FG-7000 Digital Force Gauge

The new FG-7000 Series digital force gauges are loaded with functionality to simplify your compression and tension testing needs. The multiple-language FG-7000's provide menu programming for easy selection and set-up of the instrument to your desired requirements. Three modes of operation are selectable: Track mode for live readings, Peak mode for displaying the peak reading that remains until a higher peak is sensed, and Auto Peak mode which is similar to Peak mode except the peak on the display will reset only after a programmed time period. Programmable limits provide a quick visual and audible indication if a test passed or failed on the LCD. In addition, the comparator output can be set up for integration of the instrument into your quality system for repetitive testing such as on a production line.

These high-tech instruments can easily data log a reading at the push of a button for simple data acquisition, or be set to continuous data storage. Data can be viewed on the screen, sent to the optional printer, or loaded to be analyzed and graphed on the free software program. The 1,000 point memory with definable groups allows for multiple tests to be recorded and easily separated upon loading .

The FG-7000's robust housings are designed to fit perfectly in the operator's hand for portable testing. The large backlit, 180° auto-reversible display, compression/tension icons, combined with the dual labeled key pad allows for instant switching from push to pull testing for portable or test stand applications. Models are available from 1 lb to 220 lb ranges providing a large offering for various applications such as, incoming quality inspection, finished goods testing, R&D or almost any portable or force stand testing requirement.

**FG-7000 with Accessories
in Protective Carrying Case**

Features

- *1000 Hz Sample Rate combined with +/-0.2% F.S. accuracy provides fast sampling producing great resolution and more accurate results*
- *Three mode operation: Track, Peak & Auto-Peak*
- *180° Auto-reversible display, tension/compression icons, and dual printed keypad allows usage as a portable gauge or mounted upside down on a test stand*
- *Programmable High & Low Limits allow for instant visual and audible indication of pass or fail testing.*
- *1000 point data collection capability can be viewed on display, sent to optional printer, or uploaded to software package via USB or RS-232 Serial Port for further analysis*
- *Rugged, ergonomic die cast aluminum construction allows usage in demanding applications*
- *Comparator output function provides user with easy Pass/Fail testing system integration capabilities*
- *Multi-language and engineering units selection provides flexible user comfort*
- *Field Calibration capability eliminates need to send to lab*
- *Calibration Certificate included along with popular adapter attachments*
- *Free Datalogging/graphing software available for free download on website*

FG-7000 Specifications

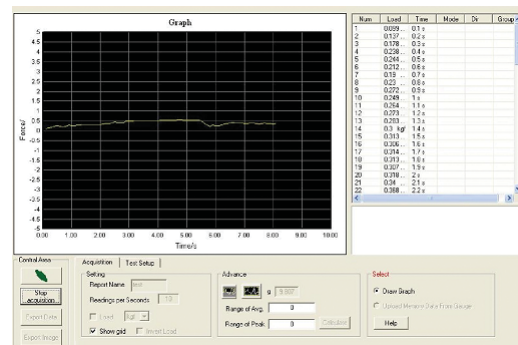|	
Accuracy	± 0.2% F.S.
Selectable Units	mN, N, gf, kgf, ozf, and lbf. (Depending on Range)
Overload Capacity	150% of F.S. (LCD flashes beyond 110% of F.S.)
Measurement Method	Peak, Autopeak or Track Mode
Data Sampling Rate	1000 Hz
Display	2.1 x 1.6" (54 x 40 mm); dot matrix LCD with LED Backlight
Display Update Rate	10 times/second
Resolution	See chart
Memory	1000 data
Set Point	Programmable high and low limits
Battery Indicator	Display flashes battery icon when battery is low
Power	3.6 V dc 800 mAH Ni-MH rechargeable batteries
Battery Life	Approximately 16 hours continuous use per full charge
Charger / Adaptor	Universal USB/BM charger, Input: 110 ~ 240 V ac
Temperature Effects	<0.054% per °F (0.03% FS per °C)
Operating Temperature	14 to 104°F (-10 to 40°C)
Humidity Limit	5 to 95%
Housing	Aluminum
Outputs	USB, Serial Port RS-232, High & Low Limit NPN
Humidity Limit	5 to 95%
Dimensions	5.7 x 2.9 x 1.4" (145 x 73 x 35.5 mm)
Product Weight	1.5 lb (0.7 kg)
Package Weight	2.8 lb (1.3 kg)
Certification	CE
Warranty	1 year
Included Accessories	AC Adaptor/Charger, USB cable, calibration cert., 6 attachments: hook, flat tip, conical tip, chisel tip, notched tip, extension shaft, carrying case

Ordering Details

Model		mN	N	gf	kgf	ozf	lbf
FG-7002	Capacity	5000.0	5.0000	500.00	-	18.000	1.1000
	Resolution	0.5	0.0005	0.05	-	0.005	0.0001
FG-7003	Capacity	10000	10.000	1000.0	1.0000	35.00	2.2000
	Resolution	1	0.001	0.1	0.0001	0.01	0.0005
FG-7004	Capacity	20000	20.000	2000.0	2.0000	70.00	4.400
	Resolution	5	0.005	0.5	0.0005	0.01	0.001
FG-7005	Capacity	50000	50.000	5000.0	5.0000	180.00	11.000
	Resolution	5	0.005	0.5	0.0005	0.05	0.001
FG-7006	Capacity	-	100.00	10000	10.000	350.0	22.000
	Resolution	-	0.01	1	0.001	0.1	0.005
FG-7007	Capacity	-	200.00	20000	20.000	700.0	44.00
	Resolution	-	0.05	5	0.005	0.1	0.01
FG-7008	Capacity	-	500.00	50000	50.000	1800.0	110.00
	Resolution	-	0.05	5	0.005	0.5	0.01
FG-7009	Capacity	-	1000.0	-	100.00	3500	220.00
	Resolution	-	0.1	-	0.01	1	0.05

Accessories

FG-7CHRG	Charger
FG-7USB	USB Cable
FG-HK	Hook Adapter (M6)
FG-7FL	Flat Adapter (M6)
FG-7CN	Cone Adapter (M6)
FG-7CL	Chisel Adapter (M6)
FG-7GV	Notched Adapter (M6)
FG-7RD	Extension Rod (M6)
FG-PRINT	Portable Thermal Printer

EDMS Data Acquisition Software

Allows full testing of FG Series Force Gauges with live analysis of the test results. Users can set a delay or a time period for the test data to record as well as begin or end if a load threshold is reached. The load can be inverted so the graph shows the resultant force in the direction desired. Average and peak readings are automatically calculated, but the user can zoom in on a section of a graph and recalculate the new average and peak over the selected portion of the test. Besides acquiring live data, the EDMS program can also upload previously stored readings from the gauge. Additionally, the software provides the ability to easily save the data set to a spreadsheet file, plus save the resultant graph as a photo for later review.

Data Management Program
Available from Website