

Force / Torque Gauge Comparison Chart

Note: The BGI force/torque gauge shares its features and specifications with the BG (except for load cell information, weight, and included accessories). The MGT torque gauge also shares most of its characteristics with the MG force gauge, with the same exceptions.



	Series BG	Series CG	Series EG	Series MG
Accuracy (% of full scale)	±0.2%		±0.3%	±0.5%
Sampling rate (readings/s)	65		30	
Display rate (updates/s)	2.5 / 65 in peak mode		2.5 / 30 in peak mode	
Power	AC or rechargeable battery (both included). Includes Intelligent Power Management System (IPM). IPM warns the user via a "LO BAT" indicator and then will power off the gauge.			AC or non-rechargeable battery, includes IPM
Battery life	8-10 hours of continuous use			30 hours of continuous use
Peak capture	Yes, in tension and compression (cw and ccw for torque gauges)			
Units of measurement	Force gauges: lb(oz), kg(g), N Torque gauges: lbin(ozin), kgmm, Ncm for torque gauges			
Outputs	Standard		Optional	N/A
RS-232	Fully configurable up to 9600 baud. Includes Gauge Control Language (GCL).		Fully configurable up to 9600 baud.	N/A
Mitutoyo (Digimatic)	Serial BCD suitable for all Mitutoyo SPC-compatible devices			N/A
Analog	±1 VCD, ±0.25% of full scale at capacity. Positive for compression, negative for tension.			N/A
General purpose I/O	Three open collector outputs and one input (utilizing Mitutoyo lines)		N/A	
Set point	Three open collector lines (utilizing Mitutoyo lines)		N/A	
Analog	±1 VCD, ±0.25% of full scale at capacity. Positive for compression, negative for tension.			N/A
Configurable Settings	Analog filters, digital filters, outputs selection, automatic output (RS-232), automatic shutoff, initial (default), averaging mode, calibration		Outputs selection, automatic shutoff, initial (default), calibration	N/A
Load cell deflection	0.010 in [0.25 mm] at full capacity			
Safe overload (% of full scale)	150% (display shows "----" at 110% and above)			
Weight (gauge only)	BG012 - BG200: 0.95 lb [0.4 kg] BG500: 1.12 lb [0.5 kg]	All capacities: 1.8 lb [0.8 kg]	EG012 - EG200: 0.95 lb [0.4 kg] EG500: 1.12 lb [0.5 kg]	MG025 - MG200: 0.7 lb [0.3 kg] MG500: 0.87 lb [0.4 kg]
Included accessories	Chisel, cone, V-groove, hook, flat, extension rod		Hook, flat	
Environmental requirements	40°F - 100°F [5°C - 45°C], <96% humidity (non-condensating)			
Thermal effects	Zero: 0.03% of full scale/°C, Span: 0.01% of full scale/°C			
Housing construction	6061 aluminum, reversible halves for handheld operation or test stand mounting			