



# SPECTRA GMBH & CO. KG

KNOW-HOW IN INDUSTRIAL COMPUTING





## THE COMPANY

### WELCOME AT SPECTRA

Spectra GmbH & Co. KG was established in 1982 and has grown to become a leading supplier of products directly and indirectly related to industrial computer applications in Germany.

Spectra's activities included trading in components for measurement and automation technology and the development and production of industrial PC systems.

Another business area is „Special Industry Solutions“, which is primarily concerned with the creation of systems for digital information transmission.

With the objective of providing comprehensive, optimum and above all customer-proximate care in the German-speaking world, a subsidiary was opened in Switzerland in 2004: Spectra (Schweiz) AG.

This was followed in 2006 by a branch office in Austria. Marketing, purchasing, numerous logistics activities, development and quality assurance measures are performed centrally at our headquarters in Reutlingen. This is also the location of our large central warehouse with over 45,000 products, ensuring very short delivery times.

# SPECTRA IN FIGURES

## 3.400 m<sup>2</sup> SURFACE

Office: 1.400 m<sup>2</sup>

Logistics/Production: 2.000 m<sup>2</sup>

## 104 EMPLOYEES

Germany: 80

Switzerland: 8 | Austria: 2

Taiwan: 14

## 5 LOCATIONS NATIONAL

Headquarters: Reutlingen

Sales Offices: Southwest, Southeast,  
Centre, North

## 3 LOCATIONS INTERNATIONAL

Switzerland: Spectra (Schweiz) AG, Egg/ZH

Austria: Spectra, Sipbachzell (Wels)

Taiwan: Cervoz Co. Ltd, New Taipei City





## WE ARE DIFFERENT!

### PERSONALITY

Customers for industrial high-tech products attach especially high importance to good service. For Spectra as a supplier of high quality products, competent and personal customer support in both pre- and post-sales is of key importance. Instead of having to call anonymous call centres, customers can at any time turn to their personal contact person, who with professional competence and experience is able to deal with requests and problems in a committed, cooperative and solution-orientated manner.

### SPEED

So that we can implement customer requirements just-in-time, Spectra has optimised and streamlined all relevant processes. An expanded production site in Reutlingen and the computer-controlled logistics centre assure you of rapid and reliable production and short delivery times.

The shortest path from idea to the installed solution.



### **QUALITY**

Our quest for absolute quality starts with the careful selection of components and embraces diligent quality controls with numerous in-house tests. Modern, well equipped, intelligently organised production spaces are the essential external context for precise and high-quality manufacture of our industrial PC systems.

These are manned by motivated, highly qualified employees with many years of experience.

### **DOWN-TO-EARTHNESS**

With solid technical knowledge and „private sector“ common sense, we have always been considered by our customers ever since the company was established as a reliable business partner. Solutions are designed transparently and on schedule, planning for complex projects is set out in project specifications.

Project management is supported by efficient ERP and our experienced team helps our customers to save time and money.



# KNOW-HOW IN INDUSTRIAL COMPUTING

## ONE FOR ALL

Whether industrial production, research or medical technology, environment or building management technology, Spectra offers a tailor-made PC solution. This claim is supported by numerous references from a wide variety of industries.

Almost all the big names in manufacturing industry are to be found in our customer file. However, many small and medium-sized companies and virtually all German universities and technical colleges appreciate our personal service and our wide portfolio.

## THE MATCHING SYSTEM SOLUTION

Whether standard 19" industrial PCs for integration in control cabinets, compact PCs, panel PCs with flat screen display, a PC for installation on DIN rails or a powerful digital signage player. The choice is yours.

And in consultation with your personal Spectra adviser, you decide the best and most suitable solution for your application.

We prepare a high quality, turnkey system that undergoes comprehensive tests before it reaches you.





## YOU CAN DEPEND ON US

### QUALITY AND WARRANTY

Our careful selection of components combined with numerous and extensive tests guarantee the quality of our products, their reliability and your security! No company can afford downtimes nor should it have to.

