## 100 Kg, tension & compression

# FORCE GAUGE

Model: FG-5100 *ISO-9001, CE, IEC1010* 





#### **FEATURES**

- \* 100 Kg, Kg/LB/Newton.
- \* Tension or Compression, Peak hold, Zero.
- \* Positive/ Reverse display.
- \* 5 digits LCD with back light.
- \* RS-232 computer interface.
- \* Optional accessories :

  USB cable, RS232 cable,

  Software for data logging
  and recorder,
- \* DC 1.5V battery (UM-3, AA) x 6 or DC 9V adapter in.







The Art of Measurement

### 100 Kg x 0.05 Kg, Kg/LB/Newton, R\$232

## **FORCE GAUGE**

Model : FG-5100

#### **FEATURES**

| <ul> <li>Large LCD display with back light.</li> </ul>     |  |  |
|--|--|--|
| * Tension & compression capability .                       |  |  |
| * 100 Kg, wide capacity, high resolution, high accuracy,   |  |  |
| high repeatability.  |  |  |
| * 3 kind display unit, Kg/LB/Newton.                       |  |  |
| * Seperate sensor.   |  |  |
| * Peak hold ( Max. load ) can be held in display during    |  |  |
| make tension or compression measurement.                   |  |  |
| * Zero button can operate both for normal measuring        |  |  |
| & the " peak hold " operation.                             |  |  |
| * Full capacity zero (tare) control capability.            |  |  |
| * Fast/Slow response time push button.                     |  |  |
| * Positive or reverse display direction select.            |  |  |
| * Over load protection.                                    |  |  |
| * Hand held & stand mounting available.                    |  |  |
| * Low power consumption gives long battery life.           |  |  |
| * Build in low battery indicator.                          |  |  |
| * Microprocessor circuit & exclusive load cell transducer. |  |  |
| * RS-232 computer interface .                              |  |  |
| * Power supply built-in DC 9V adapter input socket.        |  |  |
|  |  |  |

#### **SPECIFICATIONS**

| Display      | LCD ( Liquid crystal display ).            |
|--------------|--|
|              | 5 digits, 16 mm ( 0.63" ) digit size.      |
|              | Back light.                                |
| Display      | Positive or Reverse direction, select by   |
| Direction    | the push button on the front panel.        |
| Function     | Tension & Compression (Push & Pull).       |
|              | Normal force, Peak hold (Max. load).       |
| Peak hold    | Will freeze the display value of the       |
|              | Peak load ( Max. load ).                   |
| Zero         | Zero button can be operated both for       |
|              | "normal force" or "peak hold" operation    |
| Unit select  | Kg/LB/Newton                               |
| Measure      | 100 Kg/220 LB/980 Newton.                  |
| Capacity     |  |
| Resolution   | 0.05 Kg/0.05 LB/0.2 Newton.                |
| Min. Display | 0.15 Kg/0.35 LB/1.4 Newton.                |
| Accuracy     | ± (0.5 % + 2 digits), within 23± 5℃.       |
|              | * Under the test weight on 100 Kg & 10 Kg. |
| Data output  | RS-232 serial computer interface.          |

