



Medical Connectivity and System Solutions

Edition 2024

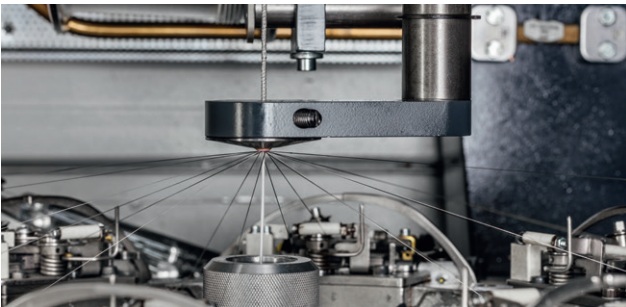
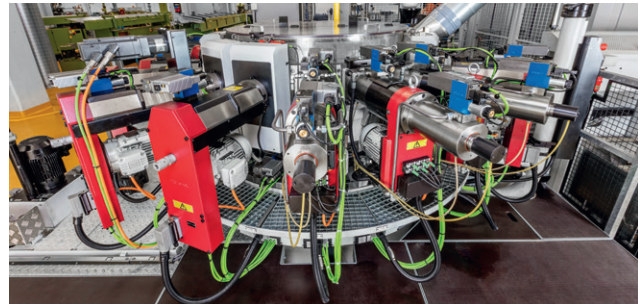
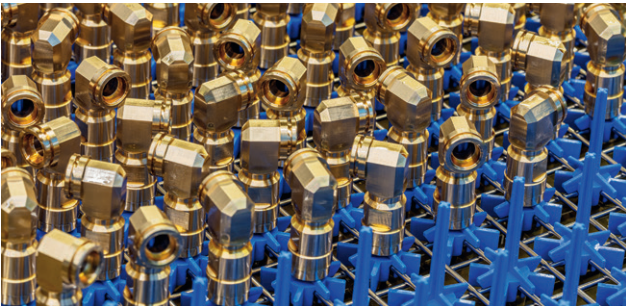
Advanced integrated connectivity solutions, from single components to customized concepts

HUBER+SUHNER develops and manufactures innovative components, provides system solutions and engineering services for the medical device industry in the fields of prevention, early diagnosis, therapy and monitoring.

Our agile team of experts operate globally, providing a wide range of cable assemblies, connectors, antennas and sub-systems based on the key technologies of radio frequency, fiber optics and low frequency.

Our solutions are driven by core technologies that include:

- High-grade extrusion
- Electron-beam crosslinking
- High precision injection-moulding for microstructures
- Mechanical machining
- Plating and assembling technology



Enabling improved efficient patient care – with solutions for radiology, oncology, cardiology and emergency medicine

Microwave Ablation

MWA is used in the treatment of primary and secondary liver, kidney, lung malignancies, renal and adrenal tumours, and bone metastases.

As a pioneer and key player in the microwave ablation device industry, the HUBER+SUHNER active and passive interconnectivity portfolio includes low loss cables, assemblies, connectors and antennas.

Imaging and Diagnostics

MRIs, ultrasonography, x-rays, computed tomography or PET scanners are crucial to detect diseases at an early stage and require higher resolution, 3D imaging, and faster image capture time, increasing demands on their underlying electronic components.

HUBER+SUHNER offers high performance components ideal for RF connectivity. We support the design and development of the interfaces, ensuring precise, reliable performance, for the most accurate imaging results.

The choice for precision, versatility and continuity.

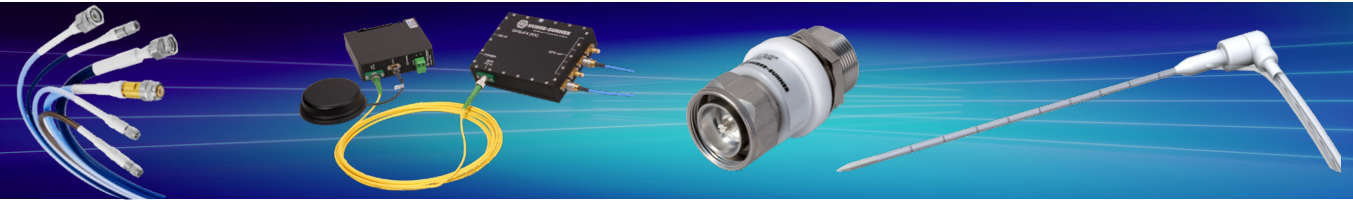
Benefit from our expertise and many years of experience to stay ahead. Make use of our product portfolio to configure and co-develop with us the solution you need.

