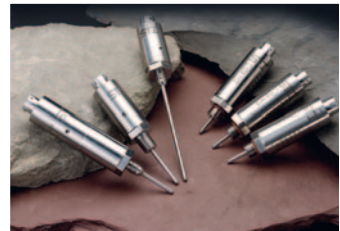


# AEROSPACE



[stellartech.com](http://stellartech.com)



Pressure, Load/Force/Torque, Displacement, and Temperature Sensors

# Aerospace Solutions



## Pressure Sensors

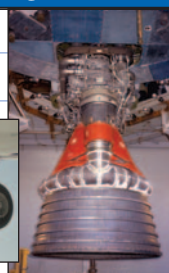
- Pressure Ranges from 1 to 100,000 PSI
- Absolute, Gage, True Gage, Differential, Vacuum, Barometric
- Accuracies to 0.05% FSO.
- High Frequency Response
- All Welded Stainless Steel (17-4, 15-5, Inconel, Monel, Hastelloy)
- mV/V, Analog or Digital Outputs (including RS232, RS485, CANbus)
- Internal Data Logger Versions
- ATEX, CSA Intrinsically Safe Certifications
- Space-Rated Electronics (Grade 1 per EEE-INST-002)
- Replaceable and/or Cleanable Diaphragms
- Comprehensive Calibration Records are Standard
- Engineered-to-Order Custom Designs

## Load Cells, Force Sensors, Reaction Torque Sensors

- Load Ranges from Grams to 2 Million lbf
- Tension, Compression, and Tension & Compression
- Complete Selection of Standard and Special Configurations
- Constructed of Stainless Steel, Carbon Steel, or Aluminum
- Miniature and Subminiature Versions
- mV/V, Analog or Digital Outputs (including RS232, RS485, CANbus)
- Multiple Bridge Configurations
- Internal Data Logger Versions
- Space-Rated Electronics (Grade 1 per EEE-INST-002)
- ATEX, CSA Intrinsically Safe Certifications
- Comprehensive Calibration Records are Standard
- Engineered-to-Order Custom Designs



Our Specialty...  
**CUSTOM  
ENGINEERING**



## Sensors for Aerospace Applications

Stellar Technology designs and manufactures a comprehensive line of test and measurement sensors for the ever evolving demands of the aerospace industry. Stellar Technology's pressure transducers, pressure transmitters, load cells, force sensors, torque sensors, temperature transducers, displacement transducers, and signal conditioners are chosen for many mission critical applications for both NASA programs and commercial cargo and crew space applications. From off-the-shelf standard products to custom-engineered sensor solutions, Stellar Technology's combination of knowledgeable sales personnel, engineering design expertise, and manufacturing capabilities, excels in providing optimum value for our customers—sensor application solutions focused on costs, productivity, reliability, and safety.

# Aerospace Solutions



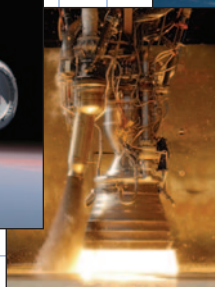
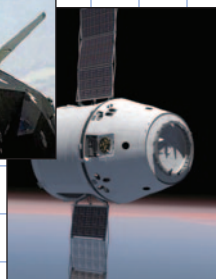
## LVDT Displacement Sensors

- Stroke Ranges from  $\pm 0.01$  in. to  $\pm 18.5$  in.
- Linearities from 1% to 0.1%
- Spring Guided, Captive Guided, Free Unguided Armatures
- AC and DC Versions
- All Welded Stainless Steel
- Precision Gauging Units with Air Push Armatures
- Submersible Designs
- Engineered-to-Order Custom Designs

## Temperature Transducers and Transmitters

- Temperature Ranges from  $-320^{\circ}\text{F}$  to  $+750^{\circ}\text{F}$
- No Thermowell Required
- Customer Specified Probe Lengths
- All Welded Stainless Steel Construction
- Hermetically Sealed
- Dual Temperature and Pressure Configurations
- Analog and Digital Outputs (Including RS232, RS485, CANbus)
- Space-Rated Electronics (Grade 1 per IEEE-INST-002)
- ATEX, CSA Intrinsically Safe Certifications
- Engineered-to-Order Custom Designs

