LHP 501
STRUCTURAL EXPERIMENTS

The LHP-501 laboratory covers all areas, theoretical and practical experimentation, concerning the **basic principles of Civil and Structural engineering**.
The laboratory is ideal for students of civil, mechanical and structural engineering. It consists of a set of experiment modules and each set of experiments offers:

- High-quality structures teaching module for students of mechanical, civil and structural engineering.
- Each set uses the bench top frame, **STR1** which is **mandatory** for all the sets, at least 1 piece per set.
- Realistic and verifiable experiment results.
- Many interchangeable experiment modules from modern, flexible and cost-effective Structures teaching system.
- Ideal tool for classroom demonstrations, or students working in pairs or small groups.

RECOMMENDED OPTIONS

- **STR S** Optional **application** for structure experiments simulator for extra 'virtual' experiments that simulate and confirm the results from your hardware and allow extended experiments. Please refer to the STR S datasheet for more details. Requires a PC, Windows 10 and a free USB port.

- **STR 2000** Optional **Data Acquisition Unit** for automatic data acquisition and virtual experiments.

All Software: Supplied on CD-ROM for installation onto a suitable computer with a Microsoft® Windows 10 ® operating system. It requires a free USB port for the application toggle keys, wherever that is applicable.
Requires a PC, Windows 10 and a free USB port.

STR 1 Bench mounting frame
A bench-mounting frame that holds interchangeable experiment modules and instrumentation from Structures range. The frame has specially designed slots and self-positioning nuts that hold the Structures experiments and instruments. This fixing system is quick and easy to use. It allows students to change, position and secure each experiment. Adjustable feet support the frame to allow students to level the apparatus before use. Supplied in kit form with installation instructions for use.

STRUCTURAL EXPERIMENTAL SETS
STR1 Bench-mounting frame
STR 1A Digital Force Display
STR 2000 Automatic Data Acquisition Unit
STR 2 Bending Moments in a Beam
STR 3 Shear Force in a Beam
STR 4 Deflection of Beams & Cantilevers
STR 5 Bending Stress in a Beam
STR 6 Torsion of Circular Sections
STR 8 Pin-Jointed Frameworks
STR 9 Three-Pinned Arch
STR 10 Two-Pinned Arch
STR 11 Fixed Arch
STR 13 Continuous & Indeterminate Beams
STR 14 Curved Bars and Davits
STR 18 Frame Deflections & Reactions
STR 19 Simple Suspension Bridge
STR 20 Bending Moments in a Portal Frame
STR S Structures Software