



Protecting your electronics ...

... anywhere

One-stop comprehensive service ...
From the idea to the complete product



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Intermas-Elcom develops, manufactures and markets components and modules for the “packaging” of electronics: cabinets, housings, subracks, cassettes and an extensive range of accessories which leaves nothing to be desired. Interma was originally founded in 1969 as an operating division of the former AEG Corporation. Interma engineers played a decisive role in the creation of the 19-inch and metric assembly standards and their subsequent further development. A wide range of innovative and trend-setting products have their roots in Interma.

Interma products are used in almost all fields of industrial electronics and telecommunications, military, and transportation technology. Well-known customers throughout the world rely on Interma. Effective July 1, 2001, the Interma assets were acquired by Interma-Elcom GmbH. Our extensive range of mechanical and electromechanical components forms the basis for integrated system solutions which we adapt to specific requirements together with our customers, thus contributing to their individual product design. The significant experience of our staff, coupled with the efficiency of leading suppliers, makes Interma a competent business partner in the solution of complex electronics packaging tasks. Furthermore, we also produce complex devices and systems which by customer

request can be equipped, wired, and tested. Interma products protect your electronics effectively and at low cost – anytime and anywhere.

We pay high regard to both customer and market orientation. Due to deep production specialization, we are able to offer the necessary flexibility to fulfill individual customer requests and to meet the demand of short delivery times. Accordingly, DIN EN ISO 9001, a certified quality management system, builds the foundation for the entire value creation process. The environmental management system DIN EN ISO 14001 ensures the sustainability of our products and their production processes.

Consulting

Analysis and evaluation of your requirements
Project support and project management

Engineering

Feasibility studies
Development of a rough concept

Development

Adaptation of product design to your specifications
CAD construction suitable for manufacturing

Prototyping

Release samples

Production

Latest technology standards

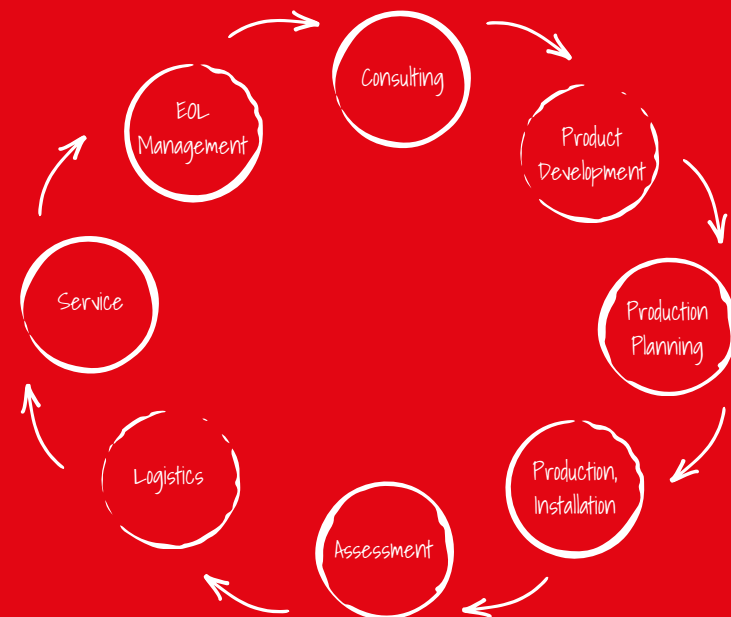
System Integration

to your individual requirements
Feedback during all production phases in order to ensure
continuing improvement
Quality control

Lifecycle-Management

Spare part supplies

We support your products throughout the
entire life cycle:
from the idea to the finished product.



Cabinets from Intermas – Custom Packaging

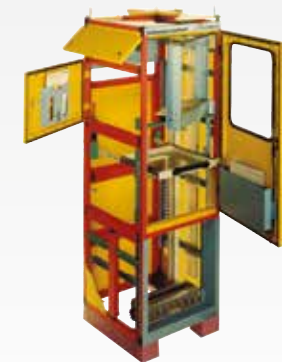
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To construct electric and electronic systems, Intermas-Elcom offers modular built cabinets made of aluminum and steel, which can be tailored to meet your specific requirements. Those cabinets are designed for extreme ambient conditions and can be equipped with EMV/ESD protection on request. Furthermore, cabinets can be mechanically sealed up to IP 54.

