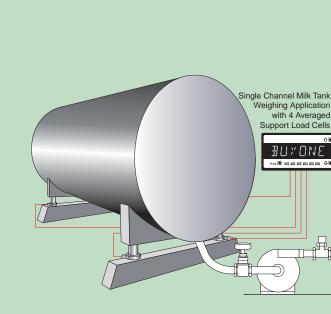


The Texmate SG100 Load Cell Controller is a high performance, programmable digital weighing system delivering precise measurement and control from a load cell input. It is pre-configured with the calibration options required for silo and tank weighing applications.

A 6-digit alphanumeric LED display provides easy to follow setup word prompts for all load cell parameters using scrolling menu options, including:



- Manual Trim for Zero Offset and Span.
- Manual mV/V Setup.
- Zero Span Calibration.
- Decimal Point Position.
- Last Digit rounding.
- Windowed Signal Averaging.
- Selectable Sampling Rate.
- Auto Zero Maintenance.
- Manual Zero.
- Tare and Reset Tare.



Single Channel Silo Weighing Application with 3 Averaged Support Load Cells

SG Range of Industrial Weighing Controllers

SG200, SG300, SG400

The SG range of industrial weighing controllers are now available with 1, 2, 3, or 4-channel load cell inputs. Auxiliary inputs such as temperature, frequency or UP DOWN counters are also available with the multi-channel versions to further increase the versatility of your automation and control applications.



1

SPECIFICATIONS

Digital Display: 14-segment alphanumeric, 0.56" (14.2 mm) LEDs. Display Color: Red (standard). Green or Super-bright Red (optional). Display Range: -199999 to 999999.

Display Update Rate: 3, 10, or 100 times per second. Display Dimming: 8 brightness levels. Front panel selectable. Scrolling Display Text Messaging: Full alphanumeric text characters supported. Polarity: Assumed positive. Displays - negative.

Annunciators: 6 red LEDs on front panel; one per setpoint.

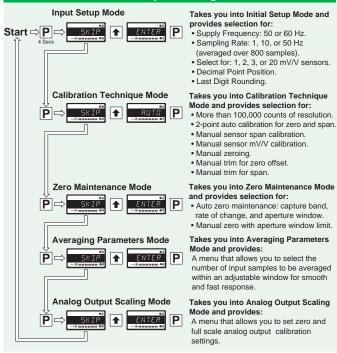
Overrange Indication:

Underrange Indication: UNBER

Front Panel Controls: PROGRAM, UP and DOWN buttons. **Excitation:** 5 V DC, 130 mA maximum, eight x 350 Ω bridges. Input Range: Software selectable for sensors from 1 mV/V to 20 mV/V. Input Sensitivity: 0.08 µV/Count maximum. Zero Drift: ± 40 nV/ °C typical.

Span Drift: ± 5 ppm/ ° C of full scale maximum. Non-linearity: ± 0.003% of full scale maximum. Input Noise: 160 nVpp typical at 1 Hz output rate. Signal processing Rate: 50 Hz maximum, 1 Hz minimum. A/D Convertors: 16-bit $\Sigma\Delta$, 19-bit performance. Warm Up Time: Up to 10 minutes for load cell to settle. Conversion Rate: 1, 10, 50 Hz selectable. Control Output Rate: Can be selected for 100 msec or 10 msec.

Load Cell Controller – Setup Menu Logic Tree



WARRANTY

2

WARKAN I Y Texmate warrants that its products are free from defects in material and workmanship under normal use and service for a period of one year from date of shipment. Texmate's obligations under this warranty are limited to replacement or repair, at its option, at its factory, of any of the products which shall, within the applicable period after shipment, be returned to Texmate's faci-ity, transportation charges pre-paid, and which are, after examination, disclosed to the satis-faction of Texmate to be thus defective. The warranty shall not apply to any equipment which shall have been repaired or altered, except by Texmate, or which shall have been subjected to misuse, negligence, or accident. In no case shall Texmate's liability exceed the original pur-chase price. The aforementioned provisions do not extend the original warranty period of any product which has been either repaired or replaced by Texmate.

