VDAS® SM1010
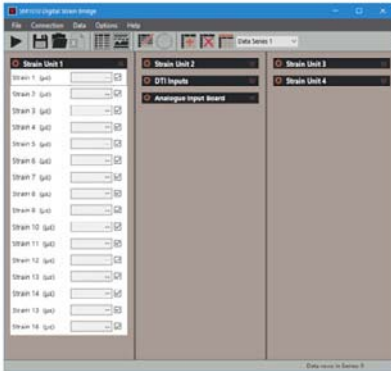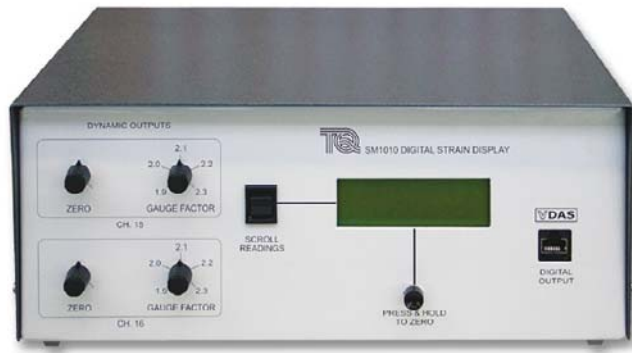
DIGITAL STRAIN DISPLAY

A 16-channel instrument that connects to industry-standard strain gauges to give direct readings of strain.

FIVE YEAR
QUALITY
TECQUIPMENT
SINCE 1958
WARRANTY

SCREENSHOT OF THE OPTIONAL VDAS®
SOFTWARE

KEY FEATURES

- Connects to industry-standard metallic foil strain gauges
- Includes two dynamic outputs for transient strain measurement
- Direct connections for half and full-strain bridge connections, with internal 'make-up' resistors
- Supplied with cable, self-locking connectors and a crimp tool to reduce connection problems
- Sixteen channels for multiple readings
- Fully programmable to match most types of strain gauges and connections
- Ideal for use with TecQuipment's Strain Gauge Kit (E19)

DIGITAL STRAIN DISPLAY

DESCRIPTION

For use with most types of metal-foil strain gauges, the Digital Strain Display connects to most types of strain bridge connections to give direct readings of strain.

The Digital Strain Display accepts up to 16 channels from strain gauges connected in quarter, half or full bridge. The display is fully programmable to match the strain gauges and their bridge connections. The display includes precision internal 'make-up' resistors to work with half bridge connections if needed. For quarter bridge connection you need suitable external make-up resistors or dummy gauges (not supplied).

Two channels include additional individually adjusted dynamic outputs. They can connect to suitable instruments, such as an oscilloscope or a chart recorder (not supplied) for measurement of transient strains.

Supplied with the Digital Strain Display is a reel of cable and connectors to fit the input sockets of the Digital Strain Display. Also supplied is a tool that crimps the connectors to the cable. The connectors are self-locking, reliable, secure and need no soldering.

For quick and reliable tests, TecQuipment's optional Versatile Data Acquisition System (VDAS®) gives accurate real-time data capture, monitoring and display, calculation and charting of all important readings on a computer (computer not supplied).

The Digital Strain Display includes a user guide with full description, installation and operating instructions.

STANDARD FEATURES

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

RECOMMENDED ANCILLARIES

- Bench-mounted version of the Versatile Data Acquisition System (VDAS-B)

ESSENTIAL SERVICES

ELECTRICAL SUPPLY:

Single-phase 100 VAC to 260 VAC

50 Hz to 60 Hz

OPERATING CONDITIONS

OPERATING ENVIRONMENT:

Laboratory

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 specifcation without prior notice.

DIMENSIONS:

130 mm x 310 mm x 380 mm

NETT WEIGHT:

4.5 kg

GROSS WEIGHT:

9 kg

PACKED VOLUME:

0.04 m^3

CHANNELS:

Sixteen – all channels may be used for slow-changing or static strain measurement. Channels 15 and 16 may also be used for dynamic strain output.

GAUGE FACTOR ADJUSTMENT:

1.9 to 2.3

STANDARD STRAIN DISPLAY RANGE:

+/– 10000 microstrain

DYNAMIC STRAIN OUTPUT RANGE:

+/– 2000 microstrain

ACCEPTED BRIDGE CONNECTIONS:

Quarter bridge, half-bridge and full-bridge