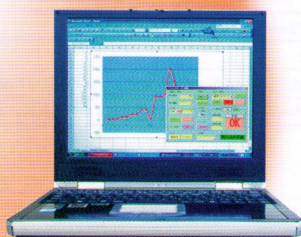# SHIMPO

Digital force gauge

FGP series

Excelent data acquisition
New force gauge with data administration function

Download the data

Download the data to Excel with high speed

Add–in software "Toriemon USB" enable us to download the data with 100 times per second.
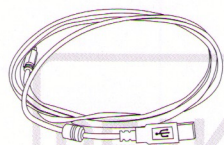Efficiently edit the data on the PC.

You can download "ToriemonUSB" from our website free of charge.

USB Communication feature

Incorporate the high versatility USB into the interface. It's easy to download the data in communicate with PC.

The wealth of measuring function

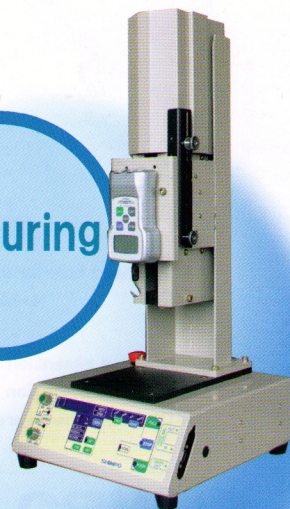### Wide variation with the motorized test stand.

High-speed sampling

It is possible to download the data on high speed with sampling rate of 1000 times per second.

Memory function

Rating capacity
Up to **1000** N (100kg)

1000N (100kg) model make addition to product line.

Measuring

Memory function is available

Three memory mode; Continuous memory, Single memory and Standard memory. Memory capacity; 1000 data in Continuous memory mode.
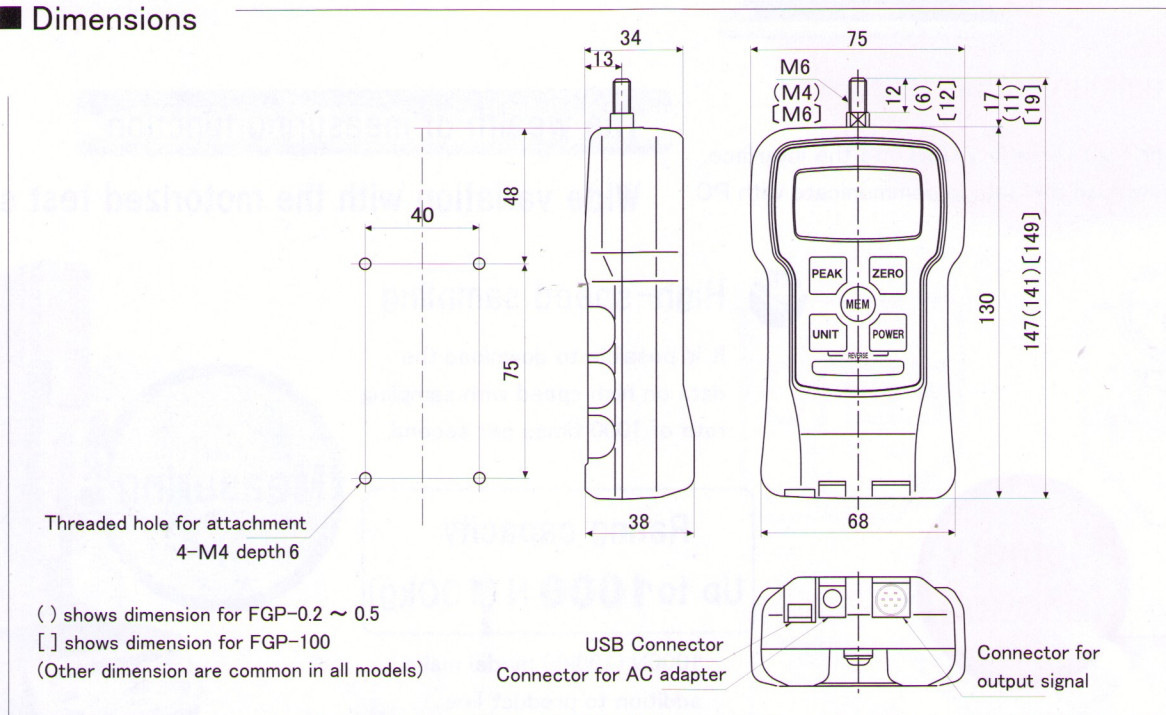
Comparator function

Available judgment of acceptance for measuring value with high/low limit setting.