| Slow Approx. 0.6 second.  Over range Display show " " when in over range status.  Overload Max. 150 kg.  Capacity  Full Scale Less than 1 mm.  Deflection  Zero/tare Max. full capacity.  Control  Circuit Exclusive microprocessor LSI-circuit.  Sensor type S type load cell.  Power Supply 6 x 1.5 V AA (UM-3) size battery or DC 9V adapter (not included).  Approx. DC 28 mA  Consumption  Operating Dess than 80% RH.  Humidity  Dimension Main instrument:  215 x 90 x 45 mm (8.5 x 3.5 x 1.8 inch).  Sensors with two hooks:  130 x 51 x 18 mm (4.7 x 2.0 x 0.7 inch).  Cable length: 2 meters.  Weight Main instrument:  450 g (0.99 LB).  Sensors: 380 g (0.84 LB).  Main instrument with mounting holes are   |              |  |
|--|--------------|--|
| Over range Indicator range status.  Overload Max. 150 kg.  Capacity Full Scale Less than 1 mm.  Deflection  Zero/tare Max. full capacity.  Control Circuit Exclusive microprocessor LSI-circuit.  Sensor type S type load cell.  Power Supply or DC 9V adapter (not included).  Approx. DC 28 mA  Consumption  Operating Less than 80% RH.  Humidity  Dimension Main instrument:  215 x 90 x 45 mm (8.5 x 3.5 x 1.8 inch).  Sensors with two hooks:  130 x 51 x 18 mm (4.7 x 2.0 x 0.7 inch).  Cable length:  2 meters.  Weight Main instrument:  450 g (0.99 LB).  Sensors:  380 g (0.84 LB).  Mounting Main instrument with mounting holes are provided on the back case, easy stand mounting.  Accessories Operating manual   | Update time  | Fast Approx. 0.2 second.   |
| Indicator  Overload  Max. 150 kg.  Capacity  Full Scale  Deflection  Zero/tare  Control  Circuit  Exclusive microprocessor LSI-circuit.  Sensor type  S type load cell.  Power Supply  or DC 9V adapter (not included).  Approx. DC 28 mA  Consumption  Operating  Humidity  Dimension  Main instrument:  215 x 90 x 45 mm (8.5 x 3.5 x 1.8 inch).  Sensors with two hooks:  130 x 51 x 18 mm (4.7 x 2.0 x 0.7 inch).  Cable length:  2 meters.  Weight  Main instrument with mounting holes are provided on the back case, easy stand mounting.  Accessories  Operating manual  |              | Slow Approx. 0.6 second.   |
| Overload Capacity Full Scale Deflection Zero/tare Control Circuit Exclusive microprocessor LSI-circuit. Sensor type S type load cell. Power Supply O'C to 50'C (32"F to 122"F).  Temperature Operating Humidity Dimension  Main instrument: 215 x 90 x 45 mm (8.5 x 3.5 x 1.8 inch). Sensors with two hooks: 130 x 51 x 18 mm (4.7 x 2.0 x 0.7 inch). Cable length: 2 meters.  Weight  Main instrument with mounting holes are provided on the back case, easy stand mounting.  Accessories Included Optional Accessories Accessories Accessories  Pull Sess than 1 mm.  Max. 150 kg.  Less than 1 mm.  May. full capacity.  Caple July 3 size battery or DC 9V adapter (not included).  Approx. DC 28 mA  Consumption  Approx. DC 28 mA  Consumption  Approx. DC 28 mA  Cossories (32"F to 122"F).  Temperature  Operating Less than 80% RH.  Main instrument: 215 x 90 x 45 mm (8.5 x 3.5 x 1.8 inch).  Sensors with two hooks: 130 x 51 x 18 mm (4.7 x 2.0 x 0.7 inch).  Cable length: 2 meters.  Weight  Main instrument: 450 g (0.99 LB).  Sensors: 380 g (0.84 LB).  Mounting Holes  Provided on the back case, easy stand mounting.  Accessories Operating manual | Over range   | Display show " " when in over  |
| Capacity  Full Scale Deflection  Zero/tare  Max. full capacity.  Control  Circuit Exclusive microprocessor LSI-circuit.  Sensor type S type load cell.  Power Supply Or C 9V adapter (not included).  Power Approx. DC 28 mA  Consumption  Operating Operating Less than 80% RH.  Humidity  Dimension  Main instrument: 215 x 90 x 45 mm (8.5 x 3.5 x 1.8 inch).  Sensors with two hooks: 130 x 51 x 18 mm (4.7 x 2.0 x 0.7 inch).  Cable length: 2 meters.  Weight  Main instrument: 450 g (0.99 LB).  Sensors: 380 g (0.84 LB).  Mounting  Main instrument with mounting holes are provided on the back case, easy stand mounting.  Accessories  Operating manual  | Indicator    | range status.  |
| Full Scale Deflection  Zero/tare Max. full capacity.  Control  Circuit Exclusive microprocessor LSI-circuit.  Sensor type S type load cell.  Power Supply Or DC 9V adapter (not included).  Power Approx. DC 28 mA  Consumption Operating Temperature Operating Humidity Dimension  Main instrument: 215 x 90 x 45 mm (8.5 x 3.5 x 1.8 inch).  Sensors with two hooks: 130 x 51 x 18 mm (4.7 x 2.0 x 0.7 inch).  Cable length: 2 meters.  Weight  Main instrument with mounting holes are provided on the back case, easy stand mounting.  Accessories Included  Operating Accessories  Operating Operating Less than 80% RH.  Humidity  Main instrument: 450 g (0.99 LB).  Sensors: 380 g (0.84 LB).  Mounting Accessories Operating manual   | Overload     | Max. 150 kg.   |
| Deflection  Zero/tare Control  Zero/tare Control  Max. full capacity.  Exclusive microprocessor LSI-circuit.  Sensor type S type load cell.  Power Supply Or DC 9V adapter (not included).  Power Approx. DC 28 mA  Consumption Operating Operating Temperature Operating Humidity Dimension  Main instrument: 215 x 90 x 45 mm (8.5 x 3.5 x 1.8 inch).  Sensors with two hooks: 130 x 51 x 18 mm (4.7 x 2.0 x 0.7 inch).  Cable length: 2 meters.  Weight  Main instrument: 450 g (0.99 LB).  Sensors: 380 g (0.84 LB).  Mounting Holes Provided on the back case, easy stand mounting.  Accessories Operating manual   | Capacity     |  |
