

# Advanced Force Gauge

The Advanced Force Gauge (AFG) is the most versatile and fully-featured instrument available on the market. Housed in an ergonomically shaped rugged aluminium case, the AFG is powered by either mains-adaptor or standard rechargeable AAA batteries. It can be used hand-held or fixed to a manual or motorised test stand to enable tension and compression testing under controlled conditions.

## KEY FEATURES:

- 10 capacities - from 2.5N to 2500N
- Peak capture - Ultimate max + 1st peak
- Data output - RS232, digimatic and analogue
- Pass/Fail Alarms - audible and visual
- Overload warning with trend bar
- Wide range of grips and fixtures

versatile  
rugged  
accurate



AFG shown mounted to the MultiTest-d motorised test stand

RS232, Mitutoyo, Analogue data output for easy data transmission

Recognises data from a range of external force & torque transducers, e.g. S-Beam, Load Button Cell and Static Torque Wrench.

View the 1st peak and ultimate peak readings. On-board memory stores up to 500 readings

Accurate to  $\pm 0.1\%$  full-scale

Internal loadcell stud for quick and easy change of accessories and fixtures  
Loadcell stud 10-32 UNF male (5/16 UNC male for AFG 1000N & 2500N)



# AFG Specification Table

Model	Part No.	mN	N	kN	gf	kgf	ozf	lbf
AFG 2.5	850- 412	2,500 x 0.5	2.5 x 0.0005	-	250 x 0.05	-	9 x 0.002	0.55 x 0.0001
AFG 5	850- 413	5,000 x 1	5 x 0.001	-	500 x 0.1	0.5 x 0.0001	18 x 0.005	1.1 x 0.0002
AFG 10	850- 414	10,000 x 2	10 x 0.002	-	1,000 x 0.2	1 x 0.0002	35 x 0.01	2.2 x 0.0005
AFG 25	850- 415	25,000 x 5	25 x 0.005	-	2,500 x 0.5	2.5 x 0.0005	90 x 0.02	5.5 x 0.001
AFG 50	850- 416	50,000 x 10	50 x 0.01	-	5,000 x 1	5 x 0.001	180 x 0.05	11 x 0.002
AFG 100	850- 417	-	100 x 0.02	-	10,000 x 2	10 x 0.002	350 x 0.1	22 x 0.005
AFG 250	850- 418	-	250 x 0.05	-	25,000 x 5	25 x 0.005	900 x 0.2	55 x 0.01
AFG 500	850- 419	-	500 x 0.1	-	50,000 x 10	50 x 0.01	1,800 x 0.5	110 x 0.02
AFG 1000	850- 420	-	1,000 x 0.2	1 x 0.0002	-	100 x 0.02	3,500 x 1	220 x 0.05
AFG 2500	850- 421	-	2,500 x 0.5	2.5 x 0.0005	-	250 x 0.05	9,000 x 2	550 x 0.1

- Accuracy  $\pm 0.1\%$  of full scale
- Full scale deflection of loadcell typically 0.5mm

## Audible & visual pass/fail alarms

Set a threshold for immediate alert when limits are exceeded

## Measurements made in N, kN, mN, lbf, ozf, kgf and gf with a sampling rate of 5000Hz

## Reversible display

View readings even when the gauge is positioned away from you

## Rugged metal housing

Ideal for factory or outdoor use

For added flexibility the AFG is able to recognise data from a range of external 'Smart' force and torque transducers, so you can use it as a universal display for remote applications, (see pages 5 to 8).

The dual level design of the keypad ensures that operation of this powerful gauge is kept simple, thereby making it ideal for use from production shop floor to R&D.

All models carry CE marking and are supplied in a robust carrying case with standard accessories and a calibration certificate traceable to UK national standards.



Textile tension test



AFG and accessories