex machines, it is often necessary to coordinate several drives in parallel. Here, a higher-level class in LASAL CLASS ensures that all axes involved start synchronously, perform their measurements, and then receive the new parameters. With auto-tuning, a powerful tool is available that enables machines to be ready to start faster, increases control quality, and prevents operating mistakes.

ALL-IN-ONE SOFTWARE

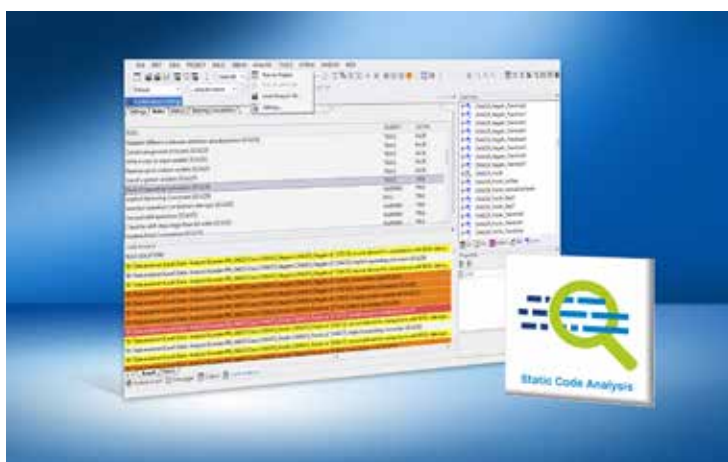
With LASAL, you can implement your machine application quickly, efficiently, and future-proof. The all-in-one engineering tool combines sequence control, motion control, safety, visualization, diagnostics, and service on a consistent platform. Object-oriented programming according to IEC 61131-3 combined with graphical representation ensures maximum clarity, modularity, and reusability. LASAL reduces development times, simplifies code maintenance, and secures the long-term value of your software. Once created, functions can be used again and again. Thanks to the modular principle and extensive libraries, even complex applications can be implemented in a structured and time-saving manner: configure instead of program. The automation software is continuously being expanded to relieve you of even more routine tasks.



STATIC CODE ANALYSIS, AI ASSISTANT SMARTE TOOLS

The object-oriented software development environment LASAL is continuously being expanded with functionalities that relieve application developers of routine tasks.

With the rising complexity of automation software, code quality assurance is becoming increasingly important. The PLC tool LASAL CLASS now offers an optional “Static Code Analysis” (SCA) extension for checking control code created in Structured Text.



IDENTIFYING ERRORS EARLY ON

SCA checks the code base for possible runtime errors and undefined behavior, such as uninitialized variables, returning a pointer to a local variable, implicit conversions, etc. – without having to execute the code.

To do this, a large number of different, simultaneously running check rules analyze the various aspects of the control code and identify any quality defects, non-compliance with guidelines, or violations of internal coding standards at an early stage.

Trivial errors that are often difficult to find can be prevented with the use of SCA, reducing the workload on the team and increasing productivity and software quality, not only during development but also during maintenance.

You have very flexible configuration options: Each of the more than 50 predefined rules for variables, types, functions, and

methods can be parameterized individually. The tool can also calculate metrics. Metrics are measures that evaluate various aspects of the code base. In addition, completely configurable naming conventions are also possible. The rules, metrics, or naming conventions can be enabled or disabled – both individually and in groups.

Automated basic checks allow reviewers to focus on the correctness of the logic and architecture. This helps to shorten development time, minimize development risk, and eliminate rework. As a result, machine and system manufacturers can develop better machines faster and secure their market position.

AI ASSISTANT: DEVELOP MORE EFFICIENTLY

New to LASAL is the AI Assistant, which can be used to increase development efficiency in terms of workflow and iteration cycles. In the first step, the AI Assistant integrated into LASAL CLASS acts as an intelligent knowledge database that is fed and trained with SIGMATEK-specific know-how: hardware and software documentation, libraries with classes, functions, packages, best practices, and FAQs. The user gets a central point of contact for optimized information retrieval and access to documentation and libraries.

AGENTIC RAG

SIGMATEK uses “Agentic RAG” (Retrieval-Augmented Generation) to find the

right information in the knowledge database and convert it into a useful answer for the user with the help of a state-of-the-art large language model. The highest possible accuracy is important here. If the AI assistant cannot find a result, it will let you know and will not simply “hallucinate.” In his answers he provides links to the source of information for more details and suggests library functions.

