

CATHETER-READY CONNECTIVITY



High-voltage, shielded & touchproof

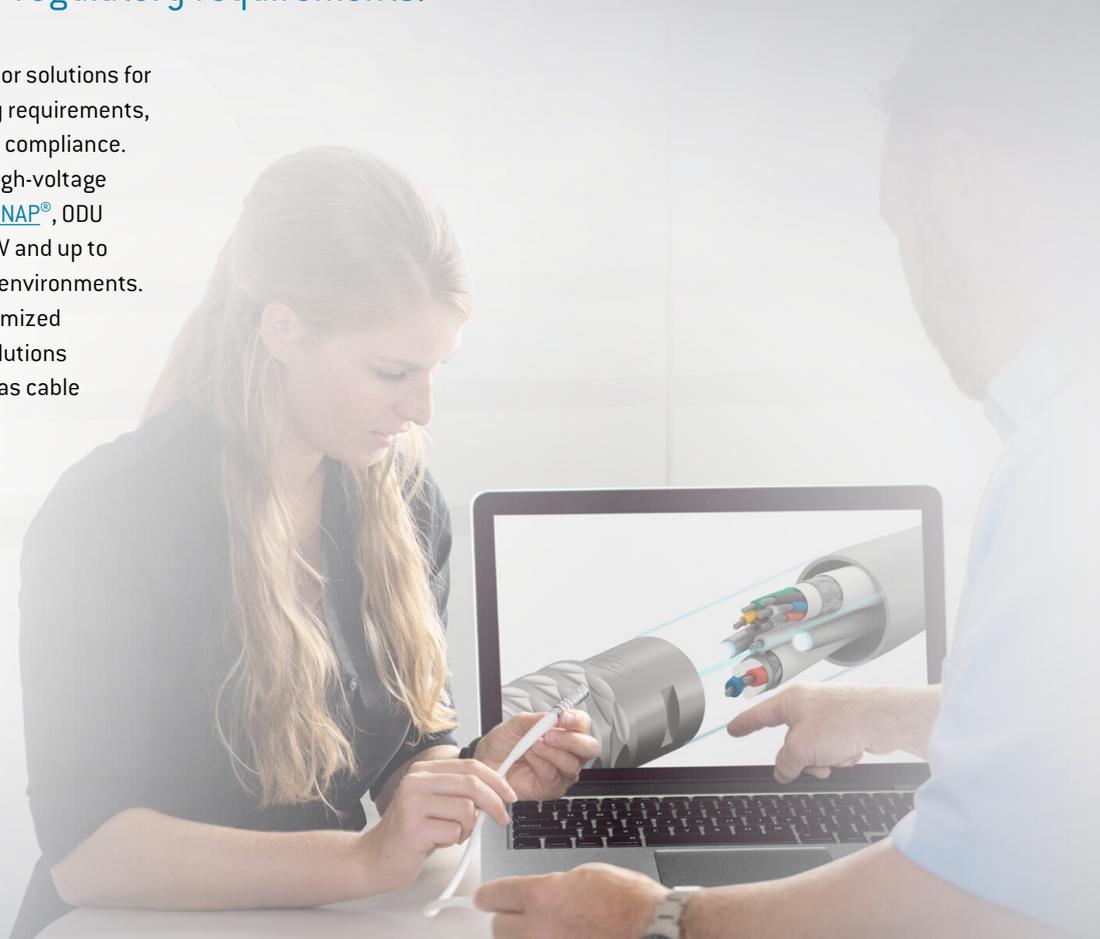


www.odu-connectors.com



When developing catheter systems, speed, customization, and compliance are essential. ODU goes beyond connectors by offering rapid, tailored solutions designed to meet your specific challenges – from concept to production – helping you accelerate time-to-market without compromising quality or regulatory requirements.

ODU offers high-performance, customizable connector solutions for catheter applications that meet stringent regulatory requirements, including IEC 60601-1 & 1-2, FDA approval, and MDR compliance. With expertise in developing shielded, touchproof, high-voltage connectors like the [ODU MEDI-SNAP®](#) and [ODU MINI-SNAP®](#), ODU delivers up to 3.5 kV, short impulse voltage up to 8 kV and up to 5,000 mating cycles – ideal for demanding medical environments. Our rapid-response engineering supports fully customized development where no standards or off-the-shelf solutions exist. Complemented by value-added services such as cable assembly, fiber optic and UDI marking, ODU ensures reliable signal and high-voltage transmission while helping catheter manufacturers overcome critical challenges in time-to-market, compliance, and system integration.



