



# Enclosures and cabinets for special requirements



... the perfect shell for valuable electronics



# We transform your **ideas** into your **enclosure**

## the counselling

**professional and competent:**

You inform us about your requirements.

Together, we work out the shape, function, material and the suitable production technique for your enclosure.



## the design

**customised und functional:**

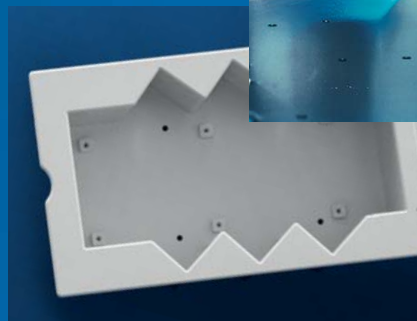
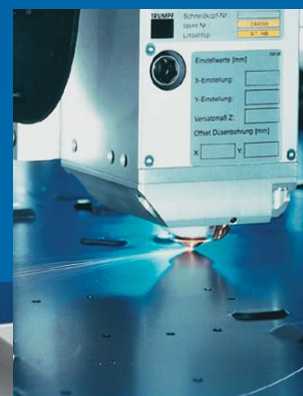
Our engineering team develops the perfect enclosure for your requirements.

## the production

**quality-conscious and up to date:**

State-of-the-art machines, highly qualified staff and consistent quality controls are essential to us.

That's how the vision of your „perfect shell“ for valuable electronics comes true.



## Our production possibilities



### Punching, laser cutting

- ▶ laser cutting
- ▶ punching
- ▶ embossing
- ▶ marking



### Surface technology

- ▶ powder coating
- ▶ wet painting
- ▶ chromating
- ▶ conductive paint coating



### Bending

- ▶ free bending
- ▶ clinching
- ▶ settling
- ▶ automated bending with robots



### Foaming/Gluing

- ▶ sealings up to IP 65
- ▶ gluing of panes



### Deburring

- ▶ complete surface
- ▶ edges



### Milling

- ▶ front panels
- ▶ cut-outs into enclosures



### Welding

- ▶ laser welding
- ▶ stud welding
- ▶ customary welding



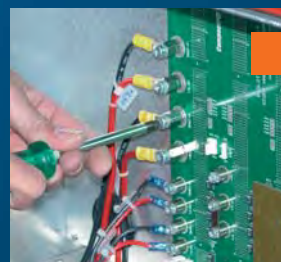
### Printing/foils

- ▶ digital printing
- ▶ silk screening
- ▶ pad printing
- ▶ keypads
- ▶ decor foils



### Insertion

- ▶ stud bolts
- ▶ nuts
- ▶ inside thread nuts
- ▶ earthing lugs



### Assembly

- ▶ assembly service
- ▶ pre-wiring
- ▶ cable configuration
- ▶ system integration

**Ask us - we will be pleased to advise you!**



## Datacenter, network engineering and industrial applications

- ▶ 19" cabinet system TiRAX
- ▶ 19" cabinet system NETcell
- ▶ 19" wall-mounting enclosures
- ▶ power distribution systems
- ▶ air conditioning technology
- ▶ cable management



## 19" cabinet system aprack

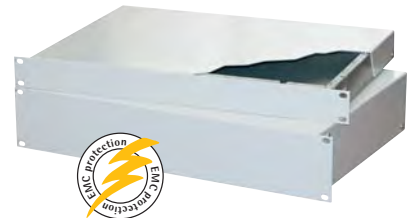
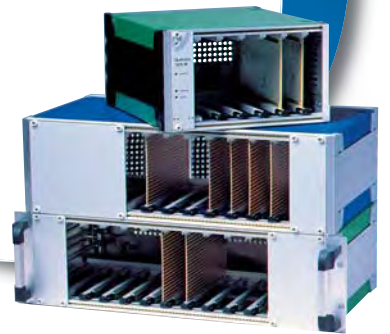
- ▶ for applications in audio, video or test and measurement
- ▶ light aluminium extrusion frame
- ▶ wide range of accessories
- ▶ free assembly service

# perfect shell for your valuable electronics



## 19" enclosure systems

- ▶ desktop enclosures
- ▶ 19" enclosures



## 19" plug-in units

- ▶ 19" computer plug-in units
- ▶ 19" front panels and dummy panels
- ▶ 19" universal plug-in units
- ▶ 19" flat modules
- ▶ 19" plug-in units for displays, keyboards and fans



## Small enclosures

- ▶ modem enclosures
- ▶ aluminium extrusion enclosures
- ▶ desk consoles





## 19" electronic packaging

- ▶ subracks 1 – 14 U, VME, Compact PCI, Advanced TCA
- ▶ EMC-compatible subracks
- ▶ customised subracks
- ▶ cassettes, plug-in modules, front panels

## Panel instrument cases and enclosures for top hat rail

- ▶ enclosures acc. to IEC 61554
- ▶ plastic injection moulding
- ▶ plastic mould construction



## Plastic enclosures

- ▶ individual plastic enclosures without tooling costs
- ▶ even the most sophisticated requests concerning form and materials can be realised
  - ▶ from 1 to 100.000 pieces in different production techniques
  - ▶ **3D printing:** the fast way to your prototype
  - ▶ **digital printing:** flexible, fast and economic
  - ▶ foil technology
  - ▶ mixed materials: the perfect combination of plastics and metal



# Custom-made enclosure technology



functionality · ergonomics · pre-cabling  
product design · IP protection · EMC shielding

... all under one roof!





## The apra group



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