# **SHIMPO**INSTRUMENTS

## FG-3000 Digital Force Gauge

**Measuring Quality** 

The new FG-3000 Series digital force gauges are the choice for simple, costeffective tension and compression testing. Combining one of the most compact housings, yet maintaining a large back-lit LCD, these units were designed to fit perfectly in the hand for ease of use. The multi-language FG-3000's provide menu programming for intuitive set-up of the instrument to your desired requirements. Three modes of operation are selectable: Track mode displays live readings, Peak mode records the maximum reading sensed during the test, and Pre-set mode which activates user defined high and low limit set points. The programmable limits provide a quick visual and audible indication if a test passes or fails. In addition, a comparator output enables integration of the instrument into your quality system for repetitive testing such as on production lines.

The display graphics facilitate user comprehension and operation. An analog bar graph provides perspective of current reading in comparison to the full scale range. Pass/Fail icons provide an instant response of the testing outcome while a storage symbol acknowledges when a reading is logged. A menu-selectable display orientation streamlines switching from push to pull testing for portable or test stand applications.

These high-tech instruments can log up to 500 readings at the push of a button for instant data acquisition. The data can be viewed on screen, sent to optional printer, or uploaded on the free software program for graphing and statistical analysis. Models are available from 2.2 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-3000 with Accessories in Protective Carrying Case

#### **Features**

- 1000 Hz Sample Rate combined with +/-0.3% F.S. accuracy provides fast sampling producing great resolution and more accurate results
- Three mode operation: Track, Peak & Preset Limits
- 180° reversible display, tension/compression icons, and vertical 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 in Preset mode
- 500 point data collection capability can be viewed on display, sent to optional printer, or uploaded to software package 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 unit's selection provides flexible user comfort
- Field Calibration capability eliminates need to send to lab
- Calibration Certificate included along with popular adapter attachments
- Free Data logging/graphing software available for free download on website

#### **FG-3000 Specifications**

FG-3000 Specifications			
Accuracy	± 0.3% F.S.		
Selectable Units	N, kgf, ozf, and lbf. (Depending on Range)		
Overload Capacity	150% of F.S. (LCD flashes beyond 110% of F.S.)		
Measurement Method	Peak, Track, Preset		
Data Sampling Rate	1000 Hz		
Display	160*128 dot matrix LCD with Backlight		
Display Update Rate	10 times/second		
Resolution	See chart		
Memory	500 data		
Set Point	Programmable high and low limits in Preset Mode		
Battery Indicator	Display flashes battery icon when battery is low		
Power	3.6VDC 800mAH Ni-MH rechargeable batteries		
Battery Life	Approximately 16 hours continuous use per full charge		
Charger / Adaptor	Universal USB/BM charger, Input: 110 ~ 240VAC		
Temperature Effects	<0.054% per °F (0.03% FS per °C)		
Outputs	USB, RS-232; High & Low Limit NPN's		
Operating Temperature	14 to 104°F (-10 to 40°C)		
Storage Relative Humidity	20 to 80%		
Housing	Aluminum		
Storage Temperature	-4 to 122°F (-20 to 50°C)		
Oper. Relative Humidity	5 to 95%		
Dimensions	5.5 x 2.8 x 1.4" (140 x 71 x 35.5 mm)		
Product Weight	0.9 lb (0.4 kg)		
Package Weight	2.25 lb (1 kg)		
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.		

### **Ordering Details**

Мо	odel	N	kgf	ozf	lbf
FG-3003	Capacity	10.000	1.0000	35.00	2.2000
	Resolution	0.001	0.0001	0.01	0.0005
FG-3005	Capacity	50.000	5.0000	180.00	11.000
FG-3005	Resolution	0.005	0.0005	0.05	0.001
FG-3006	Capacity	100.00	10.000	350.0	22.000
FG-3006	Resolution	0.01	0.001	0.1	0.005
FG-3008	Capacity	500.00	50.000	1800.0	110.00
FG-3006	Resolution	0.05	0.005	0.5	0.01
FG-3009	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

