

SD Card real time data recorder, Patent  
Fast recorder, min. 20 ms sampling time

# FORCE GAUGE *100 Kg*

Model : FG-6100SD

ISO-9001, CE, IEC1010

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*The Art of Measurement*

**100 Kg  
SD Card real time recorder  
10 ms sampling time recorder  
FORCE GAUGE**

**Model : FG-6100SD**

**FEATURES**

* Data record mode : Normal model or Peak hold mode.
* Normal record mode : Set sampling time from 1 second to 8 hours.
* Peak hold record mode : Set sampling time from 10 ms to 500 ms.
* Memory capacity of normal record mode : 1 GB to 16 GB.
* Memory capacity of peak hold record mode : 1000 data no. ( max. )
* Under Peak hold record mode, if execute the " Data record " function, the memory circuit will store 1000 data no. ( max. ) measuring data into the SD card per fast speed sampling time ( 10 ms to 500 ms ).
* Under Normal record mode, if execute the " Data record " function, will save the measuring data along the real time value ( Year/Month/ Date/Hour/Minute/Second ) into the SD card per normal sampling time ( 1 second to 8 hours ).
* After save the data into the SD memory card, it can be down load the data to the Excel directly, extra software is no need. User can make the further data analysis ( graphic analysis ) by themselves.
* Large LCD display with back light.
* 100 Kg, wide capacity, high resolution, high accuracy, high repeatability.
* 3 kind display unit : Kg, lb, Newton.
* Tension & compression capability .
* 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.
* Hand held & stand mounted gauges are available.
* Low power consumption gives long battery life.
* Build in low battery indicator.
* Microprocessor circuit & exclusive load cell transducer.
* Over load protection.
* RS-232 computer interface
* Built-in DC 9V power adapter input socket.
* Professional test stand ( optional ).

**SPECIFICATIONS**

Display	LCD ( Liquid crystal display ). 5 digits, 16 mm ( 0.63" ) digit size. Back light.
Display Direction	Positive or Reverse direction, select by 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 Capacity	100 Kg/220.5 lb/980.6 Newton.
Resolution	0.02 Kg/0.02 lb/0.2 Newton.
Min. Display	0.15 Kg/0.35 lb/1.4 Newton.
Accuracy	± (0.5 % + 0.1 Kg), within 23± 5°C. * Under the test weight on 100 Kg & 10 Kg.
Update time	Fast Approx. 0.2 second. Slow Approx. 0.6 second.
Over range Indicator	Display show " - - - - " when in over range status.
Overload Capacity	Max. 150 kg.
Full Scale Deflection	Less than 1 mm.

Normal data record mode  (Sampling time Setting range )	Auto data logger	1 sec to 8 hour 59 min. 59 sec. @ Sampling time can set to 1 second, but memory data may loss.
	Manual data logger	Push the data logger button once will save data one time. @ Set the sampling time to 0 second. @ Manual mode, can also select the 1 to 99 position ( Location ) no.
Peak hold data record mode Sampling Time Setting range	10 mS to 500 mS. * Each setting step is 10 mS. * Auto data logger * The memory circuit will store 1000 data no. ( max. ) measuring data.	
Data error no.	≤0.1% of total saved data max.	
Memory Card	SD memory card. 1 GB to 16 GB.	
Advanced setting	* SD memory card Format * Set clock time ( Year/Month/Date, Hour/Minute/Second ) * Set sampling time ( normal data record mode ) * Set sampling time ( peak hold data record mode ) * Auto power OFF management * Unit setting * Set beep Sound ON/OFF * Decimal point of SD card setting	
Data output	RS 232/USB PC computer interface. * Connect the optional RS232 cable UPCB-02 will get the RS232 plug. * Connect the optional USB cable USB-01 will get the USB plug.	
Zero/tare Control	Max. full capacity.	
Sensor type	S type load cell.	
Circuit	Exclusive microprocessor LSI-circuit.	
Power Supply	* Alkaline or heavy duty DC 1.5 V battery ( UM3, AA ) x 6 PCs, or equivalent. * DC 9V adapter input. ( AC/DC power adapter is optional ).	
Power Current	Normal operation ( w/o SD card save data and LCD Backlight is OFF ) : Approx. DC 7 mA.  When SD card save the data and LCD Backlight is OFF ) : Approx. DC 38 mA. * If LCD backlight on, the power consumption will increase approx. 3 mA.	
Operating Temperature	0°C to 50°C ( 32°F to 122°F ).	
Operating Humidity	Less than 80% RH.	
Dimension	215 x 90 x 45 mm ( 8.5 x 3.5 x 1.8 inch ).  Main instrument : 215 x 90 x 45 mm ( 8.5 x 3.5 x 1.8 inch ). Sensor with two hooks : 162 x 51 x 22 mm ( 6.4 x 2.0 x 0.9 inch ) 2 meters.	
Weight	Main instrument : 288 g ( 0.63 LB ) Sensor : 635 g ( 1.40 LB )	
Accessories Included	Operating manual .....1 PC. 100 Kg sensor with 2 hooks and 2 meter cable..... 1 PC. Carrying case ..... 1 PC.	
Optional Accessories	* SD memory card ( 4 GB ) * RS232 cable, Model : UPCB-02. * USB cable, Model : USB-01 * Software for data logging & data recorder. Model : SW-U801-WIN. * EXCEL data acquisition software Model : SW-E802	

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

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