

Highly Accurate Voltage/Current Source and Measurement Unit

GS820/GS610/GS200

Generation and measurement of voltage and current are essential to evaluating fundamental electric parameters. This is especially true in the field of semiconductors and electronic parts, in the field of mechatronics, and in the research of leading-edge technology, where highly accurate, high-speed, and convenient source and measurement devices are demanded. The DC voltage/current source measure units by YOKOGAWA are new products that meet these demands. They function not only as fundamental voltage/current sources and DC parametric testers, but also as arbitrary waveform generators and electronic loads.

Source/Measured
current

3A

2A

1A

2 channels



GS820

Source Measure Unit

$\pm 18\text{ V}, \pm 1.2\text{ A}$

$\pm 7\text{ V}, \pm 3.2\text{ A}$

With measurement features

High test speed



Wide range

GS610

Source Measure Unit

$\pm 110\text{ V}, \pm 0.5\text{ A}$

$\pm 12\text{ V}, \pm 3.2\text{ A}$

With measurement features

Low noise



GS200

Programmable

DC Source

$\pm 32\text{ V}, \pm 200\text{ mA}$

With measurement features (option)

50V

100V

Source/Measured
voltage

Popular Applications

- DC voltage and current reference
- Pulse voltage and current source

• DC parametric test

• Delivery inspection

• Arbitrary waveform generator

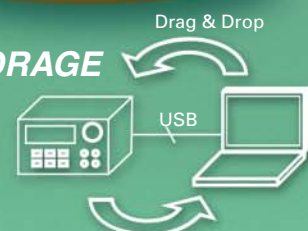
• Electronic load

Easy Programming

Your PC recognizes the GS820/GS610/GS200 internal memory as a USB mass storage device. This easy access to the internal memory facilitates the programming of source data, the acquisition of measured data, and the graphing of I-V curves.

Programmability as well as I-V curve tracing and arbitrary waveform generation features have improved drastically.

USB STORAGE



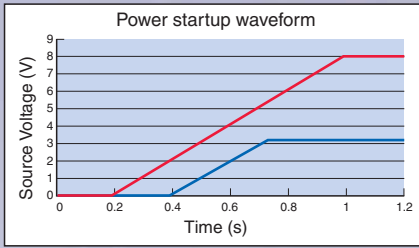
Drag & Drop

LF 7656-30E

Applications

Operation testing when multiple power sources are turned on

Time (s)	Circuit Power Source (V)	Motor Power Source (V)
0	0	0
0.01	0	0
0.02	0	0
0.03	0	0
0.04	0	0
⋮	⋮	⋮
0.65	2.6	4.6
0.66	2.7	4.7
0.67	2.8	4.8
0.68	2.9	4.9
0.69	3	5
0.7	3.1	5.1
0.71	3.2	5.2
0.72	3.3	5.3
0.73	3.3	5.4
0.74	3.3	5.5
0.75	3.3	5.6
0.76	3.3	5.7
0.77	3.3	5.8
0.78	3.3	5.9



DUT:

- Disk drives (HDD, DVD, and CD)
- Digital cameras
- Video cameras
- PDAs
- Multifunctional LSIs
- Other electronic circuits



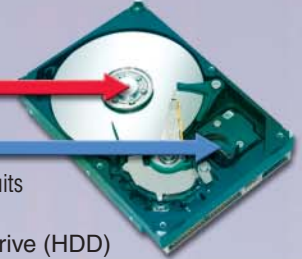
Drag & drop



GS820

Ch. 1 Power source for driving motors

Ch. 2 Power source for electronic circuits



Hard disk drive (HDD)

I-V curve tracer

Source data file (CSV)

Source Voltage (V)	Measured Current (A)
0.00E +00	
2.00E -01	
4.00E -01	
6.00E -01	
8.00E -01	
1.00E +00	
1.50E +00	
2.00E +00	
3.00E +00	
4.00E +00	
5.00E +00	
⋮	⋮
⋮	⋮
⋮	⋮



GS820

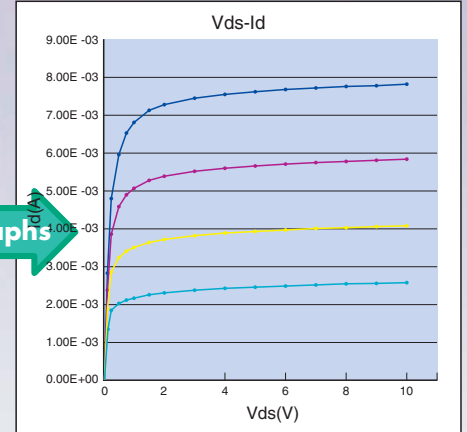
Measurement result file (CSV)

Source Voltage (V)	Measured Current (A)
0.00E +00	8.41E -06
2.00E -01	2.83E -03
4.00E -01	4.80E -03
6.00E -01	5.96E -03
8.00E -01	6.53E -03
1.00E +00	6.81E -03
1.80E +00	7.13E -03
2.00E +00	7.28E -03
3.00E +00	7.45E -03
4.00E +00	7.55E -03
5.00E +00	7.62E -03
⋮	⋮
⋮	⋮
⋮	⋮

DUT:

- Transistors
- Diodes
- LEDs, LDs
- Voltage regulators
- Other discrete components

Transistor voltage vs. current characteristics



Drag & drop

Drag & drop

Draw graphs

Remote configuration and testing of inverter output frequency



GS820

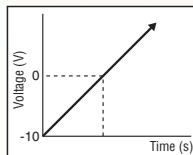
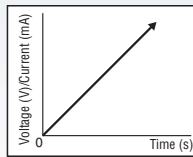
Voltage and current:

0 to 5 V, 1 to 5 V,
0 to 10 V
4 to 20 mA, 0 to 20 mA

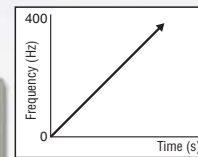
Ch.1 Terminal 1

Ch.2 Terminal 2

Voltage:
-5 to +5 V
-10 to +10 V



Inverter



Frequency module
701280
(CH1/CH2)
0.01 Hz to 200 kHz

Frequency:
0.05 Hz to 400 Hz

SL1000
Data Acquisition Unit



YOKOGAWA

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