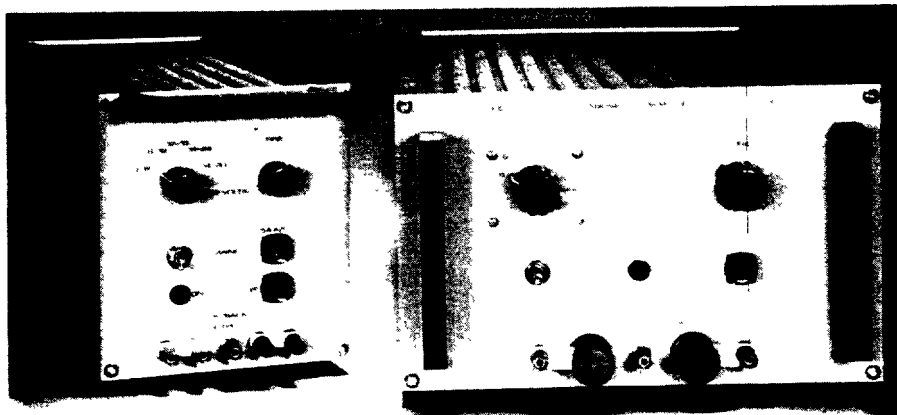


BENCH POWER SUPPLIES

sub-bench power supplies B30 Series

227-304



Combined features of bench and modular units

Output adjustable 0-30V in 6V steps with overlapping fine control

5A, 10A and 20A units available

The flexibility of bench power supplies (with fully adjustable outputs and ease of portability) and the simple mechanical concept found in modular sub-units, are combined in the Farnell B30 Series. Result — economical, utility power supplies suitable for a wide variety of applications in various locations. They can be used on or under the laboratory bench. Or built into test benches or equipment. Wherever a convenient adjustable source of d.c. power is needed, without the necessity for constant metering, specify a B30 Series unit. There are three units in the series.

Output voltage on all models is 0 to 30 volts available in steps of 6 volts each with

overlapping fine control between each step. Maximum current of 10 and 20 amps for the respective models is available at any voltage setting.

Units may be connected directly in series or parallel to obtain increased voltage or current. Feedback terminals are provided for remote sensing of the voltage at the load so that the effects of resistance in the load connecting leads may be minimised if required. Electronic current limiting circuitry and input and output fuses protect the unit against overload or accidental short circuits. The limiting circuitry automatically resets itself when the overload is cleared. There

is a cable wrap underneath the unit for stowing the permanently attached mains lead.

Mains input

A.C. mains 210-220-230-240V.

105-110-115-120V by tap change. Tolerance $\pm 10\%$. 50-400Hz

Line regulation

Output change for a $\pm 10\%$ mains change:

Less than $0.01\% + 1\text{mV}$ short term

Less than $0.02\% + 2\text{mV}$ long term

Load regulation

Output change for a zero to full load change:

Less than $0.01\% + 2\text{mV}$ short term

Less than $0.02\% + 4\text{mV}$ long term

Ripple and noise

Less than 1mV pk-pk at full load ($\Delta f = 80\text{kHz}$)

Output impedance

0.01Ω measured at 100kHz and 20°C , typical

Transient recovery time

Less than $20\mu\text{s}$ typical for output to recover within 50mV following a full load change of $1\mu\text{s}$ rise time

Temperature coefficient

0.02% per $^\circ\text{C}$, typical

Operating ambient temperature range

0°C to 50°C (for full load current)

Storage temperature range

-20°C to $+85^\circ\text{C}$

Overload protection

Constant current limiting on lowest range. Re-entrant to 10% of I_{max} on other ranges.

Input and output fuses

NATO stock numbers

B30/10 6130-99-955-7478

B30/20 6130-99-618-5353

Units available

Model	B30/10	B30/20
Order code	11B3010	11B3020
Output current	10A	20A
Output voltage d.c.	0-30V, fully variable by 5 position switch (6V steps) and fine control	
Dimensions (mm)	Height	177
	Width	160.5
	Depth	372
Weight (kg)	14.5	25.4

ORDER CODE: See units available table