The rugged Series CG Digital Force Gauge is an advanced force measurement instrument for testing up to 1,000 lbF of compressive or tensile forces. The gauge includes all the features of Series BG gauges, including sophisticated measurement capabilities, data outputs, computer control capabilities, and configurable settings.

**Specifications**

- **Accuracy:** ±0.2% of full scale ±1 digit
- **Power:** AC or rechargeable battery with Intelligent Power Management System (IPM). IPM warns the user via a “LO BAT” indicator and then will power off the gauge
- **Battery life:** 8-10 hours of continuous use
- **Selectable units of measurement:** lbF, kg, N
- **Outputs:** Standard
  - RS-232: Fully configurable up to 9600 baud. Includes Gauge Control Language (GCL) for full computer control of all functions.
  - Mitutoyo (Digimatic): Serial BCD suitable for all Mitutoyo SPC-compatible devices
  - Analog: ±1 VCD, ±0.25% of full scale at capacity. + for compression, – for tension.
- **General purpose I/O:** Three open collector outputs and one input (utilizing Mitutoyo lines)
- **Set points:** Three open collector lines (utilizing Mitutoyo lines)
- **Configurable settings:** Analog filters, digital filters, RS-232 outputs selection (other than RS-232), automatic output (RS-232), automatic shutoff, initial (default), averaging mode, calibration
- **Load cell deflection:** 0.030 in [0.76 mm] at full capacity
- **Safe overload:** 150% of full scale (display shows “----” at 110% and above)
- **Weight (gauge only):** 1.8 lb [0.8 kg]
- **Environmental requirements:** 40° F - 100° F [5°C - 45°C], <96% humidity (non-condensing)
- **Thermal effects:** Zero: 0.03% of full scale/°C, Span: 0.01% of full scale/°C
- **Housing construction:** Aluminum
- **Included accessories:** Chisel, cone, V-groove, hook, flat, extension, thread adapter
- **Warranty:** 3 years (see individual statement for further details)

**Optional Equipment**

- **Data outputs:** RS-232, Mitutoyo (Digimatic), and analog outputs. Automatic timed output (RS-232) included.
- **Set points:** Programmable high and low force set points for triggering external devices (ex. motorized test stand, alarm, etc).
- **Data averaging:** Calculates average force over a specified time (programmable)
- **External trigger:** Useful for contact or switch activation
- **Reversible housing:** Housing can be reversed for handheld or test stand use

**Dimensions**

- **Model No.**: CG500
  - Capacity x Resolution: 500.0 x 0.2 lbF, 250.0 x 0.1 kgF, 2500 x 1 N, 100V
- **Model No.**: CG1000
  - Capacity x Resolution: 1000.0 x 0.5 lbF, 500.0 x 0.2 kgF, 5000 x 2 N, 100V

**Ordering Information**

For 220V operation, add suffix E to model number. Example: CG1000E