We therefore test all our systems, which leave our premises, in a practice-based 24-hour burn-in test so that can be rest assured that the product that has been individually matched with your requirements will reliably withstand even the toughest demands.

Furthermore, we extend a 24-month warranty over all systems.

### SERVICE AND SUPPORT

In addition to the warranty and quality assurance, we offer our customers not only expert individual advice, but also competent support during commissioning and if any problems arise in service. Our repair department provides rapid, reliable and uncomplicated assistance – also on our customers' premises.

Our range of services is rounded off with qualified pre-sales advice and after-sales support by our experienced system integrators. In addition, we offer an assembly and designer service for customised industrial PC and multimedia systems.

# SPECTRA THE SYSTEM SUPPLIER

## INDUSTRIAL PC SYSTEMS

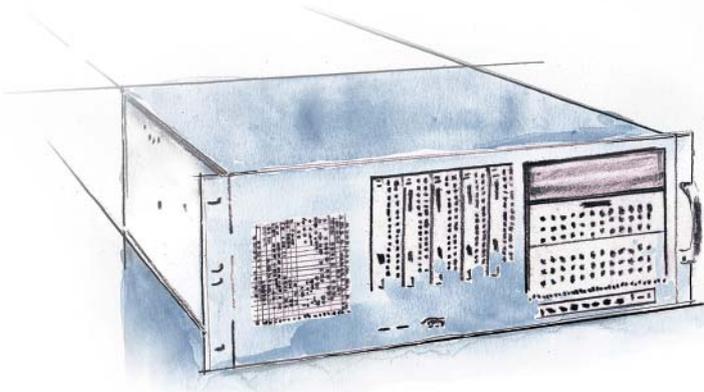
Customised, powerful, especially robust solutions are what is required here.

A Spectra industrial PC system is especially harmonised and assembled with customer requirements.

After all, when it comes to maximising productivity, the highest levels of standards of reliability and the best quality are of decisive importance.

## PORTFOLIO

- IPC systems for 19" installation with or without flat screen display
- Mini PCs with or without fan
- Industrial panel PCs with touch screen in metal housing
- Fanless box PCs for use in vehicles
- DIN-rail PCs
- Industrial PCs with PCI and PCIe extension slots in compact housing



# WHAT ELSE WE HAVE TO OFFER

Personalized service means to become familiar with your wishes and to implement them. The aim is always to provide an all-round carefree package to you. To achieve this, we make various adjustments to the industrial PC

systems, run extensive tests, install your software or perform Hands-ON workshops. Sometimes we are just the interface that knows the right person for you. The customer is at the center of all our efforts.

## **CONFIGURATION ADJUSTMENT**

You can change individual components of our standard IPC systems at any time. The installation of your additional customer-specific components is possible ex works. These are taken into account in the system test at the end control.

