

# 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

|                                    |  |                               |   |
|------------------------------------|--|-------------------------------|---|
| <b>Effective Gage Length:</b>      | 3.0" (76.2 mm); extensions available for use on R/C structures       | <b>Operating Temperature:</b> | -50° to 120°C (-60° to 250°F)   |
| <b>Accuracy:</b>                   | ±2%, individually calibrated to NIST standards                       | <b>Cable:</b>                 | BDI RC-187: 22 gage, two individually-shielded pairs with drain wire; 10 ft length standard |
| <b>Strain Range:</b>               | ±2000 µε   | <b>Material:</b>              | Aluminum  |
| <b>Force Required for 1000 µε:</b> | ~17 lbs. (76 N)  | <b>Dimensions:</b>            | 4.375" x 1.25" x 0.5"; (11.1 cm x 3.2 cm x 1.3 cm)  |
| <b>Sensitivity:</b>                | ~500 µε/mV/V   | <b>Weight:</b>                | 3 oz (85 g)   |
| <b>Circuit:</b>                    | Full wheatstone bridge with 4 active 350 Ω foil gages, 4-wire hookup |                               |   |

