

# BENCH POWER SUPPLIES

## single/twin output power supplies D Series

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### Four models available

- D30-2 0-30V, 2A single output
- D30-2T 0-30V, 2A twin outputs
- D30-4 0-30V, 4A single output
- D100-1 0-100V, 1A single output

Digital meters – large, bright LED annunciation

1mA resolution of current; 10mV resolution of voltage (100mV on D100-1)

Direct reading. Eliminates operator error (range, parallax, etc.)

Voltmeter can be used to measure external voltages

Output ON/OFF switch. Allows voltage and current limit to be set prior to connecting load

10 turn voltage control for ease of operation and reduced susceptibility to mechanical vibration

Constant voltage or constant current by automatic crossover with separate LED indication of mode

Designed to meet BS4743 and IEC348 safety standards

### NATO stock numbers

- D30-2T 6130-99-773-9423
- D100-1 6130-99-773-9422

### Mains input

110V, 220V, 240V  $\pm 10\%$  48 to 63Hz

**Constant voltage (CV) mode**  
(indicated by green LED)

### Line regulation

$< \pm 0.01\% + 2\text{mV}$  for  $\pm 10\%$  mains change

### Load regulation

$< \pm 0.01\% + 2\text{mV}$  ( $< \pm 0.02\% + 5\text{mV}$  for D100-1)

for zero to full load change

### Ripple and noise

$< 2\text{mV}$  p-p at full load ( $\Delta f = 80\text{kHz}$ )

### Output impedance

$2\text{m}\Omega$  typical measured at 1kHz and  $23^\circ\text{C}$

### Temperature coefficient

0.01% per  $^\circ\text{C}$  typically

### Transient response

25 $\mu\text{s}$  typically for output to recover within 50mV following 10% to 100% load change of 1 $\mu\text{s}$  risetime

### Constant Current (CI) mode

(indicated by red LED)

### Line regulation

$< \pm 0.1\% + 1\text{mA}$  for  $\pm 10\%$  mains change

### Load regulation

$< \pm 0.1\% + 1\text{mA}$  for zero to 30 volts change

### Ripple and noise

1mA pk-pk typical

### Output resistance

$> 50\text{k}\Omega$  (control set to maximum)

### Metering

4 digits, 12.5mm character height. High efficiency red LED displays. Separate voltmeter and ammeter on D30-4 and D100-1. Switch selected on D30-2 and D30-2T

### Voltage mode

Range: 0 to 39.99 volts (0 to 399.9V for D100-1).

Overrange: indicated by OFL.

Accuracy:  $\pm 0.2\%$  reading  $\pm 0.1\%$  full scale at  $23^\circ\text{C}$ .

Resolution: 10mV (100mV for D100-1)

### External voltage measurement

Selected by push button.

Input: via front panel sockets isolated from power supply outputs up to 200V d.c. max.

Input impedance:  $1\text{M}\Omega$  typically

### Current mode

Range: 0 to 3.999 amps.

Overrange: indicated by OFL.

Accuracy:  $\pm 0.3\%$  reading  $\pm 0.1\%$  full scale at  $23^\circ\text{C}$ .

Resolution: 1mA

### Protection

Mains input fuse  $20 \times 5\text{mm}$

### Outputs

Variable current limit control(s) plus fuse(s)  $20 \times 5\text{mm}$

Reverse voltage protection afforded providing current flow is less than full load current (short term)

### External voltage

If power supply output is switched off protection offered provided voltage does not exceed maximum output voltage

### Operating temperature range

$0^\circ\text{C}$  to  $+40^\circ\text{C}$

### Storage temperature range

$-20^\circ\text{C}$  to  $+60^\circ\text{C}$

### Output isolation

Either power supply terminal may float up to a maximum of 200V from safety earth

### Dimensions/weight approx. (mm/kg)

	Height	Width	Depth	Weight
D30-2	170	120	310	5.3
D30-2T	170	220	310	7.8
D30-4	170	220	310	7.8
D100-1	170	220	310	7.8

### Order codes

D30-2	11D302
D30-2T	11D302T
D30-4	11D304
D100-1	11D1001

**ORDER CODE: see above**