

HIGH ACCURACY DIGITAL FORCE GAGES

WITH INTERNAL OR EXTERNAL SENSORS



DFG41 Series

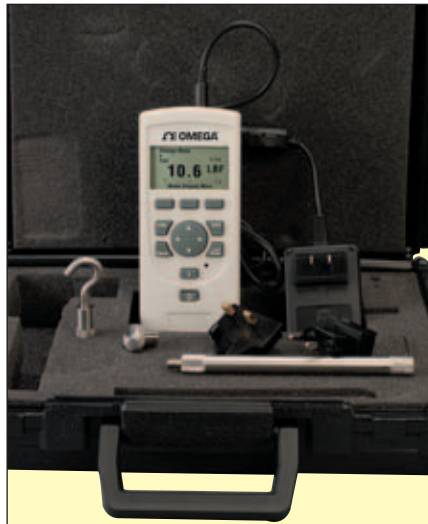
DFG41-200, \$1475,
shown smaller
than actual size.

All Models
\$1475



- ✓ User Selectable Units of Measure
- ✓ High Accuracy $\pm 0.1\%$ of Full Scale with Internal Load Cells
- ✓ Remote Sensor Model with 12 Load Cells and 5 Torque Sensors Available
- ✓ NIST Calibration Certificate Included
- ✓ Selectable Display Languages
- ✓ Advanced Operating Modes with Statistical Calculations
- ✓ Simple Operator Interface with Menu Prompts and Function Keys for Easy Use
- ✓ RS232 and ± 2 Vdc Analog Outputs Standard
- ✓ Rechargeable Nickel Metal Hydride Batteries or Direct AC Operation with Universal Adaptor

OMEGAs DFG41 Series offers the best price performance of any digital force gage available today. This compact, easy-to-use force gage is designed for basic and complex applications. Ideal for handheld or test stand applications, the DFG41 may be equipped with integral load cells or smart remote sensors for load or torque measurement.



Comes complete with hard carrying case, rechargeable batteries, universal battery adaptor, hook, flat tip, calibration certificate, and operator's manual.

Measurement accuracy is better than 0.1% full scale with internal sensors or 0.25% with external sensors. A large, easy-to-read, high resolution dot matrix LCD supports a variety of standard gage functions including normal and peak readings, high/low limits, setpoints, pass/fail results, statistical results, load averaging, load comparisons, % and sharp break detection, load cell actuation and direction. Loads are displayed in ozf, gf, lbf, kgf and N units. The display can be inverted and displayed results may be "hidden" from the operator. The DFG41 gage comes standard with a carrying case, battery adaptor/charger, testing accessories and NIST Certificate of Calibration with data.

SPECIFICATIONS

Accuracy: $\pm 0.1\%$ FS with internal load cell ($\pm 0.25\%$ with external sensors)
Display: High resolution, dot matrix LCD, 8 lines, 40 characters with adjustable contrast
Data Sampling Rate: 5000 Hz
Peak Capture Rate: 5000 Hz



Display Update Rate: User selectable 8 or 2 Hz

Operating Temperature: 4 to 38°C (40 to 100°F)

Temperature Effects: $< 0.03\%$ FS per °C (0.015% per °F)

Relative Humidity: 20 to 80%

Overload Protection: 150% FS

Tare Capacity: 10% FS

Power: Rechargeable nickel metal hydride batteries or direct AC power using universal adaptor (both included)

Battery Life: Approximately 30 hours continuous use

Dimensions: 173 H x 73 W x 41 mm D (6.8 x 2.9 x 1.6")

Weight: 0.7 kg (1.5 lb)

LOAD CELLS



HIGH ACCURACY DIGITAL FORCE GAGES WITH INTERNAL OR EXTERNAL SENSORS



DFG-LC-100, \$555, shown smaller than actual size.

DFG-TQ-50, \$1175, shown smaller than actual size.