## **COMPATIBILITY TEST**

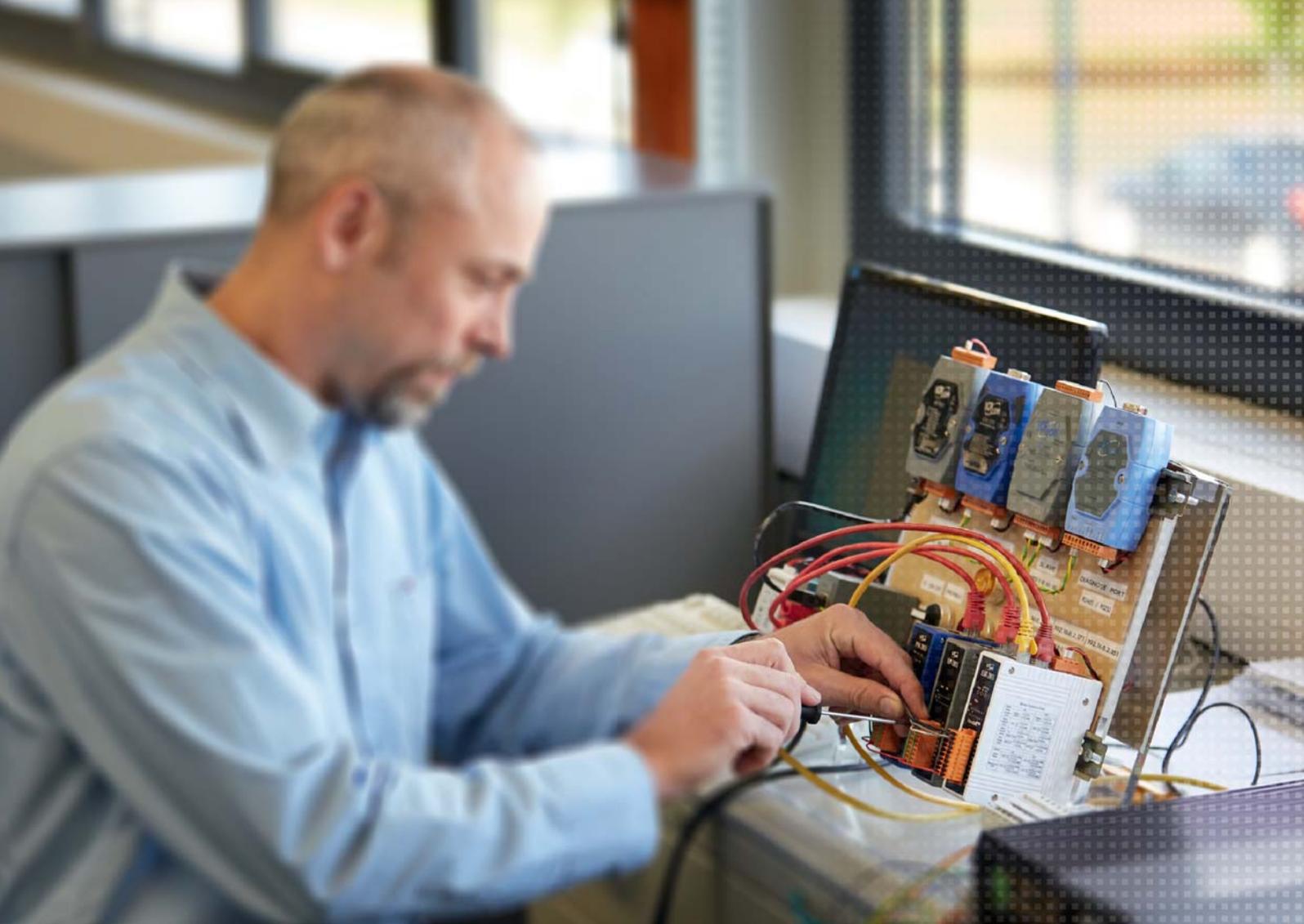
Despite the comprehensive normalization in the PC-World, it makes sense to test the custom system assortments, including the used software, before production. With our heating cabinet we can simulate high temperature requirements. All compatibility tests are documented in a detailed log.

## **INDIVIDUALIZATION**

The individualization options are nearly endless. They range from individual coloring of the housing or front panel up to imprint or sticking your logo. Such requirements can be fulfilled quickly and easily – even for smaller quantities.

## **CUSTOMER-SPECIFIC ARTICEL NUMBER**

Your individual industrial PC is managed with its own article number in our ERP system. This allows a clean audit management and simplifies reappointment. In order to ensure consistent product quality, all internal work instructions are managed under this article number.



#### **MECHANICAL ADAPTION**

Sometimes moving a port is sufficient to turn a standard PC to your ideal PC. Or the IPC can be accommodated by attaching a mounting plate in a thermally favorable position. With little effort, such a great benefit is achieved.