Please feel free to contact us. We have the right solutions for your special applications.





System Cabinet InterRack®

InterRack is used for industrial electronic applications. The bolted construction allows flexible dimensions. The InterRack cabinet even holds up under heavy mechanical load. Beyond that, it is suitable for use in rail vehicles or military construction.

Galvanized rack- and cladding components guarantee high corrosion resistance, even with extreme humidity.



Base InterRack®

19 inch laboratory rack and patch panels. 19 inch laboratory racks, which are inexpensive and easily accessible from all sides, can be assembled on the basis of the InterRack-System. These can be used for the installation of commercial 19 inch components or as patch panels.

Dimensions up to 2500 mm can be realized using a grid of 25 mm.



Customized Cabinets

We are happy to develop customized cabinets which meet your needs – made of aluminum and steel sheets up to 3 mm or stainless steel up to 2 mm material thickness. Together with you we will find the exact solution regarding dimensions, functionality and coloring for a multitude of applications.



Aluminum Cabinet MG

This cabinet is conceived for heavy-duty usage. The construction is exceptionally tough, so it can be used for mobile applications. The custom-made design allows variable dimensions and geometric adaptation to demanding outside conditions, such as in naval engineering. The MG cabinet can be sealed mechanically up to IP 54.

Housings – Attractive Design and Advanced Technology



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You can select the ideal desktop-, installation- or small housing for your individual application from our large standard assortment. Modifications and customized color designs, RFI-shielding or IP protection are possible.





Desktop Housing InterMeZo®

A modern and cost-efficient housing with an optically striking design for various applications, e.g. in the measurement and control technology.

The flexible and modular construction allows standardized dimensions for 19 inch installations as well as inexpensive customized dimensions. Available on request with RFI-shielding or ventilation slots for effective cooling of the built-in electronics.

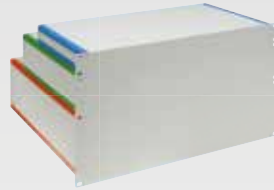


Desktop Housing InterCase

A simple and functional desktop housing for standardized components or individual modules.

A comprehensive range of subrack accessories allows individual configuration of the housing.

InterCase is optionally equipped with swivelling carrier and assembly handles. Removable covering parts enable a quick and easy access to built-in electronics in case of service or repair work.



DiVar

DiVar housing is available as 19 inch rack mounted, as desktop or customized housing with variable geometries in three axes and optimized RFI-shielding by a proven RFI-spring concept.

The construction uses corner profiles with a choice of sheet steel, stainless steel or plastic sheeting from 1.5 mm to 2.5 mm thickness.



Housing InterLock

A multifunctional housing, made of recycable high-strength polystyrene, for covering subracks or as customized housing with special measurements. Covering elements with 4–10 mm strong sheet material are thermally formed and the joints are coldly welded together using a chlorine carbon solution. Top and bottom case shells are locked by a clamp groove without screws.

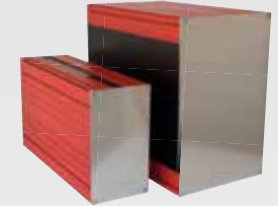
On the basis of an economic manufacturing technology also small quantities and special colors can be realised without tool costs at a reasonable price.



InterShell

Especially suitable for packaging of small electronic modules, such as Europe boards, mITX boards or customized electronics.

The flexible, quick and easily mountable aluminum housing enables customized dimensions within the field of small form factors. A wide range of colors for a finish and additional printing as per customer requirements is possible.



InterShell IP

The dust- and hose-proof housing InterShell IP is most appropriate for measuring and testing systems, as small enclosures or for mobile applications outdoors. Optimal EMV protection is guaranteed by using special conductive silicone gaskets. The basic construction consists of a massive extruded aluminum profile, which can be used as top or bottom case shells or as side elements.

Advance with Intermas Subracks



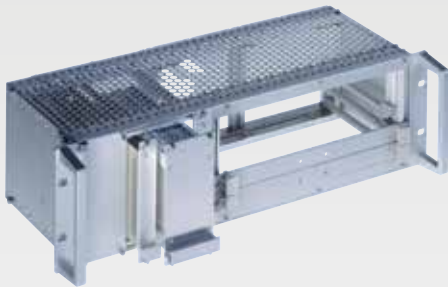
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The Intermas lines of subracks are used for applications in a wide variety of fields. Intermas subracks are considered as being particularly fail-safe due to their robust construction and durability. They are especially appreciated in the field of transportation engineering and military technology. Each subrack can be configured individually. All Intermas subracks comply with the latest international guidelines and standards.

