

# Advanced Force Gauge (Model AFG) Specifications

## AFG Capacities and Resolution

Model no:	mN	N	kN	gf	kgf	ozf	lbf
AFG 2.5N	2,500 x 0.5	2.5 x 0.0005	-	250 x 0.05	-	9 x 0.002	0.55 x 0.0001
AFG 5N	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 10N	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 25N	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 50N	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 100N	-	100 x 0.02	-	10,000 x 2	10 x 0.002	350 x 0.1	22 x 0.005
AFG 250N	-	250 x 0.05	-	25,000 x 5	25 x 0.005	900 x 0.2	55 x 0.01
AFG 500N	-	500 x 0.1	-	50,000 x 10	50 x 0.01	1,800 x 5	110 x 0.02
AFG 1000N	-	1,000 x 0.2	1 x 0.0002	-	100 x 0.02	3,500 x 1	220 x 0.05

## Specifications

**Resolution:** 1 part in 5000

**Accuracy:** +/- 0.1% of full scale

**Sampling Rate:** 5000Hz

**Peak Capture Rate:** Configurable: High — 2000 Hz,  
Medium — 10Hz (default), Low — 2Hz

**Display Update Rate:** 2Hz or 10Hz

**Tare Capacity:** 10% of capacity

**Display:** Dot graphic LCD display offers unique display modes and exceptional text prompts. Supports simultaneous display of live and peak readings. Display may be inverted 180° for improved readability during hand-held use.

**Backlight:** Standard

**Auto-off:** 2 minute timer. May be disabled.

**Advanced Loadcell Cartridges (ALC):** Capacities can be changed in seconds by swapping ALCs. Automatic recognition of capacity, display increments and calibration.

**Smart Sensor Port:** Any Quantrol Smart Sensors may be plugged in with automatic configuration of capacity, calibration, display increments and units.

**Data Storage:** Up to 100 peak values may be stored for later download.

**Freeze Reading:** Display freezes when switch under test changes state.

**Average Load Measurement:** Average load is displayed above user-defined threshold.

**Footswitch:** Optional footswitch controls any two keypad functions (Max, Units, Transmit, Zero, Reset)

**Test Stand Control:** Cycle testing (user defined load points and number of cycles), or stand reverse, stop on alarm or sample break. Requires cable 49756-1142. Cycle testing compatible on TC<sup>2</sup> only.

**Output(s):** Configurable RS-232, Digimatic (Mitotoyo), and ±4 VDC Analog (optional calibration of analog – consult factory)

**Control Output:** Output signal from gauge based upon user-defined load limit. Cable with 5v relay (49756-1217)

**Operating Temperature Range:** 50°F – 95°F (10°C to 35°C)

**Warranty:** 2 years

**Overload Warning:** Audio and visual warning at 120% of capacity.

**Mechanical Overload Protection:** 150% of capacity

**Instrument Weight:** 1lb 10 oz (750 grams) with load-cell cartridge.

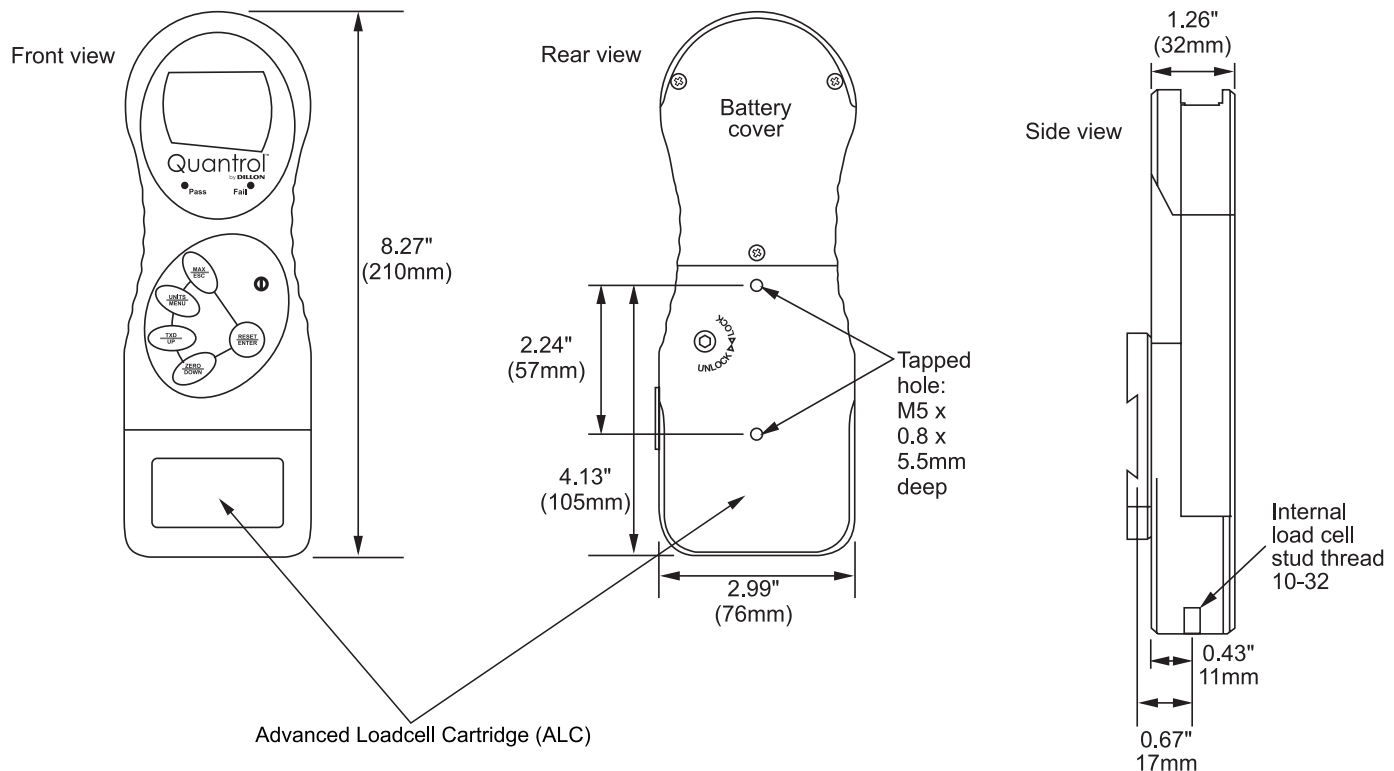
**Power Source:** (5) Nickel Metal Hydride rechargeables (supplied) or AC Adapter (supplied) or Alkaline Batteries (not supplied)

**Battery Life:** 20 Hours between charges with supplied Nickel Metal Hydride rechargeables. Typical operation with backlight off.

## Included:

- AFG/AFTI display console
- One Advanced Loadcell Cartridge (ALC)
- Carrying case
- AC charger/power supply
- Allen wrenches to install battery and ALC
- (2) M5 screws for mounting to test stand bracket
- Swivel adapter (capacities 10N and higher)
- 1.2 inch extension rod
- 5 inch extension rod
- 1 inch diameter compression platen
- Hook (small up to 50N, medium 200N-1000N and large 2500N)
- User's manual and calibration certificate.

## Dimensions



## AUTHORIZED DISTRIBUTORS

**Ask the experts.** Quantrol distributors offer complete service capabilities from application assistance to sales and product support. Their experienced representatives are the most knowledgeable experts that you will find in the force measurement industry. We recommend that you consult these capable specialists for all of your measuring needs.

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