#### **SOFTWARE ADAPTION**

Our capabilities range from BIOS adjustments (customer logo, settings) to individual operating system developments (Windows embedded, Linux ).

We can either install the operating system on your industrial PC in a defined "frozen" state, or in a current version.

#### **INDIVIDUAL FINAL INSPECTION**

In consultation with you, we perform advanced system tests for your custom IPC. Our possibilities range from custom cycles through application tests with an additional hardware – supplied by you – to advanced documentation.

#### **INDIVIDUAL LOGISTICS CONCEPT**

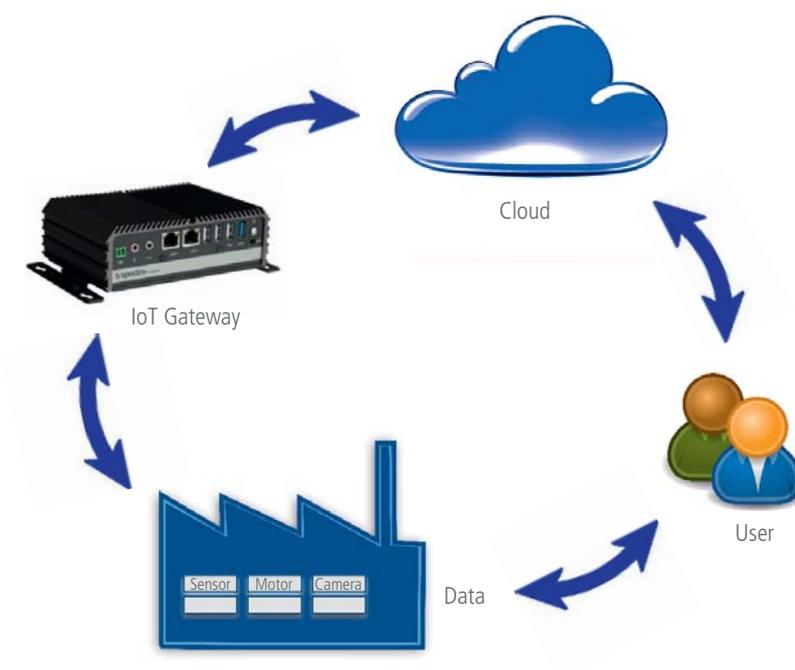
Framework agreements guarantee the long-term, on-time delivery of your products. The storage of mission-critical components enables the construction of the same industrial PC even after product discontinuation. Moreover, it may be useful to reflect on the packaging or package units to optimize your internal processes.

# SPECTRA INDUSTRY 4.0 AND IoT

## FROM SENSOR TO CLOUD

Industry 4.0, Industrial IoT (Internet of Things) & Co. stand for the systematic digitization of industrial value networks. Plant, machinery and processes merge with the information and communication technology to so-called Cyber

Physical Systems (CPS). With them the idea is connected to initiate as part of a self-coordinating network a fundamental improvement of industrial processes.





## DIGITALISATION IN PRODUCTION

Two technological trends influencing this development: the performance leaps in hardware technology and the integration of the components in an IP-based network, including communicating with central cloud servers on the internet.

Modern embedded systems are predestined with its open architecture and universal built multi-core Intel® processors, to take on the task of data integration and treatment.

In addition specialized IoT Gateways help to introduce data of existing sensors of the machinery world to the cloud environment.

The gateway collects this data in different fieldbus formats, makes them standard Ethernet capable and communicate via mobile networks or the Internet with cloud services.

The finely divided, timely data exchange between manufacturing and management systems may lead to greater flexibility and better utilization of production through smaller lot sizes.

The cost structures in production can be optimized through automated tuning of consumption and capacity. Likewise, it is conceivable that plants use their "knowledge" of the current values of production parameters and automatically initiate a maintenance.

But the entry into the Industry 4.0 / CPPS age presents a thematically and technically demanding task: Companies must carefully consider what data are useful at all for evaluation as part of cloud services. This raises also the question of which way the information from the sensors, actuators, processes and equipment can be introduced into the standard Ethernet communication.