With our extensive range of accessories, we will find the ideal solution for your exact specifications.





Subrack FLEXIBLE

Subrack FLEXIBLE offers a cost-effective and flexible design for industrial applications.

Extensive experience from everyday practice with our customers and our innovative ideas shape the construction of this subrack.

An extensive range of accessories enables a customized assembly.



Subrack RFI SHIELDED

Based on the FLEXIBLE subrack dimensions, this subrack offers complete EMV/ESD shielding as standard. The shielding system provides supreme reliability and operating safety, especially in the front area.

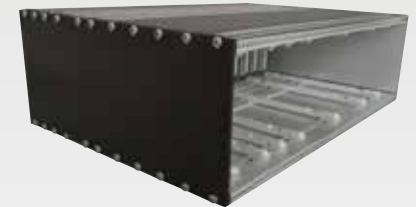
The use of seawater-resistant aluminum alloys in combination with stainless steel springs guarantees high corrosion- and aging resistance as well as low transition resistances between individual components.



Subrack InterRail®

Conceptualized for mobile use in transportation engineering, subrack InterRail is approved and certified by German and French Railways.

The vibration-resistant design is well-suited for use under extreme conditions, in application areas such as power plant engineering or aviation. An optional RFI-shielding is available as well as the use of standard accessories.



Subrack InterProtect®

Subrack InterProtect offers maximum protection up to IP66 while using standard accessories.

The robust construction guarantees shock and vibration resistance in accordance to the relevant railway and military standards up to 20 g/200 m/s². The subrack is hermetically sealed with a special conductive silicone sealing. Therefore, an optimal EMV/ESD-protection is achieved. The chosen temperature range from –55 to +160°C allows applications all over the world.

Customized products



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Our service contains the know-how and competency in implementation of customer specific solutions. Our offer ranges from the mechanical conception to the integrated system solution, according to your specifications. In consideration of mechanical and electrical requirements, we develop with you the optimal “packaging” for your electronics. The selection of suitable materials and manufacturing processes guarantees quality and cost-effective realization without any compromises.



Accessories



DIN-connectors and Backplanes

For wiring your equipment, we supply connectors according to DIN 41612 as well as bus systems such as VME, VME64x, VXI and CompactPCI.



Power Supply Units

Our assortment offers both plug-in and open-frame power supply units up to 1000 W.



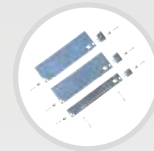
Interface Housing

RFI-shielded interface housings are made of metal for lasting protection of your connectors (according to DIN 41612) for front transfer of VME and other bus systems. You can also receive our interface housings made of plastic, of course.



Bus Bars

Bus Bars are used for diverse wiring applications up to 100 A.



Front Panels

Our comprehensive range of front panels combines appealing design and proven functionality and can be designed according to your individual needs and demands.



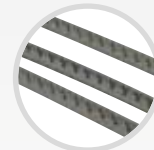
Fan Units and Cross-Flow Fans

We offer space-saving fan trays and cross-flow fans with filter elements for installation in cabinets and housings which will bring fresh air into your application.



Cover for Euroboards

We offer covers for Euroboards in all standard sizes for the protection of your circuit boards against contact and contamination.

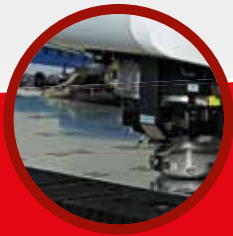


RFI Springs

We can take advantage of our wide range of own RFI springs and gaskets for optimum shielding of our subracks and housings.

Our Strength – Our Manufacturing Capabilities

The high depth of our production processes enables maximum flexibility and speed. By customer request, we can also deliver special orders in the field of sheet metal bending, stamping or milling. Beyond that we can produce individual designs of your front panels including printing and surface treatment – fast, reliably and low-priced.



