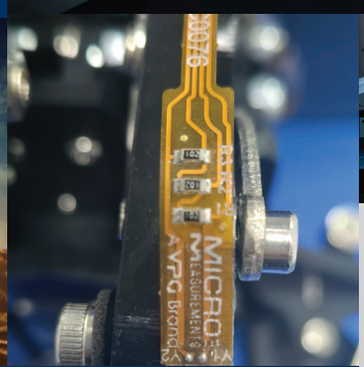
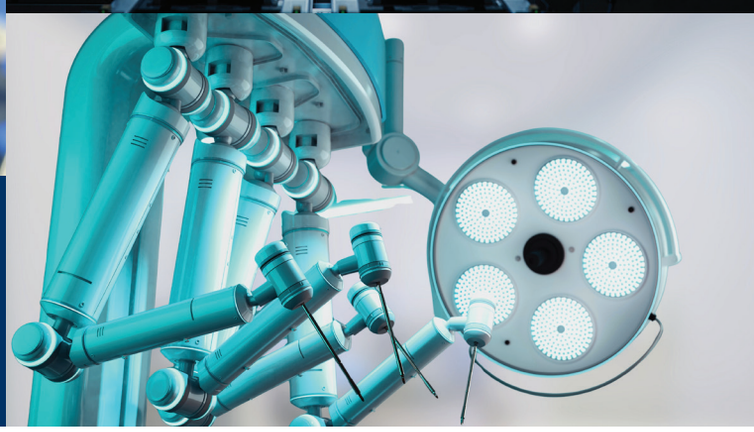
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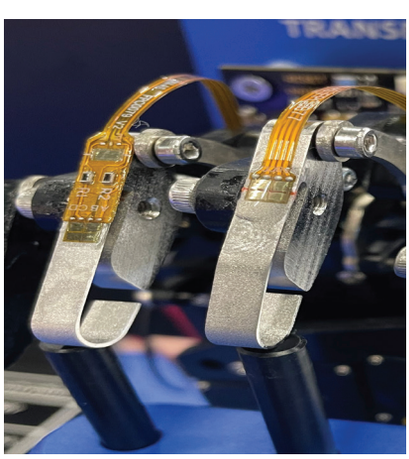


GAGE AND FLEX ASSEMBLY

Integrated Solution for Custom Strain Gage and Flexible Circuit Assemblies

Manual strain gage installation requires delicate, labor-intensive steps and a high level of operator skill. Multiple small gages must be positioned, aligned, wired, and soldered with precision and high repeatability. In space-constrained designs and wherever there are deep cavities, curved surfaces, dense assemblies, or hard-to-reach installation locations, those steps become even harder to control. This can lead to greater variability, time-consuming rework, and increased risk across the production process. As experienced strain-gage technicians become harder to find, these challenges become more difficult to manage at scale.

Simplify and Speed Sensor Integration



Micro-Measurements' Gage and Flex Assembly reduces complexity, variability, and risk by providing a complete sensing solution for a wide range of OEM applications.

It combines one or more Transducer Class® strain gages with a custom flexible printed circuit (FPC) to create a full sensing assembly with integrated electrical connections, reducing the need for discrete wiring and manual soldering. Micro-Measurements designs the assembly in collaboration with your engineering team, handles the gage-to-flex integration, and can scale from prototype to volume production. Optional in-house bonding and installation services are also available.

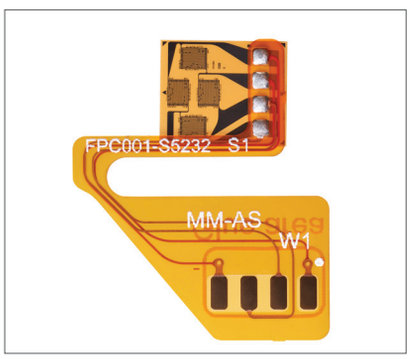
This approach simplifies system design, improves manufacturing consistency, and enhances reliability by reducing vulnerable manual connections, including solder joints and separate wiring connections. It also supports compact, lightweight designs with greater mechanical robustness.

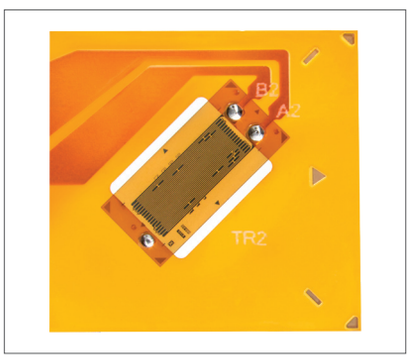
Custom Configurations

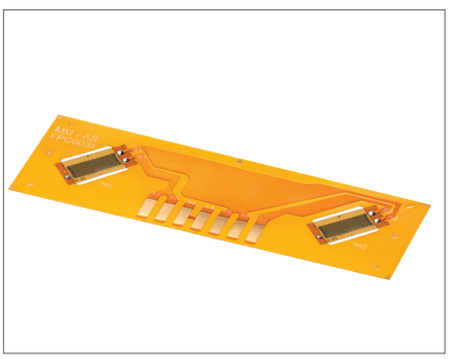
Each assembly is developed around the specific geometry, performance requirements, and production needs of your application.

Options include:

- Single-gage or multi-gage assemblies
- Any Micro-Measurements standard or custom gage
- Integrated half-bridge or full-bridge electrical routing
- Integrated resistors, temperature sensors, connectors, TEDS chips, and other SMT/SMD-compatible components
- Custom flex geometry for compact, curved, or hard-to-access spaces
- Localized or full-length flex thickening for added mechanical support
- Stress-relief features for improved durability
- Gages with pre-applied adhesive
- Pre-connected wires







Key Benefits

Micro-Measurements' Gage and Flex Assembly addresses the main sources of variability and risk in manual strain gage installation. It simplifies integration while supporting faster, more repeatable production workflows.

- **Higher production yield** through simplified assembly and fewer manual steps
- **Faster installation** with reduced setup and positioning time
- **Lower labor costs** by reducing manual gage wiring and soldering
- **Fewer installation errors** from pre-defined gage placement and routing
- **Increased repeatability** with pre-aligned gages in fixed geometry
- **Less dependent on technician skills** for delicate handling, alignment, and soldering
- **Fewer points of failure** with integrated electrical pathways
- **Enhanced design freedom** for compact, curved and hard-to-access geometries

In one customer-specific configuration, a dedicated flex design reduced solder points from 34 to 10 and consolidated five separate components into one bonded unit.

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