

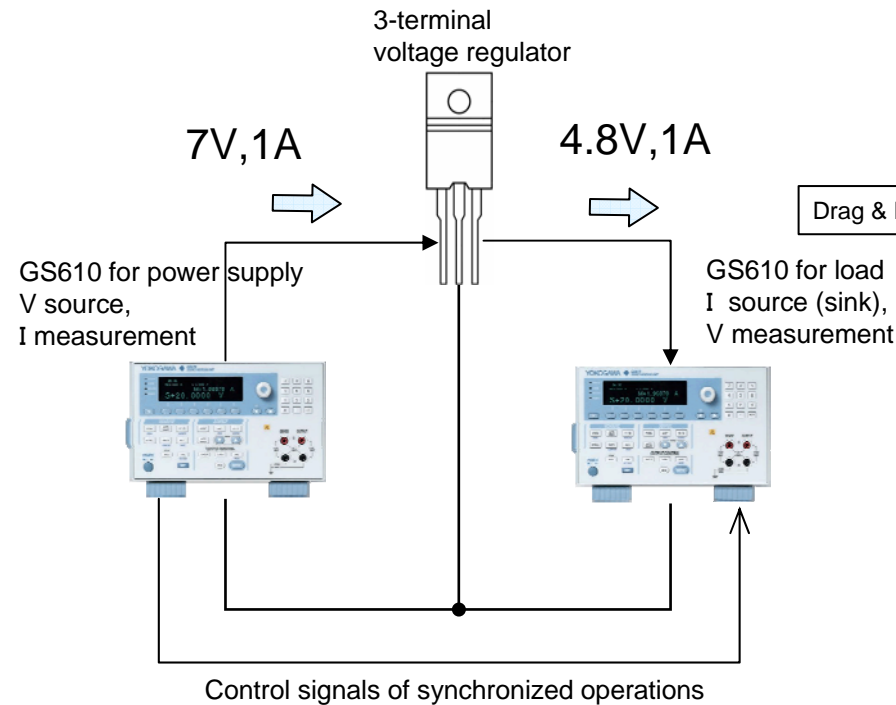
Measuring Power Efficiency of Power Source Devices

Application

GS610 can measure the efficiency of power conversion of power source devices such as 3-terminal voltage regulators and DC-DC converters. GS610 that provides power will supply the voltage to regulator's input and measure the current as well. GS610 that works as an electronic load consumes current from regulator's output and measure the output voltage. The efficiency of power conversion can be calculated as a ratio between provided power and consumed power.

Solution Features

- Power provision and power consumption (load)
- Can generate and measure max 110V and max 3.2A
- Collection of measurement data and power conversion efficiency calculation using multipurpose worksheets
- No control software needed
- Easy to connect, easy to set up when operating multiple units in sync



Time(s)	Source(V)	Measure(A)	Source(A)	Measure(V)	Input(W)	Output(W)	Efficiency
0	7.00	0.002617	0.00	4.95495	1.83E-02	0.00E+00	0.00%
0.55	7.00	0.102457	-0.10	4.94771	7.17E-01	4.95E-01	68.99%
1.1	7.00	0.202470	-0.20	4.94113	1.42E+00	9.88E-01	69.73%
1.65	7.00	0.302443	-0.30	4.93466	2.12E+00	1.48E+00	69.93%
2.2	7.00	0.402436	-0.40	4.92822	2.82E+00	1.97E+00	69.98%
2.75	7.00	0.502437	-0.50	4.92177	3.52E+00	2.46E+00	69.97%
3.3	7.00	0.602380	-0.60	4.91529	4.22E+00	2.95E+00	69.94%
3.85	7.00	0.702407	-0.70	4.90882	4.92E+00	3.44E+00	69.89%
4.4	7.00	0.802434	-0.80	4.90221	5.62E+00	3.92E+00	69.82%
4.95	7.00	0.902451	-0.90	4.89524	6.32E+00	4.41E+00	69.74%

