

## Why customize...

If extraordinary requirements, such as extreme environmental conditions or enormous costs pressures are in the forefront of system development the customer-specific, application-optimized PLC is growing in importance.

Take advantage of an integrated system development process up to serial production.

All from one source!



**CANopen**  
**IEC 61131-3**

PORTABLE  
CANOPEN  
ENHANCED  
IEC 61131-3  
PLC KERNEL

### More Information

Looking for more information about our services? Please check out our company website, where you'll find lots of useful information.

### Order Information

Call to discuss or

contact: [sales@systec-electronic.com](mailto:sales@systec-electronic.com)

## OEM Automation Solutions

Demands made on automation of modern, modular machines and systems are increasing at an accelerated pace.

Innovative automation concepts require future-oriented solutions that are closely aligned with technological advances.

Especially efficient automation solutions result, however, in the combination of standard controls and user-specific special components. In realizing user-specific controls, the developer is frequently faced with the task of incorporating proprietary hardware components.

### Jump-start your Development Cycle

SYS TEC helps to jump-start your development cycle. We have everything you need to develop a state-of-the-art automation solution that even meets extraordinary demands.

- Our powerful PLC runtime system as a portable system, available for many hardware platforms.
- Take advantage of many years of experience in development of custom automation solutions, including CANopen field-bus technology and safety relevant application for process control in accordance to IEC 61508.
- Last but not least we provide high-level hardware solutions. Our in-house development and production guarantees maximum quality and highest reliability.

Your target platform  
+ IEC 61131-3 kernel  
+ CANopen Master  
= technological advantage

Our CANopen protocol stack combined with our IEC 61131-3 runtime system is a perfect match for designing sophisticated automation solutions based on open standards.

Extended CANopen network management features and a CANopen Safety Protocol implementation offer additional flexibility in systems design.

Here too, our efficient integrated system development cuts time-to-market for your product.

Why buying all ingredients separately when you can have a ready meal.

### Convenient IEC 61131-3 programming environment

OpenPCS, the truly IEC 61131-3 compliant programming environment, includes editors and debuggers for all IEC 61131-3 programming languages.

A seamless integration of all CANopen services goes without saying. Furthermore high-performance native code generation is available for many target platforms.

### Production at SYS TEC saves license costs

Development of an IEC 61131-3 compliant custom PLC doesn't necessarily require acquisition of expensive buyout licenses. When you develop and produce your hardware at SYS TEC, this high initial investment is eliminated. Take advantage of our

experience in adapting to the widest range of hardware platforms. Your special requirements are taken into account by our portable PLC solution. You receive an integrated harmonious design from one source, an optimized PLC solution. Don't burden yourself with integration of the widest range of components and manufacturers. Place this task in the hands of our specialists.

# SYS TEC products and services are available worldwide through our partners and distributors.

## America

USA:  
PHYTEC America LLC  
[www.phytec.com](http://www.phytec.com)

Brazil:  
Sigma Quantum  
[www.sigquantum.com.br](http://www.sigquantum.com.br)

## Europe

Germany:  
SYS TEC electronic GmbH  
[www.systemec-electronic.com](http://www.systemec-electronic.com)

France:  
PHYTEC France SARL  
[www.phytec.fr](http://www.phytec.fr)

UK:  
HITEX Ltd.  
[www.hitex.co.uk](http://www.hitex.co.uk)

Italy:  
FASE s.r.l.  
[fase-online@libero.it](mailto:fase-online@libero.it)

## Asia/Australia

P. R. China:  
Beijing Bocon Automation Co. Ltd.  
[www.bocon.com.cn](http://www.bocon.com.cn)

Australia / New Zealand:  
Embedded Logic Solutions Pty Ltd  
[www.electro.com.au](http://www.electro.com.au)

For a complete list visit: [www.systemec-electronic.com/distributors](http://www.systemec-electronic.com/distributors)

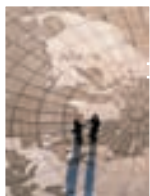
## Innovation through Outsourcing

### Our Services

- Consultation and Problem Analysis
- Workshops and Training
- Specification up to System Design
- System development including Hardware and Software
- System integration
- Efficient Prototyping up to production-readiness
- Production on-demand
- After-sale services

### Make yourself free for Core Business Expansion

We are involved on a daily basis with developing and implementation of technical solutions, with procuring material and ensuring smooth



manufacturing process. Seamlessly coordinated processes between the different divisions are your quality assurance in development and products, even if you are working on a

tight schedule. Thanks to our close relationships with our distributors and semi-conductor manufacturers, we get the most current information and can provide you with competent support in selecting the right circuit solutions.

### DIN EN ISO 9001:2000 compliant Development and Production

As a system solution provider SYS TEC offers integrated logistics from the first customer contact through development and production right up to serial supply. Our processes are certified pursuant to DIN EN ISO 9001:2000.

### Hardware Development

SYS TEC employees were intimately involved in the development of microcontroller boards such as, for example, the PHYTEC Technologie Holding AG phyCORE product line. Take advantage of our expertise when designing your electronic modules. So, for example, when creating the circuit diagram consider an EMC-compliant circuit. We have years of experience also in designing EMC-compliant layouts for circuit boards. You have optimum conditions for outsourcing, because from circuit diagram development to prototype production through to volume production you have everything from one provider at one location. All component and device development are subject to EMC testing and CE conformity.

### Software Development

Software requirements take on a complex nature in the development of automation components. Software concepts and implementation must always be tailored to the hardware. With the ever-widening possibilities of complex systems, hardware requirements also become more demanding. Use of 32-bit hardware is frequently an absolute must. Thus a comprehensive system evolves from initially functional requirements and has to be well-thought out in terms of costs aspects as well. In the context of a large number of customer-specific projects SYS TEC has accumulated expertise right in the middle of the close integration of hardware and software. Give your project the advantage of our experience. SYS TEC has a wide range of software components. Implementing a customer-specific project doesn't always have to re-invent complete software at enormous expense. Take advantage of our advice. We are pleased to demonstrate our software components' functionality for use in your application.

## Where it all comes together ...

### Fagus-GreCon Greten GmbH



### Detection and Combating Sparks in Pneumatic Extraction and Conveyor Equipment

Fire hazards, created by chipping machines in the wood processing and in the foods, feeds, textile, leather and chemical industrial operations impose a high risk into the automation process. Smoldering fires and dust explosions can result from the sparks produced by the machines. Fagus-GreCon Greten GmbH is a worldwide leading manufacturer of systems for detecting and combating sparks in pneumatic extraction and conveyor equipment. SYS TEC created a high-performance control system for real time activation of the on-board peripheral using integrated CANopen communications. In this instance, both the hardware and the software was designed and implemented by SYS TEC. Our PLC runtime system was tailored to the specific customer requirements and seamlessly integrated on the module. The control system enables parallel execution of PLC programs and customer-specific program components programmed in C programming language, loadable at runtime. In this system the highly efficient operating system controls the prioritized execution of a processing function for detecting sparks and their direction of flight as well as the overall communications process with two independent CANopen networks connected.

LEARN MORE AT:

[www.systemec-electronic.com](http://www.systemec-electronic.com)