Phone: +91-8860605265 Email: info@astrascientific.com

#### **Product Name:**

Astra Scientific Simple Suspension Bridge Experiment With Data Acquisition

**Product Code:**ASTSTUCTURAL-0011



## **Description:**

Astra Scientific Simple Suspension Bridge Experiment With Data Acquisition

#### **Technical Specification:**

## **Description:**

#### An

experimental apparatus to investigate a simple suspension bridge structure, and measure the cable tension under various loads.

The experiment hardware fits onto the Structures Test Frame. Students use masses on weight hangers to apply various loads to a rigid deck, joined to a parabolic cable via hangers.

The suspension cable passes over pulleys at each end. One end is rigidly fixed. The other end connects to a mechanism bearing on a load cell. When connected to a Digital Force Display, the load cell measures the cable tension. The equipment includes a signal cable to connect the load cell to a Digital Force Display.

Phone: +91-8860605265 Email: info@astrascientific.com

The Operation Manual provides details of the equipment including sample experiment results. The Operation Manual describes how to use the equipment and gives experiment procedures.

For extra 'virtual' experiments, supply the optional Structures Software, for use on a suitable computer. The virtual experiments simulate the tests you can perform with the hardware. They also extend the choice of tests beyond that available using only the hardware, for example: higher loads, uniform loads or different test specimens. This extends the student's learning experience.

For automatic data acquisition of your experiment results, supply the optional Automatic Data Acquisition Unit. Supplied as standard with the Structures Software that displays and logs your experiment results and gives the extra virtual experiments.

## **Key features:**

- High-quality structures training module for students of mechanical, civil and structural engineering
- · Allows safe and practical experiments into a simple suspension bridge structure
- Realistic and verifiable experiment results
- Optional Structures Software package for extra, 'virtual' experiments, that simulate and confirm the results from your hardware and allow extended experiments
- Optional unit with Structures Software package for automatic data acquisition and virtual experiment.

Phone: +91-8860605265

Email: info@astrascientific.com

Address: K-88, 20th Street, Annanagar, Chennai, India – 600040 Phone: +91-8860605265



# **Astra Scientific**

www.astrascientific.com, Email: info@astrascientific.com