# **Electronics - Technology - Engineering**





From the idea to its implementation



### Erlen - the company

Erlen GmbH is a medium-sized, owner-managed family company, and has been in the market successfully for 40 years.

In recent years we have specialised in two areas of business:

### erlen tec

The erlentec business area represents innovative technologies and business services:

On the basis of customer-specific development and manufacturing, we supply electronic measurement, control, and automation technology for equipment manufacturing, especially for medical technology, the foodstuffs industry, and shop-fitting. Our engineers and specialists from different areas are available to you for engineering, prototype construction, and series manufacture.

We don't expect a fully developed requirements document, but instead, together with the customer, we jointly define the specifications and match them to the appropriate technical solution.

In addition to ensuring all required functions, one of our particular specialities is correct scaling, with an eye to costs, operational safety, reliability, and future-proofing. Because of the high level of vertical integration in our company, we can deliver series products, even in small quantities.

#### Experience

- Certified to DIN EN 9001 and DIN EN 13485
   (Development and manufacture of medical devices)
- Forty years of market success in control technology.
- Application of our own technology in end products and through customer service for hygiene technology.

#### Customer focus

- Conception, development, and manufacture of the entire electro-technical system – all under one roof.
- Extensive physical insight, to get to grips with the requirements.
- Understanding the planned business model and supporting it through the appropriate technology.

#### Pricing policy

- Because we are a medium-sized company, our pricing can be more attractive than that of many "giants" in the industry.
- We focus on long-term partnership.
- We offer transparent and fair conditions.

### erlen med

In the erlenmed business area, hygiene is everything: hygiene technology for the hospital ward and the residential and nursing home, decentralised instrument preparation in outpatient clinics and for specialist doctors. The core of our technology is formed by bedpan washing systems, equipment for instrument preparation, and the dependable cleaning of tableware in the ward kitchen. On top of this are comprehensive technical services and financing solutions, both for our own products and across vendors. Individually for your requirements and budget, we combine equipment and configurations from our own manufacture and from external suppliers, and we link this to an extraordinary level of service.

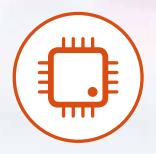
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# erlentec Portfolio of services



# Microprocessor controllers

Development and manufacture



### Electro-technical assemblies

Cable sets and components



# Measurement and laboratory technology

Recording and visualisation



## Internet of things

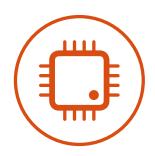
Equipment and services



ELECTRONICS · TECHNOLOGY · ENGINEERING

### Microprocessor controllers

Development and manufacture



On the basis of your requirements, we develop a measurement and control system which covers all the functions of your equipment. This also includes suitable input and output systems, from simple button operation, to glass operator panels with touch-technology, to control by gesture. Where required, connectivity via LAN/WLAN, Bluetooth, and other standards is integrated. As standard, we work with multiple operator and access levels, in order to fulfil all permission requirements when operating the equipment.

#### Project examples:

- Microprocessor controllers for various product families of cleaning and disinfection equipment for the medical area. Here, various operation and communication concepts were implemented and successfully transferred to series manufacture: from the simple multi-button, film-covered operating panel to the capacitive glass operating panel with graphical display.
- Many generations of individual small control systems for vacuum packaging machines. For this, machine control and operation are always combined in a single housing, and this therefore simplifies installation and servicing.
- Automation for shop-fitting. Small control systems for contact-free actuation of door elements and control of manoeuvrable drawer cabinets, in cooperation with an engineering company.







### Electro-technical assemblies

Cable sets and components



Complementing our electronic control systems, but also for the re-engineering of existing systems, we provide the manufacture of customer-specific cable sets, sensors, and actuators. Here we have particular experience in the area of hygiene-related applications, such as within medical technology and in the foodstuffs industry. Our high level of vertical integration and the option of manufacturing complete, ready-to-install functional aggregates are what make the difference!