Frequency Select: 50 Hz/60 Hz noise rejection, software selectable.

Load Cell Input: 4 or 6-wire Bridge, header selectable. Output Modules: Plug into carrier board from rear:

- 1. Four Relay Module: Available in six combinations from one relay up to a total of two 10 A Form C Relays* and two 5 A Form A Relays*
- 2. Four Relay Module: Available with one to four 5 A Form A Relays**. *Form C Relay Specifications: 10 A 240 VAC~1/2 HP, 8 A 24 VDC. Isolation 3000 V. UL and CSA listed.

**Form A Relay Specifications: 5 A 240 VAC, 4 A 24 VDC. Isolation 3000 V. UL and CSA listed.

3. Four Solid State Relay (SSR) Module: Available with one to four independent (210 mA DC only) or (140 mA AC/DC) SSRs (400 V max). Environmental

Operating Temperature: 0 to 50 °C (32 °F to 122 °F). Storage Temperature: -20 °C to 70 °C (-4 °F to 158 °F). Relative Humidity: 95% (non-condensing) at 40 °C (104 °F). Mechanical

Case Dimensions: 1/8 DIN, 96x48 mm (3.78" x 1.89") Case Material: 94V-0 UL rated self-extinguishing polycarbonate. Weight: 11.5 oz (0.79 lbs), 14 oz (0.96 lbs) when packed.

Approvals

CE: As per EN-61000-3/4/6 and EN-61010-1.

The resident Tiger 320 operating system also provides a range of measurement and control functions and options giving you a reliable and precise industrial quality solution. These include:

- Excitation. The controller provides excitation for up to eight 4 or 6-wire 350 Ω load cells.
- Status Inputs. Manual zero, tare and reset tare from external status inputs.
- Relays. Option of up to four multi-option 5 and 10 amp relays, and SSR outputs for SSR control.
- Setpoints. Four programmable setpoints with advanced multiple timer modes, hysteresis, deviation, PID, and setpoint tracking.
- Analog Output. Fully scalable from 4 to 20 mA (or reverse) as standard, or optional 0 to 10 V DC (or reverse).
- Totalizers. Dual totalizers with independent reset and scaling.
- Linearization. Up to four 32-point flexible linearization tables or a single 125-point flexible table.
- Serial Communications. Optional single ASCII or Modbus RS-232 or RS-485, Ethernet (TCP/IP), DeviceNet, direct serial output to printer.
- **Data Logging**. Optional data logging of up to 4000 samples with real-time clock.
- **Power Supplies** Standard high voltage AC / DC power supply 85-265 V AC / 95-370 V DC

Optional low voltage AC / DC power supply 18-48 V AC / 10-72 V DC

USER'S RESPONSIBILITY

USER'S RESPONSIBILITY We are pleased to offer suggestions on the use of our various products either by way of print-ed matter or through direct contact with our sales/application engineering staff. However, since we have no control over the use of our products once they are shipped, NO WARRANTY WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE, OR OTHERWISE is made beyond the repair, replacement, or refund of purchase price at the sole discretion of Texmate. Users shall determine the suitability of the product for the intended application before using, and the users assume all risk and liability whatsoever in connection therewith, regardless of any of our suggestions or statements as to application or construction. In no event shall Texmate's liability, in aw or otherwise, be in excess of the purchase price of the product. liability, in law or otherwise, be in excess of the purchase price of the product.

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For product details visit www.texmate.com

Local Distributor Address



Tel: 1-760-598-9899 • USA 1-800-839-6283 • That's 1-800-TEXMATE Fax: 1-760-598-9828 • Email: sales@texmate.com • Web: www.texmate.com Texmate has facilities in Japan, New Zealand, Taiwan, and Thailand. We also have authorized distributors throughout the USA and in 28 other countries.

www.texmate.com