

# Sensor Solutions for Aerospace, Defense, and Marine





TE Connectivity offers a growing range of sensors for military and aerospace needs. We will work with you to understand the custom requirements of your application. Our goal is to design, manufacture, and deliver superior solutions with uncompromising accuracy, robustness, and reliability.



# Your Sensing Need, **Our Sensing Solution**

Count on TE's advanced solutions for a wide range of sensing needs.

- Acoustic noise CO
- CO<sub>2</sub>
- Flow
- Level
- Linear position ■
- Load
- Pressure
- Speed
- Torque

- Other gases
- Humidity
- - Binary position
- Rotary position
  - Motion
  - Shock/vibration
    - Temperature

## **Application-Specific Packaging**

Building on our experience in the military, aerospace and marine markets and expertise in electronic packaging, TE can help you obtain the sensor that performs in the harshest environment. We can match sensing technology with rugged packages sealed from harsh electrical environments able to withstand vibration, shock, and other mechanical stresses, and offered in the appropriate form factor for easy integration into your system.



#### **Value-Added Custom Assemblies**

For unique solutions to meet your specific needs, take advantage of our experience to design the product you want.

- Custom enclosures
- Sealing and shielding suitable for harsh environments
- Special cabling and connectors
- Wireless telemetry
- In-house prototyping
- Proof-of-concept models

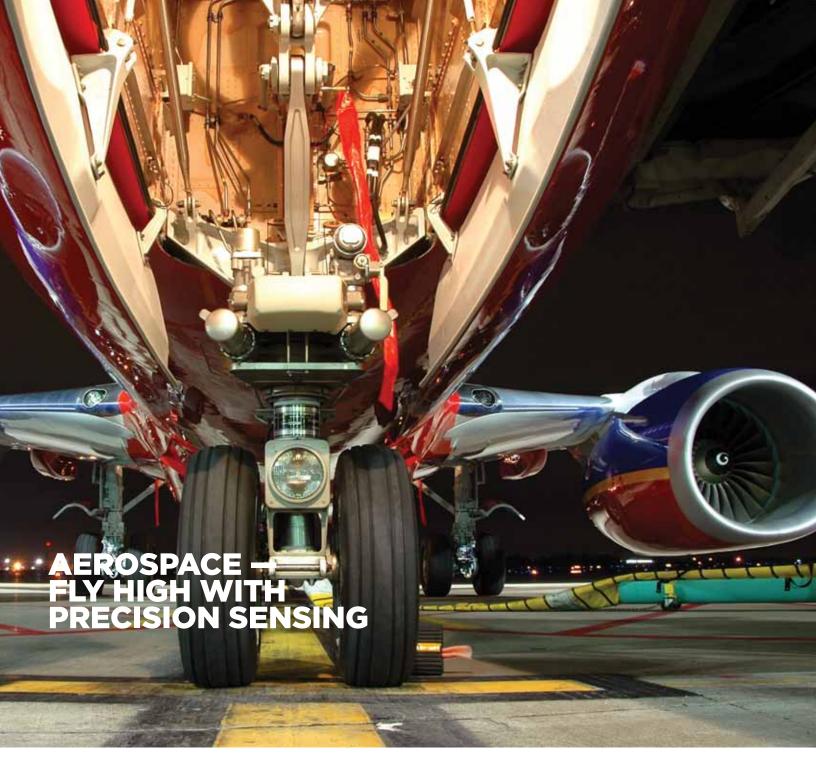
- Compliance engineering
- Global agency certifications: UL, CSA, FCC, CE, CISPR, CTICK, VDE, TUV, and company-specific standards
- Private labeling if required

TE can also offer high-level assemblies integrating the sensor with other components for a plugand-play solution that gives you an engineered product custom tailored to the application.

#### **Comprehensive Solutions**

From the basic sensor through signal processing and packaging to the I/O connector, we are able to provide professional solutions.

- High accuracy
- High reliability
- Low weight
- Low power
- Convenient, compact form factors
- Resilience to harsh environments
- High-speed telemetry
- Connectors and cabling



A custom steering feedback sensor makes use of titanium and carbon fiber to reduce weight and contactless design to withstand the temperature, shock, and vibration of flight.



#### **Applications**

- Cabin condition sensors
- Ground steering systems
- High lift flight system
- Ice detection
- Landing gear position
- Structural health monitoring
- Thrust levers in cockpit
- Wing flap position

To help manufacturers of large commercial aircraft locate ignition sources within the fuel tanks, we offer customized sensors to comply with this FAA safety regulation on fuel pump safety. TE's ground fault interrupt (GFI) relays provide both the sensing and switching function in a single package.





Our positional and rotary sensors and solid-state relays are widely used in the automotive industry and we have the expertise to package them for the rugged needs of military ground equipment. We can custom design solutions based on specific application needs to yield a robust, reliable system.





# **Applications**

- Cabin condition
- Driver pedal controls
- Gear position
- Speed sensing
- Steering controls
- Structural health monitoring
- Targeting systems
- Turret azimuth
- Kerosene leakage

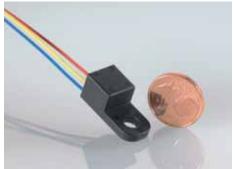


Binary, linear and rotary contactless position sensors can be hermetically sealed to provide robust solutions in the harshest marine environments.

# **Applications**

- Helm instrument and throttle controls
- Fuel tank level
- Secure door close confirmations







From topsides to ROVs to subsea reservoirs, sensors find wide use in oil exploration and production. Precision sensing is fundamental to safety and economic feasibility in this demanding environment.

# **Applications**

- Strain gauges for health of superstructure
- Strain on and position of undersea tether cables
- Valve position
- Strain gauges for weight on cranes
- Crane jib position
- Reservoir pressure and health monitoring



#### FOR MORE INFORMATION

#### **Technical Support**

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