

Z Series :

ZP for USB model

Z2 for non USB model

## Digital Force Gauge



### [Applications]

Measuring of the strength of electronic parts bonding or soldering

Measuring of contact press for touch panel or keyboard

Measuring of push / pull force for connector pin or slide cap

Pull testing of pull top can or noodle container lid

### [Features]

1 Digital display of tension and compression forces

2 Measuring units (kgf, N, lbf) are selectable.

3 Since USB output signal is equipped for ZP series, fast and easy to connect to computer.

4 1000 times sampling per second

5 Comparator function for setting Hi / Lo point values

6 Memory function to store data for analysis

7 Reversible display function

8 Overload prevention LED and alarm

9 Push and Pull peak hold by one cycle

## [Specifications]

| Model                      | ZP                                                                     | Z2                 |
|----------------------------|------------------------------------------------------------------------|--------------------|
| Unit                       | kgf/(k)N/lbf or gf/N/ozf 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 tip microprocessor                                             |                    |
| Accuracy                   | +/- 0.2% F.S. +/- 1 digit                                              |                    |
| Battery use                | 8 hours continuous use with full charge<br>Approx. 10 hours for charge |                    |
| Use temperature            | 0~+40 degree Celsius                                                   |                    |
| Power                      | Internal NiMH rechargeable battery, AC adapter                         |                    |
| Output                     | USB                                                                    | Mitutoyo digimatic |
|                            | Analog (+/- 2V F.S.)                                                   |                    |
|                            | Serial RS232C                                                          |                    |
|                            | Comparator signal (+NG, OK, -NG)<br>: Open collector MAX30V10mA        |                    |
|                            | Overload warning signal (OVL)<br>: Open collector MAX30V10mA           |                    |
| Peak hold                  | Compression or tension, compression and tension                        |                    |
| 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)<br>damping mode (7 level setup )    |                    |
| Auto power OFF             | 5, 10, 30, 60 minutes, and OFF selectable                              |                    |
| Accessories                | USB cable1.5m,<br>driver CD-ROM                                        | -                  |
|                            | 8 attachment, AC adapter, instruction manual, Carrying case            |                    |
| External connecting switch | Display hold, zero clear, and peak/track select                        |                    |

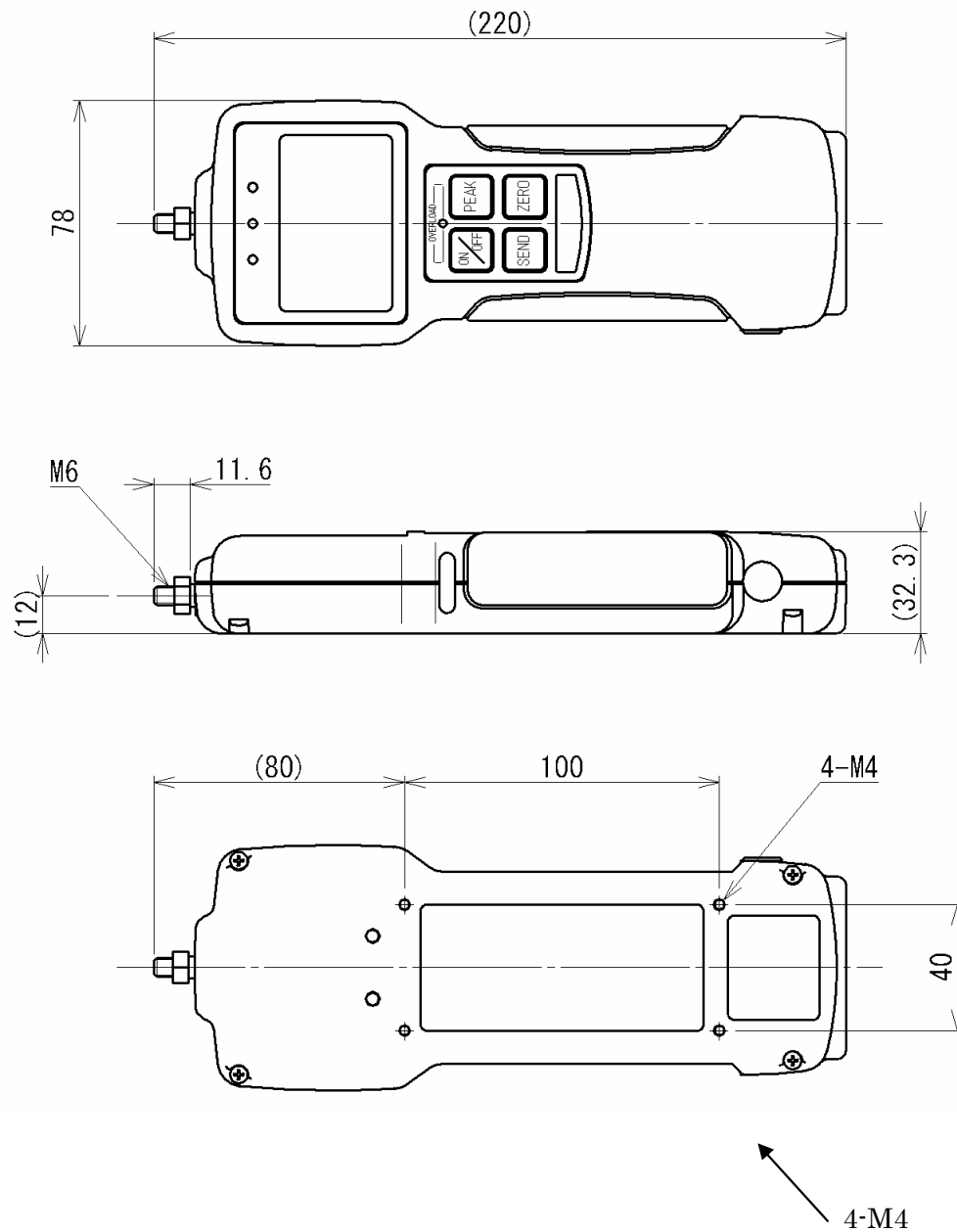
Note 1) Since commercial power supply voltage varies in the area where the gauge is used, three types (100V, 120V, 230V) of voltage adapters are available. Please specify the confirmed voltage for the commercial power supply when you order.

## [Available models]

| Model        | Capacity      | Display          | Resolution      |
|--------------|---------------|------------------|-----------------|
| ZP(Z2)-2N    | 2N(200gf)     | 2.000N(200.0gf)  | 0.001N(0.1gf)   |
| ZP(Z2)-5N    | 5N(500gf)     | 5.000N(500.0gf)  | 0.001N(0.1gf)   |
| ZP(Z2)-20N   | 20N(2Kgf)     | 20.00N(2.000Kgf) | 0.01N(0.001Kgf) |
| ZP(Z2)-50N   | 50N(5Kgf)     | 50.00N(5.000Kgf) | 0.01N(0.001Kgf) |
| ZP(Z2)-100N  | 100N(10Kgf)   | 100.0N(10.00Kgf) | 0.1N(0.01Kgf)   |
| ZP(Z2)-200N  | 200N(20Kgf)   | 200.0N(20.00Kgf) | 0.1N(0.01Kgf)   |
| ZP(Z2)-500N  | 500N(50Kgf)   | 500.0N(50.00Kgf) | 0.1N(0.01Kgf)   |
| ZP(Z2)-1000N | 1000N(100Kgf) | 1000N(100.0Kgf)  | 1N(0.1Kgf)      |

## [Dimension]

## ZP/Z2 series



## [Note]

- \*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.