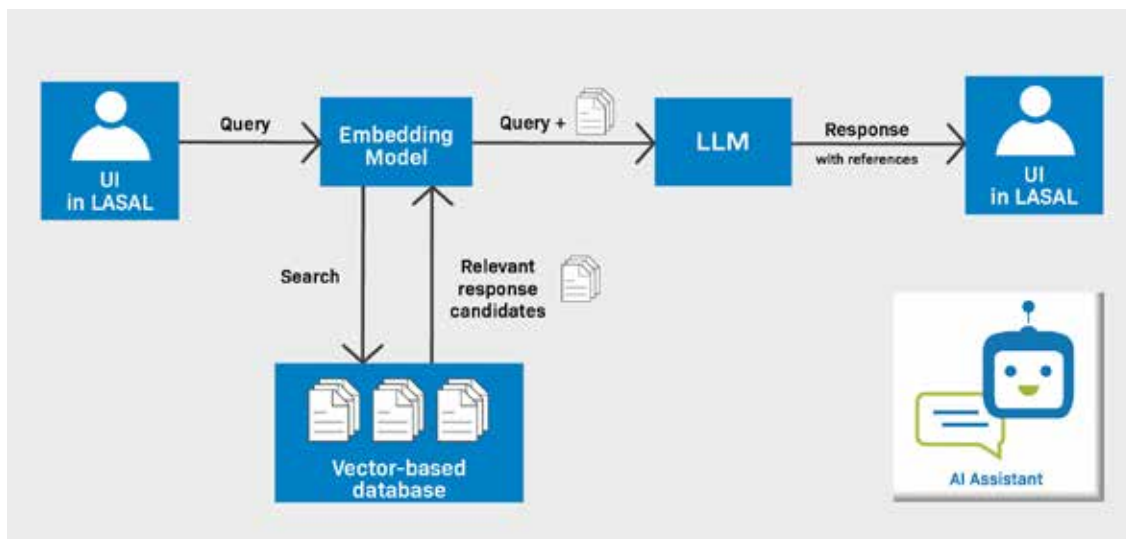
AVAILABLE 24/7

Users can ask questions around the clock and receive answers in their respective languages. The goal is that the AI assistant supports developers in implementing basic functions.*

Machine applications realized with LASAL CLASS usually consist of at least 50 percent library classes that are imported and parameterized to fulfill the desired function.

NEXT STEP

In the future, this process can be accelerated with the AI Assistant by suggesting the most suitable functionality for the task to be completed. If this suits the developer, they give the command to load and import the corresponding library or classes. If necessary, the AI Assistant could explain the parameterization in detail.**



Functional principle of the new AI Assistant integrated into LASAL CLASS.

*Planned availability: Q1/2026

**Planned availability: Q4/2026

INTERNATIONAL



AUSTRIA - CORPORATE HEADQUARTERS

SIGMATEK GmbH & Co KG
5112 Lamprechtshausen
Sigmatekstraße 1
Tel. +43 6274 43 21-0
Fax +43 6274 43 21-18
www.sigmatek-automation.com
office@sigmatek.at



GERMANY

SIGMATEK GMBH
76829 Landau
Marie-Curie-Straße 9
Tel. +49 6341 94 21-0
Fax +49 6341 94 21-21
www.sigmatek-automation.com
office@sigmatek.de



SWITZERLAND

SIGMATEK Schweiz AG
8308 Illnau-Effretikon
Schmittestrasse 9
Tel. +41 52 354 50 50
Fax +41 52 354 50 51
www.sigmatek-automation.ch
office@sigmatek.ch



ITALY

SIGMATEK Italia Srl
Office Bologna
Tel. +39 352 03 50 724
www.sigmatek-automation.it
office@sigmatek.it



GREAT BRITAIN

SIGMATEK Automation UK Limited
Leamington Spa, CV32 6JX
Gables House, 62 Kenilworth Road
Tel. +44 115 922 24 33
www.sigmatek-automation.co.uk
office@sigmatek-automation.co.uk



USA

SIGMATEK U.S. Automation, Inc.
44133 North Royalton, Ohio
10147 Royalton Rd., Suite N.
Tel. +1 440 582 12 66
Fax +1 440 582 14 76
www.sigmatek-automation.us
office@sigmatek.us



CHINA

SIGMATEK Automation CO., Ltd
315040 Ningbo · Room 15A03,
Building A, No. 555, Jingjia Road
Tel. +86 574 87 75 30 85
Fax +86 574 87 75 30 65
www.sigmatek-automation.cn
office@sigmatek-automation.cn



BELGIUM

SigmaControl B.V.
2992 LC Barendrecht
Tel. +32 329 770 07
www.sigmacontrol.eu
office@sigmacontrol.eu



FINLAND

SARLIN Oy Ab
01610 Vantaa
Tel. +358 105 50 40 00
www.sarlin.com
asiakaspalvelu@sarlin.com



ITALY

SIGMA MOTION SRL
36075 Montecchio Maggiore (VI)
Tel. +39 0444 60 75 75
www.sigmamotion.it
info@sigmamotion.it



JAPAN

SUMITOMO HEAVY INDUSTRIES, LTD.
Mechatronics Division
141-6025 Tokyo
Tel. +81 3 67 37 25 32
www.shi-mechatronics.jp
ryuji.nakajima@shi-g.com



KOREA

Servostar CO., Ltd
14988 Siheung-si · Gyeonggi-do
#501, 168-28, Mokgamdulle-ro
Tel. +82 31 486 87 87
Fax +82 31 486 88 84
servo@servostar.co.kr
www.servostar.co.kr



NETHERLANDS

SigmaControl B.V.
2992 LC Barendrecht
Tel. +31 180 69 57 77
www.sigmacontrol.eu
office@sigmacontrol.eu



PORTUGAL

Plasdan Automation & Add-On Systems
2430-379 Marinha Grande
Tel. +351 244 57 21 10
www.plasdan.pt
info@plasdan.pt



SWEDEN

SIGBI Automation AB
254 64 Helsingborg
Tel. +46 42 654 00
www.sigmatek.se
info@sigmatek.se



SOUTH AFRICA

Anytech (PTY) Ltd.
Corner Homestead & Orleans Road
Kya Sand, Randburg 2163
Tel. +27 11 708 19 92
www.anytech.co.za
info@anytech.co.za



THAILAND

SCMA CO., LTD.
69/494 Moo 1 Tiwanon Road
Banmei, Pakkret, 11120 Nonthaburi
Tel. +66 2 615 48 88
www.scma.co.th
contact@scma.co.th



TURKEY

Dedem Mekatronik
35477 Menderes – İzmir
Tel. +90 232 47 21 848
www.dedemmekatronik.com
satis@dedemmekatronik.com