DFG41 with Internal Load Cells

**MOST POPULAR
MODELS HIGHLIGHTED!**

To Order (Specify Model Number)

MODEL NO.	PRICE	FORCE RANGE VS. RESOLUTION				
		oz	g	lb	kg	Newtons
DFG41-250G	\$1475	8 x 0.002	250 x 0.05	0.5 x 0.0001	0.25 x 0.0001	2.5 x 0.0005
DFG41-2	1475	32 x 0.005	1000 x 0.1	2 x 0.0002	1 x 0.0001	10 x 0.001
DFG41-10	1475	160 x 0.02	5000 x 0.5	10 x 0.001	5 x 0.0005	50 x 0.005
DFG41-25	1475	400 x 0.05	10000 x 1	25 x 0.002	10 x 0.001	100 x 0.01
DFG41-50	1475	800 x 0.1	25000 x 2	50 x 0.005	25 x 0.002	250 x 0.02
DFG41-100	1475	1600 x 0.2	50000 x 5	100 x 0.01	50 x 0.005	500 x 0.05
DFG41-200	1475	–	–	200 x 0.02	100 x 0.01	1000 x 0.1
DFG41-500	1475	–	–	500 x 0.05	250 x 0.02	2500 x 0.2

External Load Cells or Torque Sensors

MODEL NO.	PRICE	DESCRIPTION
DFG41-RS	\$1055	DFG41 base unit; requires 1 or more external sensors listed below

External Load Cells

MODEL NO.	PRICE	FORCE RANGE VS. RESOLUTION				
		oz	g	lb	kg	Newtons
DFG-LC-250G	\$705	8 x 0.002	250 x 0.05	0.5 x 0.0001	0.25 x 0.0001	2.5 x 0.0005
DFG-LC-2	705	32 x 0.005	1000 x 0.1	2 x 0.0002	1 x 0.0001	10 x 0.001
DFG-LC-10	705	160 x 0.02	5000 x 0.5	10 x 0.001	5 x 0.0005	50 x 0.005
DFG-LC-25	705	400 x 0.05	10,000 x 1	25 x 0.002	10 x 0.001	100 x 0.01
DFG-LC-50	555	800 x 0.1	25,000 x 2	50 x 0.005	25 x 0.002	250 x 0.02
DFG-LC-100	555	1600 x 0.2	50,000 x 5	100 x 0.01	50 x 0.005	500 x 0.05
DFG-LC-200	555	–	–	200 x 0.02	100 x 0.01	1000 x 0.1
DFG-LC-500	555	–	–	500 x 0.05	250 x 0.02	2500 x 0.2
DFG-LC-1K	1050	–	–	1000 x 0.1	250 x 0.02	2500 x 0.2

External Torque Sensors

MODEL NO.	PRICE	TORQUE RANGE VS. RESOLUTION				
		in – lb	in – ozs	N – m	N – cm	kg – cm
DFG-TQ-3	\$1175	3 x 0.0005	50 x 0.005	0.35 x 0.0001	35 x 0.005	3.5 x 0.0005
DFG-TQ-12	1175	12 x 0.002	192 x 0.02	1.25 x 0.0002	125 x 0.02	12.5 x 0.002
DFG-TQ-50	1175	50 x 0.005	800 x 0.1	5 x 0.0005	500 x 0.05	55 x 0.005
DFG-TQ-100	1175	100 x 0.01	–	10 x 0.001	1000 x 0.1	100 x 0.01
DFG-TQ-200	1175	200 x 0.02	–	20 x 0.002	2000 x 0.2	200 x 0.02

ACCESSORIES

MODEL NO.	PRICE	DESCRIPTION
DFG-850-1	\$70	RS232 cable
ME-1708	160	Reference Book: Handbook of Mechanical Engineering

Comes complete with hard carrying case, rechargeable batteries, universal battery eliminator, hook, flat tip, calibration certificate, and operator's manual.

Ordering Examples: DFG41-100, 100 lb high accuracy digital force gage with internal load cell, \$1475.

DFG41-RS, digital gage and DFG-TQ-12, 0 to 12" lb external torque sensor, \$1055 + 1175 = \$2230.

DFG41-RS, digital gage and DFG-LC-100, 0 to 100 lb external load cell, \$1055 + 705 = \$1760.

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