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PRESS RELEASE

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Maximum safety and signal integrity for medical technology

Innovative connector solutions from ODU

The safety of patients and users plays a central role in the development of medical devices. Electromagnetic compatibility (EMC) is of crucial importance in medical technology. Devices operating in an electromagnetically active environment must function safely to avoid interference in critical applications such as diagnostics or therapy. Failure could not only affect sensitive systems, but also endanger patients. An often underestimated risk is posed by the connection between the device and the handpiece, sensor or surgical tool. This is where the ODU MEDI-SNAP® comes in, meeting all the requirements of IEC 60601-1 (patient and user protection) and IEC 60601-1-2 (EMC protection).

Highest protection standards: 2MOPP and 2MOOP

The MEDI-SNAP connectors offer two protective measures (2MOPP/2MOOP) against electric shock, as required by IEC 60601-1. The use of touch-safe plastic housings and compliance with defined creepage and clearance distances guarantee maximum safety. Thanks to innovative designs such as asymmetric contact arrangements and insulating sleeves, ODU is able to implement these protective measures even in compact connectors.

Perfect Signal Integrity and EMC Protection

The MEDI-SNAP series combines patient protection with state-of-the-art EMC solutions. The connectors offer 360° metal shielding ("shielded feedthrough"), which prevents electromagnetic interference both from the outside and from the conductive contacts inside. Tests in independent laboratories according to IEC 61000-4-2 show that ODU solutions withstand electrostatic discharges of up to +/- 15 kV in air and +/- 8 kV in direct contact without sparking or interference.

Applications and benefits

MEDI-SNAP connectors are ideal for medical devices such as patient monitors, diagnostic devices, surgical systems or therapy devices. The combination of plastic housing and metal shielding provides the following benefits:

- **Contact safety** for maximum patient safety
- **Excellent EMC shielding** for interference-free signal transmission
- **Compact design** with flexible customisation options

The ODU MEDI-SNAP® with shielded feedthrough therefore not only fulfills the EMC requirements according to IEC 60601-1-2, but also guarantees the protection requirements according to IEC 60601-1 (2MOPP/2MOOP). This technology therefore not only protects signal transmission from external interference and electromagnetic emissions from the device, but also protects patients and users from electric shock. With "Shielded Feedthrough", ODU enables reliable and future-proof connections that accelerate development processes and guarantee the highest safety standards - an essential prerequisite for modern medical technology applications.

ODU Group: global representation with perfect connections

The ODU Group is one of the world's leading suppliers of connector systems, employing 2,800 people around the world. In addition to its company headquarters in Muehldorf a. Inn (Germany), ODU also has an international distribution network, production and product development sites in Sibiu / Romania, Shanghai / China, Tijuana / Mexico and Camarillo / USA. ODU combines all relevant areas of expertise and key technologies including design and development, machine tooling and special machine construction, injection, stamping, turning, surface technology, assembly and cable assembly. The ODU Group sells its products globally through its sales offices in Austria, China, Denmark, France, Germany, Hong Kong, Italy, Japan, Korea, Sweden, UK and the US, as well as through numerous international sales partners. ODU connectors ensure a reliable transmission of power, signals, data and media for a variety of demanding applications including medical technology, military and security, automotive, industrial electronics, and test and measurement.