Digital Force Gauge

ZPH Series USB model

Z2H Series Non-USB model

High Capacity Digital Force Gauge

[Applications]

- Strength test for various materials (tension test, compression test, shearing test, etc.)
- Measuring of attraction / repulsion force of solenoid or magnet.
- Adhesion test of laminated tubes.

[Features]

- Digital display of tension and compression forces
- Measuring units (kgf, N, lbf) are selectable.
- Since USB output signal is equipped for ZPH series, fast and easy to connect to computer.
- 1000 times sampling per second
- Comparator function for setting Hi / Lo point values
- Memory function to store data for analysis
- Reversible display function
- Overload prevention LED and alarm
- Push and Pull peak hold by one cycle

[Models]

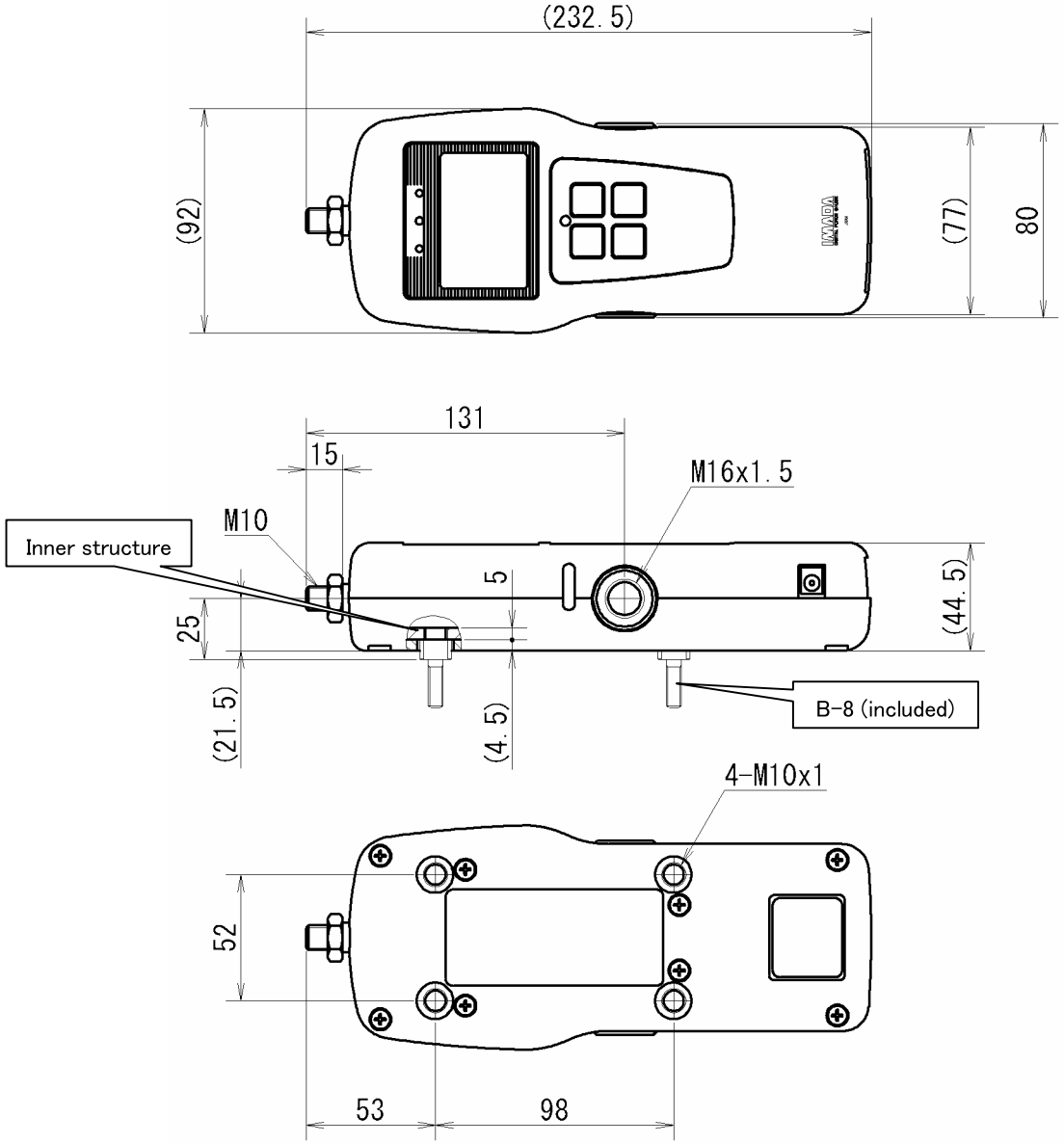
Model		Capacity	Display	Resolution
ZPH-1000N	Z2H-1000N	1000N(100.0Kgf)	1000N(100.0Kgf)	1N(0.1Kgf)
ZPH-2000N	Z2H-2000N	2000N(200.0Kgf)	2000N(200.0Kgf)	1N(0.1Kgf)
ZPH-5000N	Z2H-5000N	5000N(500.0Kgf)	5000N(500.0Kgf)	1N(0.1Kgf)

[Specifications]

Model	ZPH	Z2H
Unit	Kgf / N / lbf Selectable	
Display	4 digit LCD-Unit-Mode-Overload LED-Comparator LED[Reversible]	
Sampling speed	1000 times/sec	
Display update	10 times/sec	
Usage Capacity	According to each capacity	
Overload capacity	200%F.S. (LED flashing and buzzing beyond 110%)	
A/D converter	24bit delta sigma	
Micro processor	8 bit 1 chip microprocessor	
Accuracy	+/- 0.2% F.S. +/- 1 digit	
Battery use	8 hours continuous use with full charge Approx. 10 hours for charge	
Use temperature	0 to +40 degree Celsius	
Power	Internal NiMH rechargeable battery, AC adapter	
Output	USB	Mitutoyo Digimatic
	Analog(+/-2V F.S.) , RS232C Comparator (+NG, OK, -NG): Open collector MAX30V10mA Overload warning signal: Open collector MAX30V10mA	
Peak hold	“Compression OR Tension”, “Compression AND Tension” selectable	
Comparator function	Programmable high/low set points with color coded indicators	
Memory function	1000 measurement values	
Display reverse function	Measurement value and unit	
Alarm	Overload and +NG(ON/OFF selectable)	
Other functions	Auto zero clear (1.0~25 sec setup) damping mode (7 level setup)	
Auto power OFF	5, 10, 30, 60 minutes, and OFF selectable	
Accessories	USB cable, driver CD-ROM	-
	6 attachment, handles, mounting bolts, AC adapter, instruction manual, Carrying case	
External connecting switch	Display hold, zero clear, and peak/track select	

Note: Since commercial power supply voltage varies in the area where the gauge is used, three types (100V, 120V, 230V) of voltage adapters are available. Please specify the confirmed voltage for the commercial power supply when you order.

[Dimension]



[Notes]

- Do not apply excess force, torque, or impact on the measuring axis regardless to the power is on/off.
- Do not use the gauge under the condition of the rapid temperature changes, high temperature, high humidity, near water and dusty place.
- Keep the gauge in the exclusive carrying case when it is not used.
- The use of the test stand made by Imada is recommended for the stable measuring result.
- All information is subject to change without prior notice.