

HM7042-5

Triple Power Supply

Technical Data



Key facts

- ▮ $2 \times 0 \dots 32\text{V} / 0 \dots 2\text{A}$ $1 \times 0 \dots 5.5\text{V} / 0 \dots 5\text{A}$
- ▮ High-performance and inexpensive laboratory power supply
- ▮ Floating, overload and short-circuit proof outputs
- ▮ Separate voltage and current displays for each output
4 digits at channel 1+3; 3 digits at channel 2
- ▮ Display resolution:
10mV/1mA at channel 1+3; 10mV/10mA at channel 2
- ▮ Protection of sensitive loads by current limit or electronic fuse
- ▮ Pushbutton to activate/deactivate all outputs
- ▮ Low residual ripple, high output power, excellent regulation
- ▮ Parallel (up to 9A) and series (up to 69.5V) operation
- ▮ Temperature-controlled fan

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All data valid at 23 °C after 30 minutes warm-up.

Outputs

2 x 0...32V/2A and 0.5,5V/5A	ON/OFF pushbutton control, SMPS followed by a linear regulator, floating outputs for parallel/serial operation, current limit and electronic fuse
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Output 1+3 (32V)

Range:	2 x 0...32V, continuously adjustable 2 knobs (coarse/fine)
Ripple:	≤100µV _{Eff} (3Hz...300kHz) typ., ≤1mV (10Hz...1MHz)
Current:	max. 2A
Current limit/electronic fuse:	0...2A, continuously adjustable (knob)
Recovery time (10...90% load variation):	80µs within ±1 mV of nominal value 30µs within ±10mV of nominal value 0µs within ±100mV of nominal value
Max. transient deviation:	typ. 75mV
Recovery time (50% basic load, 10% load variation):	30µs within ±1 mV of nominal value 5µs within ±10mV of nominal value 0µs within ±100mV of nominal value
Max. transient deviation:	typ. 17 mV
Display:	
7-Segment LED:	32,00V (4 Digit)/2,000A (4 Digit)
Resolution:	0,01V/1 mA
Display accuracy:	±3 digit voltage/±4 digit current
LED:	indicates current limit

Output 2 (5,5V)

Range:	0...5.5V, continuously adjustable (knobs)
Ripple:	≤100µV _{Eff} (3Hz...300kHz) typ., ≤1mV (10Hz...1MHz)
Current:	max. 5A
Current limit/electronic fuse:	0...5A, continuously adjustable (knob)
Recovery time (10...90% load variation):	80µs within ±1 mV of nominal value 10µs within ±100mV of nominal value
Max. transient deviation:	typ. 170mV
Recovery time (50% basic load, 10% load variation):	30µs within ±1 mV of nominal value 15µs within ±10mV of nominal value 0µs within ±100mV of nominal value
Max. transient deviation:	typ. 60mV
Display:	
7-Segment LED	5,50V (3 Digit)/5,00A (3 Digit)
Resolution:	0,01V/10 mA
Display accuracy:	±3 digit voltage/±1 digit current
LED	indicates current limit

Maximum ratings

Max. voltage applicable to output terminals:

CH 1 + CH 3	33V
CH 2	6V
Reverse voltage:	max. 0,4V
Reverse current:	max. 5A
Voltage to earth:	max. 150V

Miscellaneous

Safety class:	Safety class I (EN61010-1)
Mains supply:	115V/230V ±10%; 50...60Hz, CAT II
Mains Fuse:	115V: 2 x 5A; slow blow 5 x 20mm 230V: 2 x 2,5A; slow blow 5 x 20mm
Power consumption:	max. 330VA/250W
Operating temperature:	+5...+40°C
Storage temperature:	-20...+70°C
Rel. humidity:	5...80% (non condensing)
Dimensions (W x H x D):	285 x 75 x 365mm
Weight:	approx. 7,4 kg

Accessories supplied:

Operating manual, line cord, CD

Recommended accessories:

HZ10S 5 x silicone test lead (black)
HZ10R 5 x silicone test lead (red)
HZ10B 5 x silicone test lead (blue)
HZ42 19" Rackmount Kit 2RU