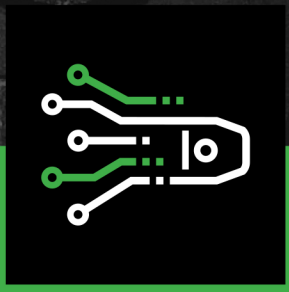
DATA YOU CAN TRUST.
RESULTS YOU CAN BUILD ON.



INSTRUMENTS

STS4 WIRELESS

STRUCTURAL TESTING SYSTEM

Designed and manufactured by BDI, the STS4 is the world's only data acquisition system designed by civil engineers expressly for diagnostic testing. The field time saved using the STS4, compared to standard data acquisition systems, will pay for itself after just a few uses.

This wireless system is rugged, highly efficient, and extremely easy to deploy.

4-CH INTELLIDUCER NODES

Battery-powered and water resistant with 40 hours of data collection time make these rugged nodes ideal for all diagnostic testing applications. Intelliducer connectors simplify the installation by automatically applying all sensor settings and can be used with the full range of BDI sensors, in addition to most voltage sensor types.

WIRELESS BASE STATION

This rugged, battery-powered network hub generates the wireless network for all STS4 nodes and the user's computer. Link multiple WBS's to increase wireless network areas.

AUTOMATIC LOAD POSITION TRACKER

Designed specifically for load testing bridges, this device wirelessly tracks the longitudinal position of the loading vehicle during the test so that data can be viewed as a function of load position rather than time.

STRUCTURAL MONITORING SYSTEM

Based on our successful STS4 architecture, we have developed a modular Structural Monitoring System that can be applied in laboratory research projects or large scale, high-speed, permanent monitoring systems.

We've once again taken the lessons learned over hundreds of monitoring projects and put them into the design of our hardware. With simple power and communication options coupled with easy-to-configure software, our systems can be designed and installed more efficiently than anything else on the market.

4- or 16-CH TERMINAL NODES

The industrial terminal input nodes have been designed for both laboratory and long-term monitoring applications. Either 4 or 16 analog sensor inputs alongside an equal number of thermistor inputs make these nodes ideal for collecting high-speed data and correcting for temperature at the same time throughout the monitoring application.

CORE DATA LOGGER

This rugged industrial computer is designed to collect and process data from our nodes in the harshest of environments. Proven to provide continuous reliable data collection, the CDL can process and store over 100 GB of data and transmit the data to the cloud or an office server/computer.

MONITORING ACCESSORIES

From full system design to an extensive array of options, we have you covered.

+ Solar/AC battery backed power systems
+ Enclosures
+ Power/Communication cables
+ Wireless communication
+ Third party sensors/systems integration
+ Cellular/Satellite/Hard Line communications

STRAIN TRANSDUCER

The ST350 Strain Transducer has been designed for structural testing in tough field conditions. These accurate, rugged, and fully weatherproofed units can be installed very quickly for all types of measurement applications.

ACCELEROMETER

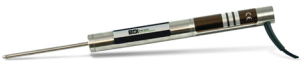
The A1521 & A2521 Accelerometers have been designed for dynamic structural testing in tough field conditions. These accurate, rugged, and fully-weather proofed units can be installed very quickly and are available in ranges between 2g and 100g.

TILTMETER

The T500 electrolytic tilt sensor is a high precision fluid-based sensor with integrated mechanical offset adjustment, designed for short-term testing applications. The T600 MEMS tilt sensors are ideal for longer term installations due to their higher temperature stability.

COMPLETION MODULE

Available in both 120Ω and 350Ω configurations, as well as standard or amplified outputs, these rugged and re-usable Strain Gage Completion Modules significantly reduces field installation time since only the lead wires from either a ¼-arm or ½-bridge foil gages are connected with a waterproof connector.



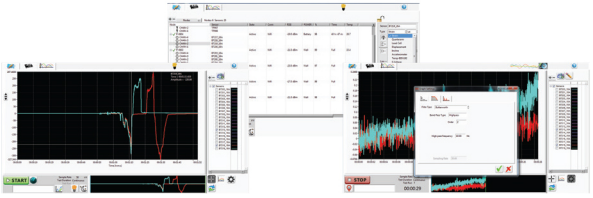
DISPLACEMENT

LVDTs are spring-loaded units that provide the “gold standard” for structural deflections when scaffolding or another reliable reference is available. In addition to LVDTs , we offer cable potentiometers, resistive displacement transducers, and ultrasonic displacement sensors.

APPLICATIONS

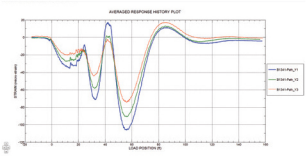
STS-LIVE

No programming required. Mount the sensors on the structure, connect them to a local STS4 node, turn the system on, and start collecting data. Import data into STS-VIEW, or open with Microsoft Excel.



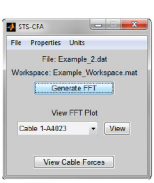
STS-VIEW

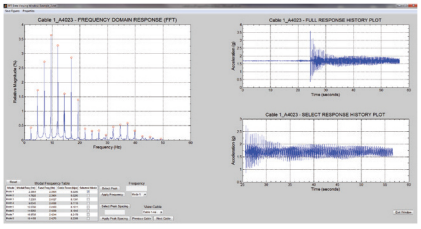
STS-VIEW is a graphing application designed for viewing and processing data collected by our STS hardware as well as Campbell Scientific, Inc. data loggers. Quickly evaluate the structure's response by viewing data as a function of time, load position, or load event. Apply filters, overlay finite element data, and view the frequency response. This application significantly reduces data processing time.



STS-CFA

The STS-CFA application computes in-situ cable forces using acceleration measurements collected by our STS hardware. Run side-by-side with STS-LIVE and forces can be computed simultaneously for up to 12 cables and displayed immediately so that adjustments can be made more efficiently than measuring one cable at a time.





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