Connectors, Cables & Cable Assemblies

- Common connector types in-house
- Non-magnetic (RF, MW, optics, LF/DC)
- 50, 75, 78, 95, 100, 135 ohm
- Coax, Twinax, Triax
- Multi-pin and multi-contact
- Micro-miniature
- Low-loss & ultra-low-loss
- Test & lab cables
- Test assemblies (off-the-shelf)
- Bend-to-the-end & bend-insensitive
- Semi-rigid & hand-formable
- Coils & delay lines
- Spuma LL foam cable (LMR equivalent)
- Coax/feeder line including plenum
- CPR & UL cable
- Cabling systems (i.e. hospital, campus)
- FO multi-mode, single-mode, POF
- Drag-chain fiber

Passive and Active Electronics

- PCBA's / integrated circuits
- DC-blocks, loads
- Coils & baluns
- Optical switches
- RF/ LAN/ power over fiber
- Transceivers (SFP, SFP+, QSFP)
- Optical amplifiers, attenuators, multiplexer
- Fiber Bragg sensor (thermal & position)
- Thermocouple
- Antennas & wireless connections
- Data center systems
- Healthcare DAS & network systems
- Backhaul portfolio



From idea to solution – with one partner.

We accompany you with our competencies backed by highly efficient engineering teams and manufacturing sites through the entire development and product life-cycle.

Design

- Full system solutions
- Components, cables, assemblies
- Cable routing / harness design
- Antenna pattern
- RF/MW simulation
- Thermal simulation
- Fluid flow
- Test, validate, certify

Wire and Cable Extrusion

- Ultra-flexible
- Hybrid (wire, tube, fiber)
- Micro coax
- High temperature
- Multi-conductor
- Flat/ribbon profiles
- Low frequency/DC cabling
- Twisted pair
- High-voltage / high power
- Signal integrity shielding
- Jacketing / braiding
- Thermal management
- PTFE, ePTFE, FEP, RADOX®
- Tape wrap
- Rotary swaged inner conductors
- Radiation resistance
- Harsh environment

Injection Molding

- Horizontal / vertical
- Single / dual-shot
- Insert-molding
- Over-molding
- Low-pressure
- High-precision
- Metallization (PVD)
- 3D channels

Tube Extrusion

- Single / multi lumen
- Co-extrusion
- Heat-set coiled
- Metal reinforced
- Tipping / skiving
- Textiles
- USP class VI

Metal Fabrication

- Machining, turning, milling
- Prototype to volume
- CNC to hydromat
- In-house plating

Mechanical Solutions

- Integrated solutions
- Box builds (custom and build to print)
- Fluid fittings & manifolds
- Ferrules
- Enclosures, brackets, racks
- Ceramics, dielectrics, beads
- 3D print (plastic & metal)
- Additive manufacturing (FDM, SLA, SLS)

Assembly and Completion

- Complete device
- Complex Harness Assembly
- Manual & automated
- Medical grade packaging
- Various solder technologies
- Fiber optic termination
- Laser stripping/cutting/marking
- Pad printing
- Laser welding
- UV & solvent bonding
- Curing
- Stress relief / mechanical aging
- Statistical process control
- Full test (Hypot, VNA, x-ray etc.)

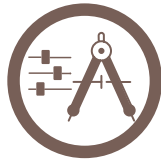
Your vision is our drive.

Leveraging our technical and operational competencies and experience in a wide variety of applications we strive to provide interconnectivity turnkey solutions that fit your expectations.

Customized solutions



Design flexibility



Cost effective



Highest quality



A short step from development to manufacturing – together.

HUBER+SUHNER is compliant with all relevant medical regulations and standards, while pursuing continuous improvements, uncompromising quality, efficiency and sustainability.

- Global Production/Warehousing, Sales and Service Networks
- Logistics and Customs
- Free-Trade-Zone (FTZ)
- ISO 9001, 14001, 13485
- Global Quality Management Systems

Interconnectivity solutions that significantly improve the quality of healthcare.

Contact our experts.

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HUBER+SUHNER is certified according to ISO 9001, ISO 14001, OHSAS 18001, EN(AS) 9100, IATF 16949 and ISO/TS 22163 – IRIS.



More information:
hubersuhner.com



Waiver

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