

# P SERIES MODEL PSD3510A

## FEATURES

Compact, single output linear supply

Delivers a full 10A over 0 to 35V range

Constant voltage or constant current output

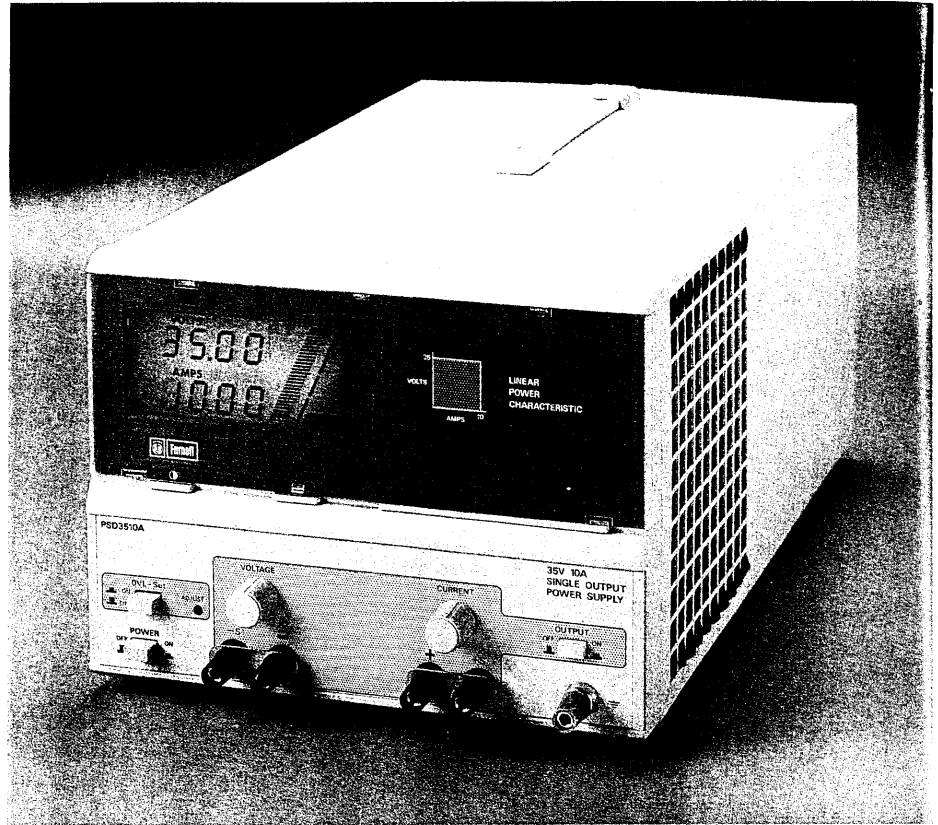
10-turn controls for precise settings

4-digit LCD displays of voltage and current. Simultaneous indication of voltage, current or power on analogue bar graph.

Output enable switch enables voltage or current preview

Overvoltage protection can be viewed and preset via the front panel

The output is remotely programmable by voltage or resistance via the back panel



The PSD3510A is a single output, linear regulated bench power supply for general purpose use. From an AC mains input of 220/240V nominal it will supply a well regulated and stable DC output. This may be set accurately in the range 0 to 35V by means of 10-turn controls and a full 10A is at the disposal of the user at any setting.

The unit features a custom LCD which incorporates a twin 4-digit display showing both voltage and current. There is also a bargraph so simultaneous analogue indication of voltage, current or power is also provided. The required output may be set and viewed prior to being applied via an output enable switch. Overvoltage protection can also be viewed and preset on the front panel. The output is remotely programmable with a controlling voltage or with resistance values.

Modern circuit techniques and special transformer design has allowed the construction of a compact and relatively light weight unit which should appeal to both industrial and educational users.

## SPECIFICATION

**AC input** 220/240V  $\pm 10\%$ , 50/60Hz

**Output** 0 to 35V at 10ADC

**Line regulation** for a  $\pm 10\%$  change

CV:  $< 0.01\% + 2\text{mV}$

CI:  $< 0.01\% + 200 \mu\text{A}$

**Load regulation** for a 0-100% change

CV:  $< 0.01\% + 2\text{mV}$

CI:  $< 0.1\% + 2\text{mA}$

**Ripple and noise** ( $\Delta f = 80\text{kHz}$ )

$< 2.5\text{mV pk-pk}$

**Transient response** (CV mode typical)

$< 1\text{ms}$  for output to recover within 50mV following a 10-100% load change of 1 $\mu\text{s}$  risetime

**Temperature coefficient** 0.02% per  $^{\circ}\text{C}$

**Metering** back-lit LCD with two 4-digit displays for voltage and current.

Analogue bargraph, status flags and adjustable viewing angle

**Meter range** 0 to 38V and 0 to 10.6A approx.

**Meter accuracy** Volts:  $\pm 0.2\% \pm 0.1\%$  fsd

Current:  $\pm 0.3 \pm 0.1\%$  fsd

**Meter resolution** Volts: 10mV

Current: 10mA

**Remote sensing** maintains nominal voltage at load by correcting for up to 0.5V drop in each output lead

**Protection** input and output fuses. Variable current limit. Reverse voltage protection.

Forward voltage protection (65V).

Overvoltage crowbar. Mains high/low detection disables output.

**Operating ambient temperature range** -5 to  $+50^{\circ}\text{C}$

**Storage temperature range** -40 to  $+70^{\circ}\text{C}$

**Cooling** Fan cooled. Draws sides, exhausts rear

**Safety compliance** BS 4743 (IEC348)

**Mechanical** 170H x 215W x 400Dmm. 9.7 kg

**ORDER CODE**  
1EAPSD3510A

Bench Power Supply