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■ Specifications

Model		FGP-0.2	FGP-0.5	FGP-1	FGP-2	FGP-5	FGP-10	FGP-20	FGP-50	FGP-100
Capacity(R.C.)		±2.000N (±200.0g) (±0.5lb)	±5.000N (±500.0g) (±1lb)	±10.00N (±1000g) (±2lb)	±20.00N (±2.000kg) (±5lb)	±50.00N (±5.000kg) (±10lb)	±100.0N (±10.00kg) (±20lb)	±200.0N (±20.00kg) (±50lb)	±500.0N (±50.00kg) (±100lb)	±1000N (±100.0kg) (±200lb)
Display range		±2.000N ±200.0g ±0.5lb	±5.000N ±500.0g ±1lb	±10.00N ±1000g ±2lb	±20.00N ±2.000kg ±5lb	±50.00N ±5.000kg ±10lb	±100.0N ±10.00kg ±20lb	±200.0N ±20.00kg ±50lb	±500.0N ±50.00kg ±100lb	±1000N ±100.0kg ±200lb
Resolution		0.001N 0.1g 0.001lb		0.01N 1g 0.001lb	0.01N 0.001kg 0.001lb	0.01N 0.001kg 0.01lb	0.1N 0.01kg 0.01lb		0.1N 0.01kg 0.1lb	1N 0.1kg 0.1lb
Unit		N, kg(g), lb(oz) (Reversible display)								
Measuring mode		Standard measuring, Plus peak measuring, Minus peak measuring								
Display cycle		1, 2, 3, 5, 10, 20 times per second								
Sampling Rate		1000 times per second								
Accuracy		±0.2% R.C. ±1/2digit(23℃)								
Influence of temperature		Gain : ±0.01%LOAD/℃ Zero : ±0.01%/R.C./℃ (Drift of zero point can be cancelled with tracking function.)								
Display		Main display: 4-digits 12mm high, Reversible display								
		Unit display: 3-digits 7mm high								
		Other display: ①"LO BAT"(Decrease battely voltage), ②"BAT"(Battery charge), ③"OVR"(Over load), ④"Peak"(Peak hold mode)								
Overload		200%R.C.								150%R.C.
Tracking		Available(ON/OFF)								
Output	USB	Communicate with PC by special apprication software (maxmum 100 times per second). Connection cable is standard accessory.								
	RS-232C	Communicate with PC by special command (maximum 100 times per second). Connection cable is option.								
	Analog	±1V, Accurecy±50mV, through a 12 bit D/A converter, Output update 1000 times per second, Acceptable tare, Load resistance is more than 10k Ω								
	Overload/ Comparator	Open-collector output (Max DC30V/5mA). Either overload output or comparator output								
Power		Rechargeable Nickel hydride battery or AC adapter/charger, Measurable during the charge,								
		Operating hours: about 8 hours after full charge, Charging time: Max 16 hours (when the battery is full, charge is finished automatically.)								
Auto Power Off		10 minitus (not active if adapter/charge is in use) or OFF								
Memory function		Continuous memory: 1000 data, Single memory: 100 data, Standard memory: 50 data								
		Statistic function (max, minimum, peak, average, standard deviation)								
Comparator function		Yes(high and low)								
Temperature range		0 – 40° C no condensation								
Humidity range		35～85%RH no condensation								
Dimensions		147mm※(L)x 75mm (W) x 38mm(H)								
Weight		Approx. 450g								Approx. 500g
Accessories (Included)		AC adapter/charger, carrying case, hook, chisel, flat head, notched head, hanger, cone head, extension rod, USB cable								
Application software		Application software (USB version), Availabe to download ToriemonUSB from our website free of charge.								

※Dimension for FGP-0. ~ 0.5 is 141mm, FGP-100 is 149mm.

■ Dimensions

Threaded hole for attachment
4-M4 depth 6

( ) shows dimension for FGP-0.2 ~ 0.5
[ ] shows dimension for FGP-100
(Other dimension are common in all models)

USB Connector
Connector for AC adapter

Connector for output signal

SHIMPO

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