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



FORCE GAUGE 20 Kg

Model: FG-6020SD *ISO-9001*, *CE*, *IEC1010*









Test stand, optional FS-1001, FS-1002







Test and Measurement Instruments C.C.

Tel: 011 683 4365 Fax: 011 583 4461
Email: t.m.i@iafrica.com Website: www.instrumentsgroup.co.za

The Art of Measurement

LUTRON ELECTRONIC

http://www.instrumentsgroup.co.za

20 Kg SD Card real time recorder 10 ms sampling time recorder

FORCE GAUGE



Model: FG-6020SD

- A 7	JEC

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.	
* 20 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.	
* Full line accessories (adapters) are included.	
* 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.	
Dulit in DC 34 power adapter input socket.	

SPECIFICATIONS

* Professional test stand (optional).

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	20.00 Kg/44.10 lb/196.12 Newton.
Capacity	
Resolution	0.01 Kg/0.01 lb/0.02 Newton.
Min. Display	0.02 Kg/0.07 lb/0.3 Newton,
Accuracy	\pm (0.5 % + 2 digits), within 23 \pm 5°C.
	* Under the test weight on 10 Kg & 20 Kg.
Update time	Fast Approx. 0.2 second.
	Slow Approx. 0.6 second.
Over range	Display show " " when in over
Indicator	range status.
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.