Spectra is your competent partner in all these issues and develop with you custom solutions for Industry 4.0 and IoT.

# SPECTRA THE DISTRIBUTOR

## IPC COMPONENTS

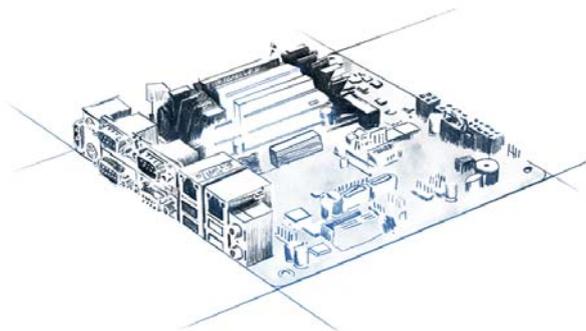
The component carousel is turning ever faster. Innovative developments and trends come and go at an ever increasing rate. Spectra with its products is always future-orientated and combines state-of-the-art innovations with continuity.

## COMMUNICATION AND AUTOMATION

Centrally monitoring and controlling devices and machines, immediately preventing or rectifying faults. These are the central tasks for industrial communication. Precision, long-term stability and fault suppression are factors that are very important in the field of automation.

## PORTFOLIO IPC COMPONENTS

- Displays & monitors
- IPC housing
- Power supplies
- Industrial PC boards
- Passive bus boards
- CPU
- PC extension cards & modules
- Processors
- Memory modules
- SSD
- Periphereral devices
- Accessories



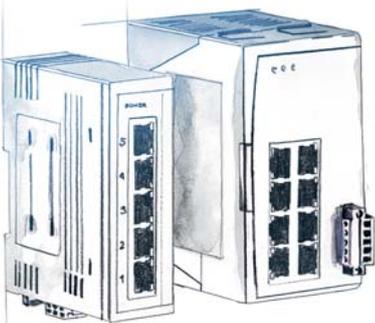


#### PORTFOLIO COMMUNICATION

- Ethernet switches
- Interface converters
- Device servers
- Media converters

#### PORTFOLIO AUTOMATION

- Fieldbus I/O modules
- Fieldbus I/O systems
- Programmable Automation Controllers (PAC)
- Plug-in modules for I/O systems & PAC
- Programmable Logic Controller



*powered by individuality*

#### **Spectra GmbH & Co. KG**



Mahdenstr. 3  
72768 Reutlingen  
Germany  
Phone +49 (0) 7121 14321-0  
E-Mail [spectra@spectra.de](mailto:spectra@spectra.de)  
Web [www.spectra.de](http://www.spectra.de)

#### **Sales Offices**

North	PC 06, 10-31, 38-39	Phone +49 (0) 7121 14321-48
Centre	PC 32-37, 40-54, 56-59	Phone +49 (0) 7121 14321-23
Southwest	PC 55, 60-69, 72, 75-79, 87-88	Phone +49 (0) 7121 14321-55
	PC 70-71, 73-74, 89	Phone +49 (0) 7121 14321-80
Southeast	PC 01-04, 07-09, 80-86, 90-99	Phone +49 (0) 7121 14321-54

#### **Spectra GmbH & Co. KG**



Gewerbepark Ost 1  
4621 Sipbachzell (Wels)  
Austria  
Phone +43 (0) 7240 20190  
E-Mail [info@spectra-austria.at](mailto:info@spectra-austria.at)  
Web [www.spectra-austria.at](http://www.spectra-austria.at)



#### **Spectra (Schweiz) AG**

Flugplatzstr. 5  
8404 Winterthur  
Switzerland  
Phone +41 (0) 43 27710-50  
E-Mail [info@spectra.ch](mailto:info@spectra.ch)  
Web [www.spectra.ch](http://www.spectra.ch)