### Application examples:

- Hygiene equipment for hospitals in OR induction areas, and on the ward.
- Sensors and wiring for care and rehabilitation technology (hospital bathtubs, aids for patient transport).
- Controlled and intrinsically safe heating systems, e.g. for the operation of water mattresses.



# Measurement and laboratory technology

Recording and visualisation

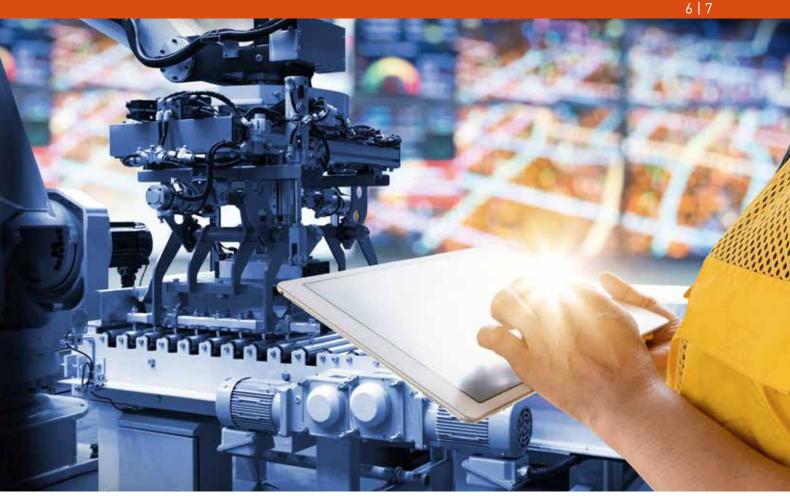


Special tasks require application-specific equipment! Whether for individual processes in your manufacturing, the proper functioning of your entire machine, or even a measurement task across manufacturers and products, we, as a specialist for the relevant application, together with you develop and manufacture a suitable system, and of course as a white label provider if required.

#### Application examples:

- Validation kit including PC-interface for external monitoring and visualisation of thermal disinfection processes in medical cleaning equipment.
- Assessment system for the identification of defective units after the manufacturing process, based on electrical measurement parameters which can be transmitted to an ERP system.
- Monitoring of flow behaviour in exhaust systems for cleanrooms.





### Internet of things

Equipment and services

The availability and quality of the data generated by your equipment or machine is a prerequisite for your future success. But there's no sense in simply doing everything possible. Together with you, we decide on the right concept, in agreement with your current and intended business model.



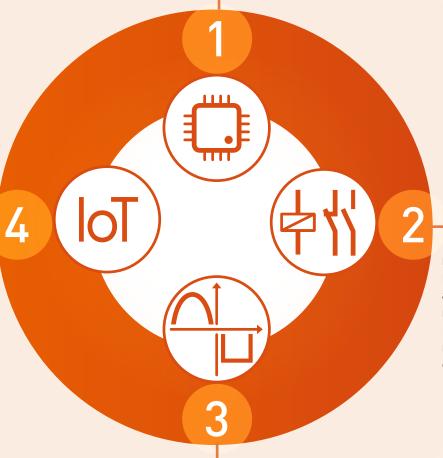
#### Application examples:

- Database system including decentralised recording units for operating states and batch data of medical equipment in a hospital environment.
- Recording and transmission of the fill levels of fuel tanks.
- Implementation of signals from specific BUS system for processing on standard hardware and software, to the benefit of cost-effective end applications.



# Electronics $360^{\circ}$ – integrated service portfolio

Customer-specific small control systems and input/output systems fulfilling jointly developed requirements. Inclusion of requirements from standards and applicable directives, from the very first component onwards.



Installation of the necessary components (sensors, actuators), and connection by means of a cable set. Pre-installation or manufacture of a complete aggregate.

Systems for the validation of your application.
Visualisation and documentation of proper functioning.

Erlen GmbH

Integration of all

(commissioning,

device-specific data

validation, operational

created for you or for

your own customer.

states, and batches) into a database or app

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