Cryogenic Temperature Sensors
Measure from <10 mK to over 1,500 K using our comprehensive line of sensors. Industry-leading sensors include Cernox™ thin-film RTDs featuring low magnetic field-induced errors and excellent stability over repeated thermal cycling and under extended exposure to ionizing radiation. Others include silicon diode, germanium, and ruthenium oxide (Rox™) sensors as well as platinum RTDs and specialty sensors with NIST-traceable calibrations.

Cryogenic Temperature Probes
Ideal for measuring inside fluid containers, cryostats, and other liquid storage systems, these probes provide highly reliable sensor performance in a thermowell or direct cryogen contact. Customizable for specific applications, probes can be configured with many sensor types for superior performance from room temperature to 4 K and below.

AC Resistance Bridges
Optimized for measurement and control of dilution refrigerators operating below 100 mK, AC resistance bridges make it easy to perform multiple tasks that were once very difficult to perform reliably at sub-1 K ranges: temperature measurement, automatic or manual temperature control, and device or sample impedance measurements.

Controllers, Monitors, and Sources
Our temperature instruments measure multiple sensors and sensor types in applications requiring high sensitivity at ultra-low temperatures. Controllers are available with up to eight inputs and four independent control outputs, and monitors come with up to 12 independent sensor channels. Our DC current source provides stable currents for test and measurement applications.

Temperature Sensor Input Modules
For precision remote monitoring of sensors used in large-scale cryogenic facilities down to 1 K, Lake Shore offers multi-input modules for reliable real-time monitoring over PLC-based networks.

Also available: Cryogenic accessories (cable, wire, grease, varnish, and more)
**Gaussmeters**
Measure both DC and AC magnetic fields and control DC fields with these highly accurate instruments. Ideal for both industrial QC and scientific R&D applications, gaussmeters offer a broad measurable field range (from 0.001 mG to 350 kG) in an easily programmable instrument. Available in both handheld and benchtop units.

**Hall Probes**
Lake Shore offers a number of Hall probes with axial, transverse, multi-axis, gamma, and tangential field orientation for measuring magnetic flux density. Choose from high-stability, high-sensitivity, and ultra-high-sensitivity types in a wide range of lengths and thicknesses. Hall probes are also available for cryogenic applications.

**Magnetic Sensors**
We offer compact Hall sensors for reliably measuring magnetic field magnitude in axial or transverse configurations. Available with 4-lead cable assemblies, Hall generators can be ordered in general purpose and instrumentation quality packages for either surface- or channel-mount applications. Cryogenic Hall sensors are also available.

**Fluxmeters**
Measure total flux in industrial and research measurement system settings, such as in BH loop or hysteresisgraph measurement applications. Our fluxmeters feature compensated analog integration for faster instrument response than those with digital circuitry alone.

**Helmholtz Coils, Field Standards, and Search Coils**
For producing moderate-volume uniform magnetic fields, our Helmholtz coils are available with standard field or magnetic moment measurement capabilities. We also offer field probes for search coils when measuring in narrow gaps or where field gradients require the use of smaller coil diameter.

Also available: Magnetic accessories (reference magnets, extension cables, and more)
Cryogenic Probe Stations
Best-in-class, micro-manipulated platforms for non-destructive, on-wafer probing of device samples as a function of temperature and field using magneto-transport, DC, electro-optical, and RF/microwave measurements. And now available: a THz-frequency, on-wafer probing arm for cryogenic applications.

Hall Effect Systems
Advanced systems available in a variety of electromagnet configurations for performing Hall and magneto-transport measurements as a function of field and temperature. Available with an AC field Hall option for exploring properties of very low-mobility materials (down to 0.001 cm²/V s).

Vibrating Sample Magnetometer Systems
Optimized for characterizing DC magnetic properties of a broad range of sample materials, these magnetometer systems offer high sensitivity, accuracy, and speed, as well as a wide temperature-dependence measurement range (4.2 K to 1,273 K) and variable fields to 3.26 T. Featuring support for first-order-reversal-curve (FORC) measurements and analysis.

Field Control Platforms and Electromagnets
For easy integration into user-designed magnetic test systems, we offer FCP platforms containing an electromagnet, magnet power supply, and electronics with field control firmware, as well as individual 4- or 7-in electromagnets with adjustable poles.

Also available: Electromagnet and superconducting magnet power supplies

NEW MeasureReady™ instruments for materials characterization—as easy to use as your smartphone
The Model 155 precision I/V sources are ideal for applications requiring a precise, low-noise supply of current or voltage.

The M91 FastHall™ measurement controller features the FastHall technique, which eliminates the need to switch the polarity of the applied magnetic field during the measurement. This breakthrough results in faster and more accurate measurements, especially when using high field superconducting magnets or when measuring very low mobility materials.