

*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**



Test stand, optional  
FS-1001, FS-1002



**Lutron**

**LUTRON ELECTRONIC**

***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.
* Built 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	Auto data logger	1 sec to 8 hour 59 min. 59 sec. @ Sampling time can set to 1 second, but memory data may loss.
Sampling Time Setting range	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		10 mS to 500 mS. * Each setting step is 10 mS. * Auto data logger
Sampling Time Setting range		* 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 ).
Weight		650 g ( 1.43 LB )/with batteries.
Mounting Holes		Main instrument with mounting holes are provided on the back case, easy stand mounting.
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 ( 2 GB ) * Test stand, Model : FS-1001 * Electrical test stand, Model : FS-1002 * Wedge grip, Model : WG-01 * RS232 cable, Model : UPCB-02. * USB cable, Model : USB-01 * Software for data logging & data recorder. Model : SW-U801-WIN.

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