

# DEFENSE SYSTEMS



STELLAR TECHNOLOGY  
INCORPORATED

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

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

# Defense Systems 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
- Designs Submersible to 12,000 ft. of Seawater
- Space-Rated Electronics
- 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
- Designs Submersible to 12,000 ft. of Seawater
- Comprehensive Calibration Records are Standard
- Engineered-to-Order Custom Designs

Our Specialty...

**CUSTOM  
ENGINEERING**



## Sensors for Defense Systems

Modern defense systems often employ innovative technologies. Many of these technically advanced systems rely on sensors during the research and development stage or even through to field applications. Stellar Technology's comprehensive selection of pressure transducers and pressure transmitters, load cells, force sensors, reaction torque transducers, temperature sensors, and LVDT displacement sensors can provide the design engineers and technical specialists with many sensor application solutions; land-based, airborne, marine, or in space.

STI's engineering expertise, proven sensor technology, field experience, and manufacturing capabilities provide customers with high reliability sensors for the broad range of defense applications. Our engineering and manufacturing center in Amherst, New York, is uniquely designed to deliver both standard products and custom-engineered special products. Rely on STI to add value to your test and measurement solution.

# Defense Systems 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
- Subsea Versions Submersible to 7500 ft. of Seawater

## 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)
- Customer Specified Process Connections
- ATEX, CSA Intrinsically Safe Certifications



Our Specialty...  
**CUSTOM ENGINEERING**



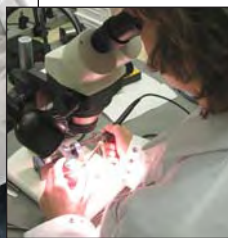
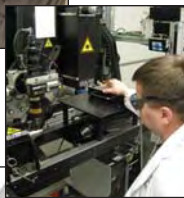
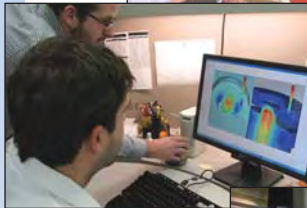
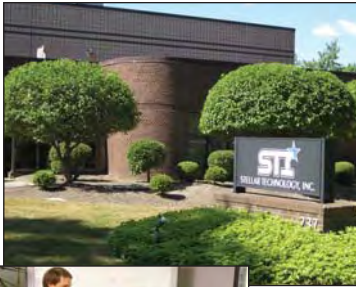
## Defense Systems Sensors For:

- Jet Engine Test Stands
- Ballistics Testing
- Rocket/Missile Thrust Tests
- Materials Endurance and Fatigue Testing
- Armament defense Systems
- Marine Propulsion Systems
- ROV/AUV Controls
- Cargo Loading Systems
- Aircraft Cargo Deployment Systems
- Target Towing Arrays (Air, Land, Sea)
- Hoisting System Hook Loads
- Ship-to-Ship Transfer Systems
- Jet Fuel Analyzers
- Calibration Systems
- Oceanographic Mapping
- Structural Analysis
- Armored Vehicle Turret Controls
- Proof-of-Concept Testing
- defense Satellites and Launch Systems
- Ship Board Diagnostic Systems for Aircraft
- Submarine Air, Water, Fuel Systems
- Biomechanics
- Missile Guidance Systems
- Robotic Controls
- Fuel Storage and Delivery Systems

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?** Whether it's designing and testing a revolutionary method of deploying airborne cargo, improving the air and water supply systems on board a submarine, or launching a special defense related satellite, what causes military and defense technology experts 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 STI 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 non-STI manufacturers)
- Rapid-response on-site technical field support
- Ready access to regional sales offices
- Order status and expediting
- Direct access to STI's design engineers
- 24 hour web access to technical manuals

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

ISO 9001



Find More Information at:  
[stellartech.com](http://stellartech.com)

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

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