Our Specialty...  
**CUSTOM  
ENGINEERING**



## Aerospace Sensors For:

### General Purpose

- Components testing
- Proof-of-concept validation
- Materials testing
- Wind tunnel testing
- Fatigue testing

### Qualification Testing

- Flight simulators
- Iron-bird testing
- Hydraulic systems testing
- Linear/Rotary actuators
- APU production and flight-line testing

### Engine and Propulsion

- Jet engine test stands
- Rocket engine thrust tests
- Rocket engine fuel control
- Jet engine/rocket engine diagnostics
- Ground support monitoring systems

### Primary Systems

- Landing gear systems
- Cargo deployment systems
- Hydraulic actuator testing
- Airframe stress tests
- Flight control systems
- Fuel monitoring systems
- On-board waste disposal systems

### Space Qualified

- NASA Shuttle Program
- COTS (Commercial Orbit Transportation Systems)... Cargo and Crew
- NASA Constellation Program (Ares I, Ares V, Orion) Satellites (Commercial and Defense)
- Launch vehicles

### Aircraft Assembly

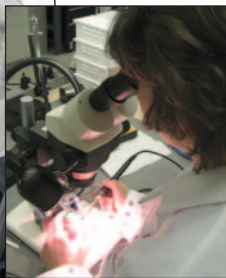
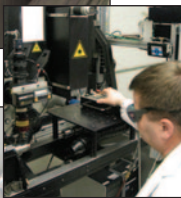
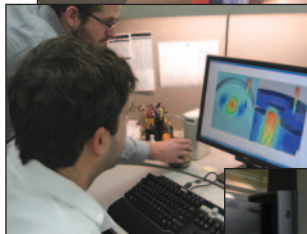
- Components testing
- Materials testing
- Jack Stands
- Automated fastener systems
- Cable tension monitoring

Call: **716.250.1900**



# Capabilities

*Stellar Technology designs and manufactures a comprehensive offering of pressure transducers/transmitters, load cells, force sensors, torque transducers, temperature transmitters, and displacement sensors used in test and measurement applications across a wide range of industry sectors including aerospace, oil and gas, marine/oceanographic, automotive, medical, industrial automation, geophysical, power generation and many more.*



**Why Stellar Technology?** What causes specialists to choose Stellar Technology sensors for their application solutions?

**One word: Capabilities.**

*Stellar Technology combines sales capabilities, engineering capabilities, manufacturing capabilities, and service/support capabilities into one focused business objective:*

***Provide the customer with the optimum sensor solution.***

## **Sales Capabilities:**

- Experienced technical sales professional located in your area
- Direct link to Stellar Technology's design engineers
- Knowledgeable inside sales engineers
- Complete pre-sales application review process
- Facilitate technical Lunch & Learns at customer's site

## **Engineering Capabilities:**

- Design engineers with years of practical sensor application experience
- Specialists in mechanical, electronic, and software design
- Innovative design and simulation tools
- ISO9001 registered documentation and control
- Work directly with customer's engineers
- Creative solution providers

## **Manufacturing Capabilities:**

- Complete vertical integration (raw material through final calibration)
- 18 CNC machines (up to 8-axis)
- Wire and probe EDM machining
- Laser and TIG welding
- Ultrasonic cleaning
- Micro assembly
- Automated pressure compensation and calibration
- 5 load cell calibration systems (to 600,000 lbf)
- 1,000,000 inch-lbf reaction torque calibrator
- High-reliability/traceability assembly and test area
- Comprehensive inventory of raw materials
- Finished goods inventory programs (standard and customer-specific)

## **Service/Support Capabilities:**

- Complete repair and recalibration (including other manufacturers)
- Rapid-response on-site technical field support
- Ready access to regional sales offices
- Order status and expediting
- Direct access to Stellar Technology's design engineers
- 24 hour web access to technical manuals

***Your Application-Solution Source<sup>SM</sup>***



ISO 9001/AS9100

Due to the nature of technology, changes are inevitable. For latest technical specifications, see our website.

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