

ST350

Strain Transducer for Structural Testing



The ST350 Strain Transducer, manufactured by Bridge Diagnostics, evaluates live-load stresses on bridges, buildings, cranes, and other civil structures. This prewired transducer can be installed within minutes on steel, concrete, timber, and FRP members. Compatible dataloggers include our CR800, CR850, CR1000, CR3000, CR5000, and CR9000X.

Mounting

The ST350 is affixed to steel, pre-stressed concrete, or wood via two threaded mounting tabs and a tab jig. Alternatively, two c-clamps may be used to mount the sensor to steel. Attachment to reinforced concrete typically requires two threaded mounting tabs, a transducer extension, and an extension jig.

Ordering Information

Strain Transducer

ST350 Bridge Diagnostics 350 ohm Strain Transducer, 15 foot Heavy Duty Cable

Accessories

21278 Threaded Mounting Tab (requires 2)
21279 Tab Jig
21280 Transducer Extension (extension jig required)
21281 Extension Jig
21282 C-Clamps (requires 2)



Specifications

Effective Gage Length:	3.0" (76.2 mm); extensions available for use on R/C structures	Operating Temperature:	-50° to 120°C (-60° to 250°F)
Accuracy:	±2%, individually calibrated to NIST standards	Cable:	BDI RC-187: 22 gage, two individually-shielded pairs with drain wire; 15 ft length standard
Strain Range:	±2000 $\mu\epsilon$	Material:	Aluminum
Force Required for 1000 $\mu\epsilon$:	~17 lbs. (76 N)	Dimensions:	4.375" x 1.25" x 0.5"; (11.1 cm x 3.2 cm x 1.3 cm)
Sensitivity:	~500 $\mu\epsilon$ /mV/V	Weight:	3 oz (85 g)
Circuit:	Full wheatstone bridge with 4 active 350 Ω foil gages, 4-wire hookup		