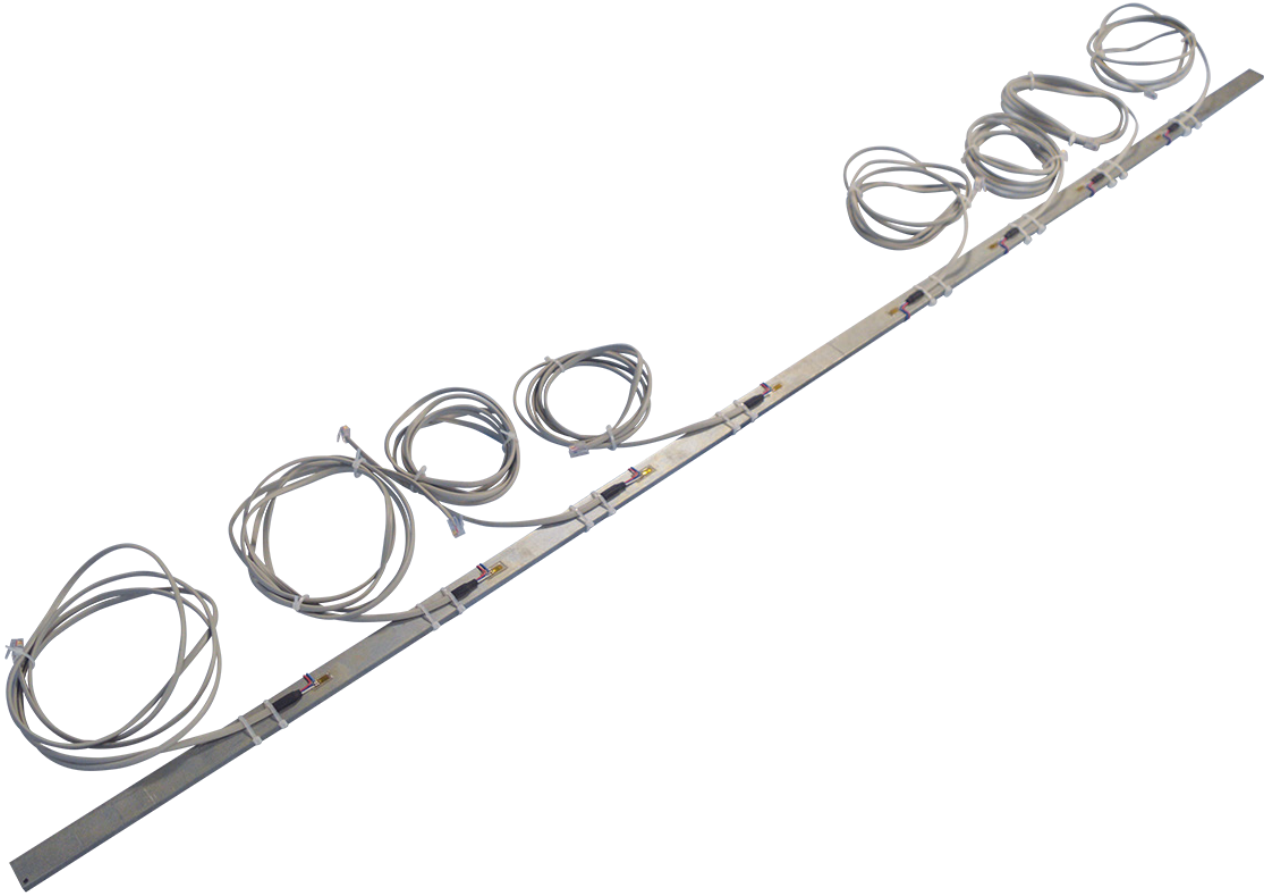




≡ STRAIN GAUGED BEAM

SM1004C

A steel beam with eight half-bridge strain gauges spaced from the centre line, for the examination of strain at different points along a beam for both simply supported and cantilever experiments.



KEY FEATURES

- Works with VDAS®
- Simply Supported and Cantilever experiments on a variety of arrangements
- Eight gauges spread along the beam length (symmetrically)
- When used with the SM1004 and SM1010 creates a wide variety of learning outcomes across different topics
- Extends the use of SM1004



≡ STRAIN GAUGED BEAM

SM1004C

DESCRIPTION

A steel beam with eight half-bridge strain gauges spaced from the centre line of the beam with a 135 mm pitch. The gauges are numbered 1 - 8 from left to right.

The Strain Gauged Beam (SM1004c) has been designed as an ancillary to be used with the TecQuipment Beam Apparatus (SM1004 supplied separately).

The strain gauges have a 'gauge factor' which is noted on the beam. Each of the strain gauges is connected via its attached cable to the Digital Strain Display (SM1010 supplied separately). The strain readings can be read directly from the display on the SM1010. Alternatively the SM1010 can be connected to VDAS-B (supplied separately) for output directly to a suitable computer (not supplied) running TecQuipment's VDAS® software (free to download from the TecQuipment website).

STANDARD FEATURES

- Five-year warranty
- Manufactured in accordance with the latest European Union directives
- ISO9001 certified manufacturer

LEARNING OUTCOMES

- Bending moment diagrams for:
 - Cantilever beam with end load
 - Cantilever beam with intermediate load
 - Propped cantilever with point load
 - Simply supported with intermediate load
 - Simply supported with centre load
 - Simply supported with two symmetrical loads
- Half bridge gauge configuration

ESSENTIAL BASE UNIT

- Beam Apparatus (SM1004)
- and
- Digital Strain Display (SM1010)

OPERATING CONDITIONS

OPERATING ENVIRONMENT:

Laboratory environment

STORAGE TEMPERATURE RANGE:

-25°C to +55°C (when packed for transport)

OPERATING TEMPERATURE RANGE:

+5°C to +40°C

OPERATING RELATIVE HUMIDITY RANGE:

80% at temperatures < 31°C decreasing linearly to 50% at 40°C

SPECIFICATIONS

TecQuipment is committed to a programme of continuous improvement; hence we reserve the right to alter the design and product specification without prior notice.

DIMENSIONS:

6.4 mm (thickness), 19.1 mm (width), 1350 mm (length) , (nominal)

Strain Gauges

8 half-bridge strain gauges with typical gauge factor 3.1 to 3.25

APPROXIMATE NETT WEIGHT:

1.5 kg

APPROXIMATE PACKED VOLUME:

0.02 m³