| Zero/tare Control  Circuit Exclusive microprocessor LSI-circuit.  Sensor type S type load cell.  Power Supply or DC 9V adapter (not included).  Approx. DC 28 mA  Consumption  Operating O°C to 50°C (32°F to 122°F).  Temperature  Operating Less than 80% RH.  Humidity  Dimension  Main instrument:  215 x 90 x 45 mm (8.5 x 3.5 x 1.8 inch).  Sensors with two hooks:  130 x 51 x 18 mm (4.7 x 2.0 x 0.7 inch).  Cable length:  2 meters.  Weight  Main instrument:  450 g (0.99 LB).  Sensors:  380 g (0.84 LB).  Mounting Main instrument with mounting holes are provided on the back case, easy stand mounting.  Accessories  Operating manual   | Full Scale   | Less than 1 mm.  |
| Control  Circuit Exclusive microprocessor LSI-circuit.  Sensor type S type load cell.  6 x 1.5 V AA (UM-3) size battery or DC 9V adapter (not included).  Power Approx. DC 28 mA  Consumption  Operating O°C to 50°C ( 32°F to 122°F ).  Temperature  Operating Less than 80% RH.  Humidity  Dimension  Main instrument:  215 x 90 x 45 mm ( 8.5 x 3.5 x 1.8 inch ).  Sensors with two hooks:  130 x 51 x 18 mm ( 4.7 x 2.0 x 0.7 inch ).  Cable length:  2 meters.  Weight  Main instrument:  450 g ( 0.99 LB ).  Sensors:  380 g ( 0.84 LB ).  Mounting  Holes  Mounting  Main instrument with mounting holes are provided on the back case, easy stand mounting.  Accessories  Operating manual   | Deflection   |  |
| Circuit Exclusive microprocessor LSI-circuit.  Sensor type S type load cell.  6 x 1.5 V AA (UM-3) size battery or DC 9V adapter (not included).  Power Approx. DC 28 mA  Consumption  Operating O°C to 50°C (32°F to 122°F).  Temperature  Operating Less than 80% RH.  Humidity  Dimension Main instrument:  215 x 90 x 45 mm (8.5 x 3.5 x 1.8 inch).  Sensors with two hooks:  130 x 51 x 18 mm (4.7 x 2.0 x 0.7 inch).  Cable length: 2 meters.  Weight Main instrument:  450 g (0.99 LB).  Sensors:  380 g (0.84 LB).  Mounting Main instrument with mounting holes are provided on the back case, easy stand mounting.  Accessories Operating manual  | Zero/tare    | Max. full capacity.  |
| Sensor type  S type load cell.  6 x 1.5 V AA (UM-3) size battery or DC 9V adapter (not included).  Power Approx. DC 28 mA  Consumption  Operating Temperature  Operating Less than 80% RH.  Humidity  Dimension  Main instrument: 215 x 90 x 45 mm (8.5 x 3.5 x 1.8 inch).  Sensors with two hooks: 130 x 51 x 18 mm (4.7 x 2.0 x 0.7 inch).  Cable length: 2 meters.  Weight  Main instrument: 450 g (0.99 LB).  Sensors: 380 g (0.84 LB).  Mounting  Main instrument with mounting holes are provided on the back case, easy stand mounting.  Accessories  Operating manual  | Control      |  |
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| Operating Temperature  Operating Uses than 80% RH.  Less than 80% RH.  Humidity  Dimension  Main instrument: 215 x 90 x 45 mm (8.5 x 3.5 x 1.8 inch).  Sensors with two hooks: 130 x 51 x 18 mm (4.7 x 2.0 x 0.7 inch).  Cable length: 2 meters.  Weight  Main instrument: 450 g (0.99 LB).  Sensors: 380 g (0.84 LB).  Mounting  Holes  Provided on the back case, easy stand mounting.  Accessories  Operating manual  |              | or DC 9V adapter (not included).   |
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| 450 g ( 0.99 LB ).  Sensors:  380 g ( 0.84 LB ).  Mounting  Main instrument with mounting holes are provided on the back case, easy stand mounting.  Accessories  Operating manual   |              | 2 meters.  |
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| Mounting Main instrument with mounting holes are provided on the back case, easy stand mounting.  Accessories Operating manual   |              | 450 g ( 0.99 LB ).   |
| Mounting Main instrument with mounting holes are provided on the back case, easy stand mounting.  Accessories Operating manual   |              | Sensors :  |
| Holes provided on the back case, easy stand mounting.  Accessories Operating manual  |              | 380 g ( 0.84 LB ).   |
| mounting.  Accessories Operating manual  | Mounting     | Main instrument with mounting holes are  |
| Accessories  Operating manual  | Holes        | provided on the back case, easy stand  |
| Included  100 Kg sensor with 2 hooks and 2 meter cable   |              | mounting.  |
| 2 meter cable  | Accessories  | Operating manual1 PC.  |
| Hard carrying case   | Included     | 100 Kg sensor with 2 hooks and   |
| Optional * RS232 cable, Model : UPCB-01  * USB cable, Model : USB-01  * Software for data logging & data recorder,   |              | 2 meter cable 1 PC.  |
| * USB cable, Model : USB-01  * Software for data logging & data recorder,  |              | Hard carrying case1 PC.  |
| * Software for data logging & data recorder,   | Optional     | * RS232 cable, Model : UPCB-01   |
| recorder,  | Accessories  | * USB cable, Model : USB-01  |
|  |              | * Software for data logging & data   |
| Model : SW-U801-WIN.   |              | recorder,  |
|  |              | Model: SW-U801-WIN.  |

<sup>\*</sup> Appearance and specifications listed in this brochure are subject to change without notice.