In this context, our objective is to meet and succeed in the designing and manufacturing custom-designed packaging solutions for sensors across Europe, North America and Asia. Axon’ is able to locally design and build a world-leading range of interconnect solutions tailored to your specific needs.

**Examples of Interconnect Solutions for Sensors**

### Wires & Cables for Thermocouples

**Characteristics**
- Axon’ supplies extension and compensation cables for thermocouples with special thermal properties to either facilitate or reduce the transmission of heat.
- A thermocouple is a temperature sensor made of two soldered wires. The difference of temperature between hot and cold junctions creates a measurable voltage.

**Advantages**
- Many conductor possibilities with specific materials according to the range of temperature
- Many insulating materials available such as PTFE, PEP, PFA, Vitraflame®
- High resistance with custom design insulation from -196°C to +1050°C

**Applications**
- Application requiring high temperatures such as space, aerodynamics, automotive, research centers...
- Axon’ delivers over-braided cable assemblies with thermocouples for aircraft engines

### Cables for Rogowski Sensors

**Characteristics**
- Axon’ designs and manufactures cables with helical coil for Rogowski sensors. Thanks to its expertise in spiraled coil, Axon’ is able to design, assemble and manufacture custom-designed spiraled coils.
- They are used for measurement of alternative current or high speed current pulses inside the conductor without intrusiveness.

**Advantages**
- High accuracy/fast response
- Equipped with a lock system at the extremities to form a complete and homogeneous loop over the conductor
- Axios provides shielding and over braiding to avoid electromagnetic interference (EMI)

**Applications**
- Nuclear: Research centers, imaging
- Can also measure high speed transient and power frequency sinusoidal currents
- Axon’ already produces Rogowski cables for ITER project and Railway application

### Assembling of Phototransistor

**Characteristics**
- Axon’ specialises in the assembling of components including phototransistor integrated in a circular Micro-D connector shell made in Axon’ or supplied with a two-wire connection.
- Phototransistor is a resistive light sensitive sensor. Its resistance decreases as the light level increases.

**Advantages**
- Weight and space saving
- Miniaturization
- High performance and reliability
- High sensitivity
- Custom-designed moulded shapes and dimensions on demand

**Applications**
- Automotive
- Nuclear light measurement for adaptive luminosity of aircraft monitors (avionics)
- External brightness measurement in electronic devices

### Assembling & Overmoulding of Hall Effect Sensors

**Characteristics**
- The Axon’ subsidiary Axon’ Mechatronics offers a range of solutions for Hall effect probes, from precision cutting, to the complete assembly of mechatronic components including connectors, plastic overmoulding, technical seals and PCBs.
- Hall Effect sensor is an inductive probe used to measure a variation in magnetic field.

**Advantages**
- Environmental disturbances limited
- Miniaturization
- Fast integration
- High performance
- Radiation resistant and EMI optimization

**Applications**
- Solar panels and solar farms
- Space craft
- System positioning

### Connector Insertion for Sun Sensors

**Characteristics**
- Co-engineering: Axon’ works simultaneously with customers to provide the best development and design for a custom compact system by integrating micro-D connectors and offering the best wire-bonding.

As an example, Axon’ has integrated a sun sensor, which is a navigational instrument used by spacecraft to detect the position of the sun.

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**Axon’ Group: European roots, international branches**

Headquartered in the beautiful Champagne region of France, Axon’ is a worldwide leader in specialist interconnects. The company excels in the design and manufacture of wires, cables, terminated harnesses and interconnect solutions for high technology applications. With numerous manufacturing sites across Europe, North America and Asia, Axon’ is able to locally design and build a world-leading range of interconnect solutions tailored to your specific needs.

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**Packaging for Sensors**

Interconnect solutions for Sensors

The trends towards smart applications continue to grow in importance as more electronic solutions, sensor products and wireless systems are added to enhance performance, fast integration, safety and communication. Following this inclination of this very fast growing sector, Axon’ Cable can provide packaging and interconnect solutions for sensors to a large number of applications such as medical, aerospace, automotive, research industry...

In this context, our objective is to meet and succeed in the future challenges with innovative sensor technologies by designing and manufacturing custom-designed packaging solutions for such applications in accordance with requirements and regulations in the dedicated markets. Axon’ can propose a wide range of interconnect solutions with ready-to-use or customized connectors: with a comprehensive design including research & development, stamping, molding, shielding, and packaging capabilities. Knowing that companies need reliable and powerful solutions, Axon’ is able to meet customer needs for sensors in terms of harsh environment, miniaturization, weight and space saving, fast integration, EMI optimization. ...