Normal data record mode data logger Sampling Time Setting range Manual Setting range Manual Rate Setting range Manual Mata Rate Setting range Manual Mata Rate Setting Set the sampling time to O second. ***Manual mode, can also select the I to 99 position (Location) no.** ***Peak hold at a record Mata record Mata record Mata record Setting range The Mata Rate Setting Set I om Mata Rate Setting Mata Rate Set Set Set Set Set Set Set Set Set S
record mode logger
Sampling Time Setting range Setting range Setting range Push the data logger button once will save data one time. logger Set the sampling time to
Sampling Time Setting range Manual logger Manual monce will save data one time. Setting range Set the sampling time to 0 second. Manual mode, can also select the 1 to 99 position (Location) no. Peak hold data record mode * Each setting step is 10 mS. * Auto data logger Sampling Time setting range Data error no. Data error no. O.1% of total saved data max. Memory Card SD memory card. 1 GB to 16 GB. Advanced setting * Set clock time (Year/Month/Date, Hour/Minute/Second) * Set sampling time (normal data record mode) * Set sampling time (peak hold data record mode) * Set sampling time (peak hold data record mode) * Set beep Sound ON/OFF * Decimal point of SD card setting Overload Max. 30 kg. Capacity Full Scale Approx. 0.4 mm max. Deflection Zero/tare Max. full capacity. Control Transducer Exclusive load cell. Circuit Exclusive microprocessor LSI-circuit. * 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)
Setting range data logger Set the sampling time to Set the sampling time to Second. Manual mode, can also select the 1 to 99 position (Location) no. Peak hold data record Mode Sampling Time Setting range The memory circuit will store 1000 data no. (max.) measuring data. Data error no. Memory Card SD memory card. 1 GB to 16 GB. Advanced Set sampling time (Year/Month/Date, Hour/Minute/Second) Set sampling time (normal data record mode) Set sampling time (peak hold data record mode) Set sampling time (peak hold 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 Overload Capacity Full Scale Deflection Zero/tare Control Transducer Exclusive 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
logger @ Set the sampling time to
Peak hold data record mode Sampling Time Setting range Data error no. Peak hold Advanced Setting Set sope hold Advanced Source Source Setting Source So
@ Manual mode, can also select the 1 to 99 position (Location) no. Peak hold data record mode Sampling Time Setting range Data error no. Memory Card SD memory card. 1 GB to 16 GB. Advanced Setting Set sampling time (Year/Month/Date, Hour/Minute/Second) Set sampling time (peak hold data record mode) Set sampling time (peak hold 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 Overload Capacity Full Scale Deflection Zero/tare Control Transducer Exclusive 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
Peak hold data record mode Sampling Time Setting range Data error no. Memory Card SD memory card. 1 GB to 16 GB. * Sub memory card Format Setting * Set sampling time (rearly Month/Date, Hour/Minute/Second) * Set sampling time (peak hold data record mode) * Set sampling time (peak hold data record mode) * Set sampling time (peak hold data record mode) * Set sampling time (peak hold data record mode) * Set beep Sound ON/OFF * Decimal point of SD card setting Overload Capacity Full Scale Deflection Zero/tare Control Transducer Exclusive 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 record mode * * * * * * * * * * * * * * * * * * *
mode Sampling Time Setting range Data error no. Memory Card Advanced Setting Setting Setting Setting Setting Setting Setting Solution Sol
Sampling Time Setting range Data error no. 0.1% of total saved data max. Memory Card SD memory card. 1 GB to 16 GB. Advanced * SD memory card Format setting * 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 Overload Capacity Full Scale Deflection Zero/tare Control Transducer Exclusive 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
Setting range Data error no. 0.1% of total saved data max. Memory Card SD memory card. 1 GB to 16 GB. Advanced * 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 Overload Capacity Full Scale Deflection Zero/tare Control Transducer Exclusive 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 error no. O.1% of total saved data max. Memory Card SD memory card. 1 GB to 16 GB. Advanced * SD memory card Format setting * 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 Overload Max. 30 kg. Capacity Full Scale Approx. 0.4 mm max. Deflection Zero/tare Max. full capacity. Control Transducer Exclusive load cell. Circuit Exclusive microprocessor LSI-circuit. Power Supply * Alkaline or heavy duty DC 1.5 V battery
Memory Card SD memory card. 1 GB to 16 GB. Advanced * 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 Overload Max. 30 kg. Capacity Full Scale Deflection Zero/tare Max. full capacity. Control Transducer Exclusive 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
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 Overload Max. 30 kg. Capacity Full Scale Approx. 0.4 mm max. Deflection Zero/tare Max. full capacity. Control Transducer Exclusive 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
* 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 Overload Capacity Full Scale Deflection Zero/tare Control Transducer Circuit Exclusive 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
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 Overload Capacity Full Scale Deflection Zero/tare Control Transducer Exclusive 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
* 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 Overload Max. 30 kg. Capacity Full Scale Approx. 0.4 mm max. Deflection Zero/tare Max. full capacity. Control Transducer Exclusive 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
* 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 Overload Max. 30 kg. Capacity Full Scale Approx. 0.4 mm max. Deflection Zero/tare Max. full capacity. Control Transducer Exclusive 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
* Auto power OFF management * Unit setting * Set beep Sound ON/OFF * Decimal point of SD card setting Overload Capacity Full Scale Deflection Zero/tare Control Transducer Exclusive 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
* Unit setting * Set beep Sound ON/OFF * Decimal point of SD card setting Overload Capacity Full Scale Deflection Zero/tare Control Transducer Circuit Exclusive 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
* Set beep Sound ON/OFF * Decimal point of SD card setting Overload Capacity Full Scale Deflection Zero/tare Control Transducer Circuit Exclusive load cell. Circuit Exclusive microprocessor LSI-circuit. * 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
Overload Capacity Full Scale Deflection Zero/tare Control Transducer 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 Max. 30 kg. Approx. 0.4 mm max. Max. full capacity. Exclusive load cell. Exclusive microprocessor LSI-circuit. * 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).
Capacity Full Scale Deflection Zero/tare Control Transducer 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 Max. full capacity. Exclusive microprocessor LSI-circuit. * 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).
Full Scale Deflection Zero/tare Control Transducer 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 Approx. 0.4 mm max. Max. full capacity. Exclusive load cell. * 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).
Deflection Zero/tare Max. full capacity. Control Transducer Exclusive 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
Zero/tare Control Transducer Exclusive 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
Control Transducer Exclusive 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
Transducer Exclusive 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
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
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
(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
* DC 9V adapter input. (AC/DC power adapter is optional). Power Current Normal operation (w/o SD card save
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 0° to 50° (32° F to 122° F).
Temperature
Operating Less than 80% RH.
Humidity
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 Main instrument with mounting holes are holes provided on the back case, easy stand
mounting.
Accessories Operating manual
Included Flat-head adapter
Hook adapter 1 PC.
Cone head adapter 1 PC.
Chisel head adapter 1 PC.
120 mm extension rod 1 PC.
Carrying case 1 PC.
Optional * SD memory card (2 GB)
Accessories * Test stand, Model : FS-1001
* Electrical test stand, Model: FS-1002
* Wedge grip, Model : WG-01
* Wedge grip, Model : WG-01 * RS232 cable, Model : UPCB-02.
* Wedge grip, Model : WG-01 * RS232 cable, Model : UPCB-02. * USB cable, Model : USB-01
* Wedge grip, Model : WG-01 * RS232 cable, Model : UPCB-02. * USB cable, Model : USB-01 * Software for data logging & data
* Wedge grip, Model : WG-01 * RS232 cable, Model : UPCB-02. * USB cable, Model : USB-01

^{*} Appearance and specifications listed in this brochure are subject to change without notice.