

The GS-SG02 Surface/Embedded Strain Gauge is a high-precision monitoring instrument designed for long-term strain measurement in concrete, hydraulic, and geotechnical structures. Manufactured with a fully integrated stainless steel body, it delivers reliable performance in harsh and underwater environments while providing accurate strain and temperature monitoring. Its durable construction, high sensitivity, and adaptable installation options make it ideal for structural health monitoring, infrastructure projects, and continuous concrete pouring applications where long-term stability and dependable data collection are critical.



FEATURES

Fully Stainless Steel Construction	Integrated stainless steel design provides excellent durability, corrosion resistance, and long-term reliability in harsh environments.
Impact & Lightning Protection	Designed with anti-rotation, anti-bending, impact-resistant, drop-resistant, grounding, and lightning protection features.
Low Elastic Modulus	The gauge adapts well to the tested structure without interfering with the original stress field.
Reliable Installation	Simple and dependable installation process suitable for embedded and surface applications.
Long-Term Underwater Use	Suitable for continuous operation in submerged and high-moisture environments.
Expandable Measurement Capability	Can be equipped with accessories to create multi-directional strain gauge groups, stress meters, and rock strain gauges.
High Measurement Accuracy	Provides precise strain monitoring with high sensitivity and stable long-term performance.
Integrated Temperature Monitoring	Simultaneously measures temperature at the installation point for comprehensive structural monitoring.

SPECIFICATIONS

Model	GS-SG02
Measurement Range	3000 μ (Tensile 1500 μ ; Compression 1500 μ)
Resolution	0.025% FS
Additional Resolution	0.015% FS
Accuracy	0.1% FS
Temperature Measurement Range	-40°C to +80°C
Temperature Sensitivity	$\pm 0.1^{\circ}\text{C}$
Temperature Accuracy	$\pm 0.5^{\circ}\text{C}$
Water Pressure Resistance	1 MPa

APPLICATIONS

The GS-SG02 Surface/Embedded Strain Gauge is designed for long-term strain monitoring in hydraulic structures, concrete infrastructure, and geotechnical applications. It is ideal for measuring internal strain and temperature within dams, tunnels, retaining walls, underground continuous walls, impermeable walls, drilled piles, and other reinforced concrete structures. High-modulus strain gauges are particularly suited to continuous concrete pouring applications where accurate long-term structural monitoring is essential.



For more information about the GS-SG02 Surface/Embedded Strain Gauge or to discuss your project monitoring requirements, contact the team at CESCO Equipment. Our specialists can assist with product selection, technical advice, and tailored monitoring solutions for your application.