

Situational awareness through secure data transmission

Flexible, reliable and compact: ODU AMC[®] is the right solution for military and security applications

Recognizing and recording environmental conditions and situational snapshots – and translating them into actions – can reduce risks for personnel, machines and infrastructure. In many areas, security forces need to operate efficiently and require information about their surroundings. At the same time, they must use this information to plan and adjust their actions accordingly. For example, information on the location of friendly and enemy forces can be made available.

Big Data and complex networked systems

The advent of artificial intelligence, Big Data and cross-platform, complex networked systems has made highly technical expertise mandatory. Interfaces must be developed to match the respective applications. For example, optronic systems enable vehicle crews to communicate using a wide range of visual information. Acoustic sensor systems help to localize threats by identifying ballistic missiles, warning personnel and providing information on the direction and distance of the



projectile's source. Ideally, these sensor systems are coupled with an Active Protection System, which protect crews by disrupting the approaching projectile in such a way that the intended effect on target is severely impaired.

Situational awareness technologies support fast and well-founded decision-making. A central node (a forward operating base or FOB) bundles the acquired information and outputs real-time data to the deployed units via cables, antennas and glass fibers. All these systems are united by the need for highly robust, reliable, application-specific connector systems and cable assemblies for the transmission of mission-critical (RF) signals and data.

Robust, application-specific connector systems

ODU connectors for military, security, and communication applications provide a high level of signal integrity thanks to 360° shielding. Different transfer protocols (USB/HDMI/Displayport) ensure high-speed data transmissions that are also protected against access by third parties and standard interfaces. Pin-and-groove coding and color coding provide extra support in extreme situations and prevent incorrect mating. Even in the smallest installation space, different transmission variants can be individually configured. The rugged ODU housings are waterproof up to IP6K9K, non-reflective, and available with various connection types and locking mechanisms.

Robust under high loads and extreme temperatures, resistant to dust, water and vibration. Optimized for

demanding applications due to high resilience and transmission reliability even under the most technically challenging environmental conditions. ■

More information: www.odu-connectors.com/odu-amc

ODU Group: global representation with perfect connections

The ODU Group is one of the world's leading suppliers of connector systems, employing 2,500 people around the world. In addition to its company headquarters in Muehldorf a. Inn (Germany), ODU also has an international distribution network and production sites in Sibiu/Romania, Shanghai/China and Tijuana/Mexico. 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 China, Denmark, France, Germany, Hong Kong, Italy, Japan, Korea, Romania, 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.

