

More Power with the new Programmable Laboratory Power Supply HM7044

- Four Isolated Outputs, 0-32V / 0-3A (96W)
- Maximum Power in a very small Cabinet Volume (384W)
- Intelligent Programmable Safety Circuits
- Tracking Mode up to 4 Outputs
- Low Effective Ripple Output Voltage
- Programmable via RS-232 Interface
- Sense Mode - Voltage Drop Compensation



**Rugged, Accurate
Reliable & Powerful
Test Bench Solution**

Technique

The programmable laboratory power supply HM7044 comes equipped with four independent and isolated power sources. Each output voltage is continuously variable between 0 to 32V up to 3 A. All outputs can be connected in series (up to 128V, 3A max.) or in parallel for a higher current output (up to 12A). Voltage tracking can be used with up to four outputs.

User defined voltage and current settings, output voltage and output current stability and an extensive set of protection features make the HM7044 a versatile and reliable instrument especially in R&D applications.

Voltage Source or Current Source Mode

The power supply can act either as voltage source or as current source, depending on the load conditions and output values. Voltage and current settings are made by the rotary dial, key pad or via the RS-232 interface. Very high setting accuracy is assured for constant reproducibility. The very low ripple voltage allows trouble free supply to sensitive electronics.

Programmable Current Fuses

All outputs are equipped with an electronic current fuse. Over current limit values can be set by the user. When a limit value is reached, power is removed from the output

within less than one millisecond. An overload in one output will shut down all other outputs simultaneously or up to four outputs pre selected by the user.

This is an important feature to protect the device under test from overload, especially for applications on sensitive circuits requiring positive and negative balanced voltages.

Sense Mode

Load Voltage is constantly monitored by a sense controller. With the sense lines, voltage is directly measured at the load and used to compensate any voltage drop across the supply lines.

Operating Comfort

An additional operating benefit is that the output power of all outputs or only user defined outputs can be turned on and off with only one front panel key. Therefore, the entire power supply need not be switched off.

Reliability

Reliability of power supplies is of extreme importance. The HAMEG programmable power supplies are designed and manufactured for years of trouble-free life.

Accessories supplied: Line cord, Operating Manual

Optional Accessories: HZ42: 19" rack-mount-kit; HZ10 Test lead with banana plug



Specifications

Output I, II, III, IV with identical specs

Constant Voltage Source

Voltage Setting:	0 to 32V DC
Resolution:	10mV, 4-digit display
Setting Accuracy:	±5 digit
Ripple (rms):	<1mV, voltage reg.
Current Setting:	5mA to 3A
Resolution:	1mA, 4 digit display
Setting Accuracy:	±8 digit
Ripple (rms):	<1mV / 100μA current reg.

Parallel Mode

Output Voltage:	32V max.
Output Current:	12A max. with 4 outputs
Output Power:	384W

Serial Mode

Output Voltage:	128V max. with 4 outputs
Output Current:	3A max.
Output Power:	384W

Tracking Mode

Voltage tracking with up to 4 outputs

Electronic Fuses

Current Setting:	5mA-3A, each output fuse switchable
Number of Fuses:	4

Programmable Output Cutoff

On over current at one output, up to four outputs can be disconnected from load

Output Cutoff Switch

All outputs are switched on-off with one push button

7-Segment Displays

8 displays, 4-digit voltage and current display

LED Indicators

Output enabled; Current Limit enabled; Fuse enabled;
3 LEDs per output.

Interface

Serial RS-232 for PC connectivity

Command-Processing Time: 100ms, until output voltage begins to change following receipt of digital data

General Data

Internal Resistance

Static: 2.5mΩ typical

Dynamic: 150mΩ typical

Regulation Time (10/90% load change, recovery within ±100mV): ≤ 2.5ms

Stability: 0.1mV, at line voltage variation of up to 10%
at <80W per output

Temperature Coefficient: 100ppm/°C

Over Current Switch Off Time (>3A to 0A): <50μs

DC Floating Voltage: max. ±150V, outputs to chassis ground

Power Consumption: 530W at 384W output power

Ambient Temperature: +10°C to +40°C

Relative Humidity: 10% to 90%, without condensation

Line Voltage: 115V/230V ~ ±10%, 50 to 60Hz

Safety: Class I (ICE1010-1, VDE0411)

Weight: approx. 8.5kg

Dimensions: W 285 H 125 D 380mm

