

**ALTERNATIVE ENERGY**



**STL**   
**STELLAR TECHNOLOGY**  
INCORPORATED

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

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



## 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
- Operating Temperatures to 450°F
- Designs Submersible to 12,000 ft. Seawater
- Flush Diaphragm Models
- 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
- Operating Temperatures to 400°F
- Designs Submersible to 12,000 ft. Seawater
- Engineered-to-Order Custom Designs



Our Specialty...  
**CUSTOM ENGINEERING**



## Sensors for Alternative Energy

Alternative energy initiatives continue to find complements to hydrocarbon based energy sources. Some of these programs are well established while others continue to explore approaches that provide innovative sources of energy. Stellar Technology's complete selection of pressure transducers/transmitters, load cells, force sensors, reaction torque transducers, temperature sensors, and LVDT displacement transducers provide sensors vital to both the development and implementation of these alternative energy technologies. From wind turbines to fuel cell production to power transmission systems, STI's engineering expertise, proven sensor technology, field experience, and manufacturing capabilities provide customers with high reliability sensors for this broad range of 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 alternative energy solutions.



## LVDT Displacement Sensors

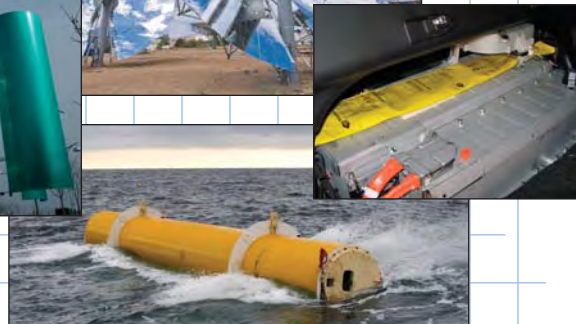
- Stroke Ranges from  $\pm 0.01$  in. to  $\pm 18.5$  in.
- Linearities from 1% to 0.1%
- Spring Guided, Captive Guided, Free Unguided Armatures
- AC and DC Versions
- All Welded Stainless Steel
- Precision Gaging Units with Air Push Armatures
- Submersible Designs
- High Temperature Options
- Subsea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



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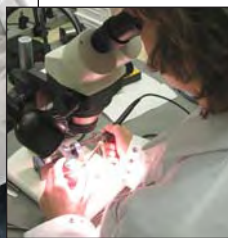
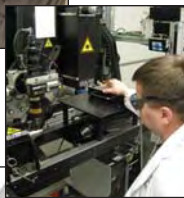
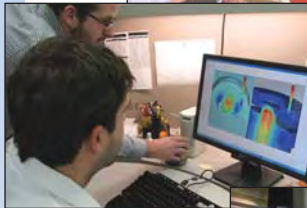
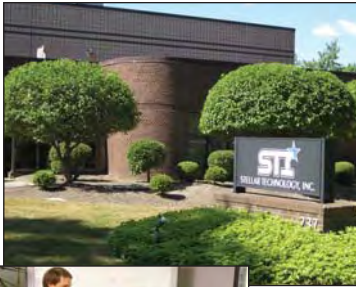
## Alternative Energy Sensors For:

- Fuel Cell Research and Development
- Fuel Cell Production
- Hydro-Current Framing Fluid Control Systems
- Large-scale Hydrogen Production
- Wind Turbine Transmission Monitoring
- Wind Turbine Lubrication Systems
- Geothermal Pumping Systems
- Proof-Of-Concept Testing and Validation
- Hybrid Battery Testing
- SWAC (Salt Water Air Conditioning)
- Pumping Systems
- Hybrid Engine Testing
- Materials and Component Testing
- Hydraulic Systems Testing
- Testing and Fabrication of Thin Film Solar Cells
- Pollutant Remediation Systems
- Direct Energy Conversion Processes
- OTEC (Ocean Thermal Energy Conversion) Plants—(Pressure and Force Measurement for Pumps and Mooring Systems)
- Fuel Analyzers
- Handling Systems for Nuclear Fuel Rods

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 testing the performance of a wind turbine, providing load cells for OTEC mooring systems, or monitoring pressure in a fuel cell production facility, what causes engineering and technology 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 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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