

ADVANCED DIGITAL FORCE GAUGES

RANGES FROM 50 GRAMS TO 500 POUNDS

DFG55 Series



- ✓ High Speed 7000 Hz Sample Rate
- ✓ 5 Selectable Units of Measurement
- ✓ USB, RS232, Mitutoyo and Analog Outputs Standard
- ✓ Large Backlit Graphic Display with Bar Graph
- ✓ 1000 Point Data Memory
- ✓ Programmable Setpoints with Audible Alarms and Outputs
- ✓ Peak Readings and Setpoints Always Displayed
- ✓ Averaging Mode Calculates Average Reading Over Time



DFG55-10.

Comes complete with carrying case, AC adaptor with US plug, extension rod, cone, chisel, V-groove, flat, hook, coupling, certificate of calibration, USB cable and resource CD with USB drivers and operator's manual.



OMEGA's DFG55 advanced digital force gauges are designed for tension and compression force testing in numerous applications across virtually every industry. With capacities from 0.12 to 500 lb (0.5 to 2500 N) the gauges feature an industry-leading sampling rate of 7000 Hz, producing accurate results even for quick-action tests. Accuracy is $\pm 0.1\%$ of full scale ± 1 digit, and resolution is 1/5000.

A large, backlit graphics LCD displays large, legible characters, while the simple menu navigation allows for quick access to the gauges' many features and configurable parameters. Data can be transferred to a PC or other data collector via USB, RS232, Mitutoyo (Digimatic), or analog outputs.

On-board data memory for up to 1000 readings is included, as are statistical calculations and output to a PC. Integrated set points with indicators are ideal for pass-fail testing and for triggering external devices such as an alarm, relay, or test stand. The gauges are overload protected to 150% of capacity, and an analog load bar is shown on the display for graphical representation of applied force.

The DFG55's averaging mode addresses the need to record the average force over time, useful in applications such as peel testing, while external trigger mode makes switch activation testing simple and accurate.

SPECIFICATIONS

Accuracy: $\pm 0.1\%$ of full scale ± 1 digit
Power: AC or NiMH rechargeable battery (included)

Battery Life: Up to 7 hours continuous with back-light on; up to 24 hours with back-light off

Low Battery: Multi-step low battery indicator is displayed, gauge shuts off automatically when power is too low.

Measurement Units: lbF, ozF, gF, kgF, N, kN, mN (depending on model)

Safe Overload: 150% of full scale (display shows "OVL" at 110% and above)

Full Scale Deflection: 0.25 mm (0.01") except DFG55-0.12, 0.13 mm (0.05")

Analog Output: ± 1 Vdc, $\pm 0.25\%$ FS

USB/RS232 Output: Configurable up to 115,200 baud; includes Gauge Control Language 2 for full computer control

Setpoint Outputs: Three open drain lines

Dimensions: 149.4 H x 64.3 W x 33.6 mm D (5.88 x 2.53 x 1.32")

Weight: Ranges 100 lb or less 0.45 kg (1.0 lb), 200 lb and up 0.54 kg (1.2 lb)



DFG55-10, shown smaller than actual size.

To Order

RANGE vs RESOLUTION

MODEL NO.	lbF	ozF	kgF	gF	N	kN	mN
DFG55-0.12	0.12 x 0.00002	2 x 0.0005	-	50 x 0.01	0.5 x 0.0001	-	500 x 0.1
DFG55-0.25	0.25 x 0.00005	4 x 0.001	-	100 x 0.2	1 x 0.0002	-	1000 x 0.2
DFG55-0.5	0.5 x 0.0001	8 x 0.002	-	250 x 0.05	2.5 x 0.0005	-	2500 x 0.5
DFG55-2	2 x 0.0005	32 x 0.01	1 x 0.0002	1000 x 0.02	10 x 0.002	-	-
DFG55-5	5 x 0.001	80 x 0.02	2.5 x 0.0005	2500 x 0.5	25 x 0.005	-	-
DFG55-10	10 x 0.002	160 x 0.05	5 x 0.001	5000 x 1	50 x 0.01	-	-
DFG55-20	20 x 0.005	320 x 0.1	10 x 0.002	10000 x 2	100 x 0.02	-	-
DFG55-50	50 x 0.01	800 x 0.2	25 x 0.005	25000 x 5	250 x 0.05	-	-
DFG55-100	100 x 0.02	1600 x 0.05	50 x 0.01	50000 x 10	500 x 0.1	-	-
DFG55-200	200 x 0.05	3200 x 1	100 x 0.02	-	1000 x 0.2	1 x 0.0002	-
DFG55-500	500 x 0.1	8000 x 2	250 x 0.05	-	2500 x 0.5	2.5 x 0.0005	-

Comes complete with carrying case, AC adaptor with US plug, extension rod, cone, chisel, V-groove, flat, hook, coupling, certificate of calibration, USB cable and CD with USB drivers and operator's manual.

For AC adaptor with European plug add suffix "-E" to model number, UK style plug add "-U", no extra charge.

Ordering Examples: DFG55-20, 20 lb digital force gauge with US style plug.

DFG55-100-U, 100 lb force gauge with UK style plug.