

# **2 CHANNEL DIGITAL STRAIN METER** HAC20



Year 1 study

# **Features**

- · Can be used on customer experiments
- 2 Channels, expandable to 18
- · Digital display
- · Stored channel configuration
- Stand alone module
- Internal completion resistors
- · Quarter, Half and Full bridge
- · DC operating voltage
- BNC output
- Tare function

#### **Description**

This two-channel strain gauge module allows connection of two strain gauge bridge arrangements as standard. A further 16 channels can be made available when the HAC20 module is connected to the HAC20M 16 channel

switching module.

The HAC20 and HAC20M module accept strain gauge bridge arrangements in  $\frac{1}{4}$ ,  $\frac{1}{2}$  or full bridge configurations, with bridge completion resistors being made available internally of the unit.

Each channel can be configured to the necessary strain gauges by adjusting the gauge configuration and gauge factor. Each channels configuration is stored in a non-volatile memory, which can be retrieved upon unit power down.

User-friendly menu options and set-up procedure have been designed in.

Each channel value can be displayed via a 3.5 digit display and selected using a front panel selector switch. The display shows readings in the range of ±2000



microstrain with a resolution of ±1microstrain. Each channel can be zeroed using the x1 or x20 tare function buttons on the front panel.

A rear output socket is available for analysing the raw signal from the strain gauges.

The unit is powered using a dual voltage power supply. The unit can also be run from the internal battery, which is charged when running the unit from the mains power source.

A comprehensive Instruction manual details all operational and set-up procedure for the unit.

The unit is rugged and robust for use around the laboratory, and can be used on a level surface.

#### **Related laws**

- Wheatstone bridge
- Strain
- Resistance

#### **Technical Specification**

- Touch button operation
- 16 x 2 line back lit display
- Channel selection
- Range: ±2000 microstrain, ±1 microstrain resolution
- · Tare function
- 15Vdc operating voltage
- Single BNC analogue output (±80mV range)
- Removable fuse

#### What's in the Box?

- 1 x HAC20
- 1 x Power supply
- 5 x Spare fuse
- 1 x Full bridge lead
- 1 x Half bridge lead
- 1 x BNC lead
- Instruction manual
- · Packing list
- Test sheet

### You might also like

- HDA200
- HPM15
- HAC20M
- HAC20K

# **Weights & Dimensions**

• Weight: 3kg

• Length: 300mm

• Width: 195mm

• Height: 110mm

#### **Essential Services**

 110/120V 60Hz or 220/240V 50Hz, single phase, live neutral and earth

# **Ordering information**

To order this product, please call PA Hilton quoting the following code: HAC20

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