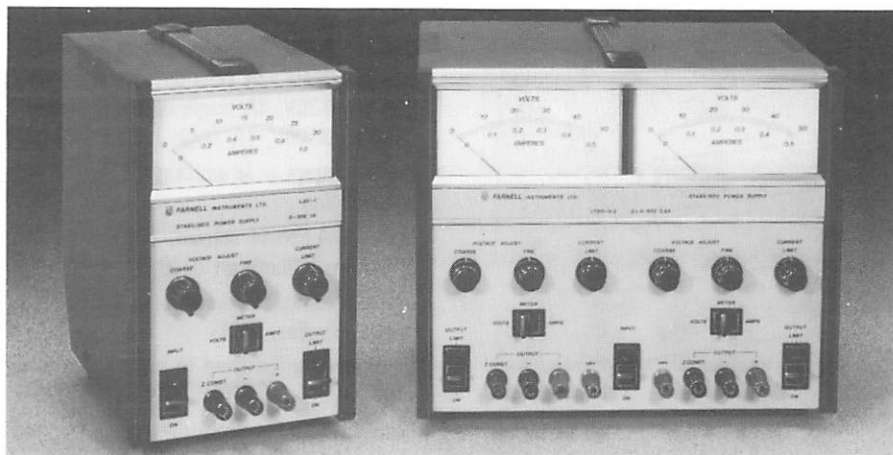


# BENCH POWER SUPPLIES

single/twin output power supplies L Series



- Regulated, stable output
- Constant voltage or constant current
- Overload and short circuit protection
- LED indication of mains on and current limit
- Separate output ON switch

The Farnell L series bench power supplies provide constant voltage d.c. outputs which are regulated and well protected against overloads and short circuits. Alternatively, a switch under the front edge of the unit enables constant current operation. L12-10 model has adjustable over-voltage crowbar, this additional protection being provided to safeguard your integrated circuit devices.

Output is continuously variable by coarse and fine potentiometers and is monitored by a large, easily read meter which is switched to show either voltage or current (models L30-5 and L12-10 have separate voltage and current

meters). Separate switching of mains input and d.c. output is provided and LED indicators, housed within the respective switch bezels, illuminate to show mains power on or when the unit is in current limit. The provision of a separate output switch enables the supply to be adjusted in circuit and left in standby prior to supplying the load so providing the best possible regulation without warm-up delay.

The higher current models have a facility for remote sensing of the load voltage. Some models are also available as twin output units and the outputs may be connected in series or parallel to provide twice the voltage or current.

### Mains input

A.C. mains 110, 130, 220, 240V  $\pm 10\%$  by internal tap change. 50-400Hz

### Line regulation

Output change for a  $\pm 10\%$  mains change:  
 Less than 0.01% +2mV constant voltage  
 Less than 0.01% +100 $\mu$ A constant current

### Load regulation

Output change for a zero to full load change:  
 Less than 0.01% +2mV constant voltage  
 Less than 0.01% +100 $\mu$ A constant current

### Ripple and noise

Less than 1mV/1% of maximum output current at full load ( $\Delta f=80$ kHz)

### Output impedance

0.1 $\Omega$  typical, measured at 100kHz and 20°C in constant voltage mode

### Transient recovery time

Less than 25 $\mu$ s typical, for output to recover within 50mV following a 10% to 100% load change of 1 $\mu$ s risetime

### Temperature coefficient

0.01% per °C, typical

### Operating ambient temperature range

0°C to +45°C

### Storage temperature range

-20°C to +50°C

### Overload protection

Adjustable constant current limiting from 10% to maximum. Automatically resets. Current limit indication by LED mounted in the output switch bezel. L12-10 has overvoltage crowbar adjustable 3.2V to 120% Vout max. Trip coefficient 0.02% per °C typical. Input and output fuses.

### NATO stock numbers

L30/1 6130-99-642-8099  
 L30/2 6130-99-543-5573  
 L30/5 6130-99-642-8101  
 LT30/1 6130-99-642-8102  
 LT30/2 6130-99-642-8103

Units available	d.c. output	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Order code
<b>Single output units</b>						
L30/1	0-30V, 1A	226	133.5	225	4.8	11L301
L30/2	0-30V, 2A	"	"	249	6.2	11L302
L30/5	0-30V, 5A	"	254	313	12.4	11L305
L12/10C*	0-12V, 10A	"	"	"	12.6	11L1210C
<b>Twin output units</b>						
LT30/1	2 $\times$ 0-30V, 1A	"	254	225	8.4	11LT301
LT30/2	2 $\times$ 0-30V, 2A	"	"	249	11.0	11LT302

\*with adjustable overvoltage protection

**ORDER CODE:** see units available table