ODU CONNECTOR SOLUTIONS BUILT FOR CATHETERS:

- **High-voltage capability:** high-voltage solutions for up to 3,500 VAC and short impulse voltage up to 8 kV
- **Shielded / touchproof** interconnects engineered for medical environments
- **Durability:** up to IP68 rated and proven 5,000 mating cycles to ensure long-lasting performance
- **Compliance:** designed to meet IEC 60601-1, FDA, and MDR standards, guaranteeing safety and reliability
- **Customizable connectors:** rapid-response engineering support and fast prototyping
- **Cable assembly integrated solutions:** including fiber optic, silicone and UDI marking

For over 80 years, ODU has been developing innovative connectivity technology – today we are a trusted partner for leading catheter system manufacturers worldwide.



ODU CIRCULAR CONNECTOR SOLUTIONS

ODU MINI-SNAP®

- IEC 60601-1 compliant and EMI protection
- Integrated EEPROMs (for customized connectors)
- Sterilizable
- Push-pull locking or break-away function
- Pin and groove coding
- 2 – 40 contacts with 3 termination types: solder, crimp and PCB
- Transmission to various requirements, signal, power, high-voltage, and fiber optic



ODU MEDI-SNAP®

- Lightweight, push-pull or break-away solution with up to 7 different colors
- High-voltage solutions for up to 3.5 kV and short impulse voltage up to 8 kV
- Touch protection in accordance with IEC 60601-1 (up to 2 MOPP / 2 MOOP), EMI safety
- Minimal requirements in terms of installation and maintenance
- Transmission to various requirements, signal, power, high-voltage, and fiber optic
- Fully sterilizable plastic housing
- Available with 360° shielding





Silicone cable assembly integrated solutions

- New surface with unique haptics – no stick-slip effect
- Up to 500 autoclave cycles
- Bend protection due to special shape of overmolding
- LSR and HTV processes available
- Maximum alternating bending strength
- Halogen- and latex-free



ODU MODULAR CONNECTOR SOLUTIONS

ODU-MAC[®] ZERO

- Ergonomic one-handed operation
- 4 different cable outlets: straight, right angle, 45° or in-line
- Quick separation with snap-in locking
- Break-away function / emergency release
- Bio-compatibility upon request
- Suitable for a wide range of ODU-MAC[®] modules
- Up to 60,000 mating cycles
- Up to 70 contacts



ODU-MAC[®] PUSH-LOCK

- Ergonomic one-handed operation
- Space-saving due to high packing density
- Easy to clean design
- Protection class IP67
- Customized laser marking with logo or code according to the UDI



Value-added services



Rapid prototyping and one-to-one engineering support



Custom connector capabilities



Cable assembly solutions including fiber optic and silicone



UDI marking to simplify regulatory traceability and documentation

All our connectors are subjected to rigorous internal and external testing – including cleaning, EMI, biocompatibility, bend cycle endurance, RoHS / REACH compliance, and guaranteed Cr(VI)-free finishes.

Expertise in medical applications Certifications

- ISO 13485:2016: Medical devices – Quality management systems – requirements for regulatory purposes
- IEC 60601-1: Medical electrical equipment
- IEC 60664-1:2007: Coordinated insulation for equipment within low-voltage systems
- ISO 9001:2015-09: Quality management systems
- ISO 10993-5: Cytotoxicity test in accordance with ISO 10993-5
- ISO 14644-1:2015

Custom connector capabilities

- The ODU product development and design teams work with you to create connector systems that respond to all your requirements. We create new, optimized connections for your application – by combining your vision and our knowledge.
- Integrated EEPROMs
- Short lead times (FEM simulations)
- Customized geometries, surfaces and inserts
- Fast in-house prototyping
- Local engineering support
- Complete solution including cable assembly

All dimensions are in mm.

Some figures are for illustrative purposes only. Subject to change without notice. Errors and omissions excepted. We reserve the right to change our products and their technical specifications at any time in the interest of technical improvement. This publication supersedes all prior publications.

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This publication is also available as a PDF file that can be downloaded from www.odu-connectors.com