Stamping

Bend and stamp technology of aluminum and sheet steel up to 3 mm as well as stainless steel up to 2 mm

Lengths and widths up to 2500 mm possible



Milling

Precision work at modern high speed machines for contours, holes, threads, cuts, and engravings

Tool diameter 1–20 mm



Bending

High form-fitting of complex bending parts up to 4 mm aluminum and 2 mm stainless steel

Imprints with radius R 0.5 or bending radii up to R 3.0



Bonding

Permanent connection with PEM® pressing up to 0.5 mm thickness

Welding studs M3 to M8



Varnishing and Labelling

Varnishing: microstructure, structure and smooth lacquer

Screen printing: single or multi-colored as well as digital printing for multicolored prints in photo quality

Special Orders

From Prototyping to Serial Production – Flexible, Rational, Optimal

We deliver custom solutions with consideration of your individual needs, so both optimal functionality and maximum economic efficiency can be achieved. Certainly our professionally qualified team is at your disposal from the consultation into design and through to reliable implementation of production.

With our competence and experience, we will find the optimal solution for the various applications together. Intermas can offer economical solutions from single piece production (prototyping) to batch production.

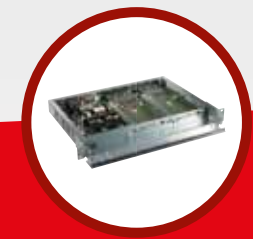
The conditions for safe development and production processes are considered in the product requirement specification. A continuous improvement process is supported with constant feedback and close communication with our customers about each development and production stage.



System Integration

Partnership in Top Technology – Systems from Intermas

Our longtime experience in the development of mechanical assembly systems and the cooperation with leading producers of power supply units, fans, connectors and backplanes, make Intermas a competent and high-performance partner regarding system solutions.



We naturally take care of the entire production of your equipment, from the manufacturing of the mechanics, through the procurement of the components up to assembly, wiring and testing.

Collaborating closely, we realize your requirements cost-effectively and with flexibility to create complete solutions. As a specialist for electronic packaging solutions, we accompany you with standardized systems and individual solutions during the entire product life cycle.

We look forward to integrating your proven suppliers. Professional installation, wiring and testing ensure that our products are ready for use. You just have to mount your daughter cards. We will manage everything else!

Quality and Service Performance

The quality management system according to DIN EN ISO 9001 ensures that the required quality during manufacturing of your products is maintained. Our environmental management system according to DIN ISO 14001 guarantees the sustainability of products and processes. The usage of recycable materials ensures an environmentally friendly disposal or reusability at the end of product life.



Quality Control

The permanent quality assurance department monitors every stage during our production. All important functional dimensions as well as defined inspection dimensions are regularly controlled and completely documented.



Logistics

We are pleased to work out a logistical concept with you in regard to your individual requirements and needs.

Best practice includes direct-transporting, returnable packaging, successive delivery contracts, consignment warehouses or KAN-BAN-deliveries.



After Sales Service

We offer you our support with on-site consultation and support for your specific application. Therefore, you can always rely on our know-how and clarify any questions about products delivered by us. By request we take care of the EOL-management and ensure spare part service.

**Intermas-Elcom GmbH**

Daimlerweg 6
D-64293 Darmstadt

Phone: +49 (0) 61 51-13 73-0
Fax: +49 (0) 61 51-13 73-100
E-Mail: info@intermas-el.com
Web: www.intermas-el.com

**Intermas Austria GmbH**

Roggegasse 13
A-1210 Wien

Phone: +43 (0) 1-2 94 65 99-0
Fax: +43 (0) 1-2 94 65 99-20
E-Mail: info.contact@intermas.at
Web: www.intermas.at

**Intermas Schweiz GmbH**

Firststrasse 15
CH-8835 Feusisberg SZ

Phone: +41 (0) 44-787 05 35
Fax: +41 (0) 44-787 05 37
E-Mail: info@intermas.ch
Web: www.intermas.ch

**Intermas US, LLC**

5174 McGinnis Ferry Road 117
Alpharetta, GA 30005
USA

Toll Free: 1 800 - 811 02 36
Phone: +1 770 - 888 65 66
Fax: +1 770 - 888 69 92
E-Mail: intermas@intermas-us.com
Web: www.intermas-us.com

**Intermas Canada Inc.**

10 Campbell Drive
Uxbridge, Ontario L9P 1R5
Canada

Phone: +1 416 - 884 76 59
Fax: +1 905 - 852 01 30
E-Mail: p.butchart@intermas.ca
Web: www.intermas.ca