



The Sciencetech 4181 30V, 10A Power Supply has been designed as a constant current (CC) and constant voltage (CV) source for laboratories, industries and field testing applications, featuring low power loss, compact and light weight. It provides floating, DC output voltages and is ideally suitable for complex analog and digital applications.

The DC output can be continuously adjusted from 0 - 30Volts with coarse and fine controls. Current limit is also adjustable from 100mA - 10A. Any over loading for adjusted current limit, is indicated by flashing "OR" LED. When the maximum setting is crossed or the overheating has occurred, the LED will lit up.

A 3-digit display for voltage and 3 ½ digit display for current is used to read the instantaneous values. In addition to low residual ripple and noise, it has excellent line and load regulation. The 30V- 10A Power Supply is also provided with all protective circuits to ensure trouble free operation.

Features

- DC 0-30 V / 10 A
- Floating Output
- Selectable display for Voltage & Current
- Low Ripple Voltage
- Excellent Line and Load Regulation
- Large Display

Technical Specifications

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|-------------------------|-------------------------------------------------------------------------------------------------------|
| DC Output | : 0 - 30 V, 10 A continuously variable by means of Coarse and Fine controls with over load protection |
| Current Limit | : 100 mA to 10 A, Adjustable, current limiting facility |
| Setting Resolution | : Voltage : 10 mV Current : 5 mA |
| Internal Resistance | : $\leq 10 \text{ m}\Omega$ |
| Stability | : 2.5 mV at 30 V / 10 A |
| Recovery Time | : $\leq 50 \text{ }\mu\text{s}$ |
| Load Regulation | : $\pm (0.05 \% + 10 \text{ mV})$ |
| Line Regulation | : $\pm (0.05 \% + 10 \text{ mV})$ |
| Temperature Coefficient | : $\pm (0.05 \% + 5 \text{ mV} / ^\circ\text{C})$ |
| Ripple & Noise | : $\leq 1 \text{ mVrms}$ |
| Display | : 3 digit for voltage and 3 1/2 digit for current 7-segment LED indicator |
| Accuracy | : $\pm (1\% + 1 \text{ digit})$ |
| Over Range Indication | : Glowing 'OR' LED indicate Overload |

General Information

Output is floating and is switchable from the front panel.

Built-in overheat, over voltage, overload and short circuit protection.

Insulation

Between chassis & output terminals $>10 \text{ M}\Omega$ at 100 V DC

Between chassis & AC plug $>50 \text{ M}\Omega$ at 500 V DC

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|-----------------------|------------------------------------------------------------------------------------------|
| Power Supply | : 230 V, $\pm 10\%$, 50 / 60 Hz |
| Operating Temperature | : 0 - 40°C, 80 % RH |
| Dimension (mm) | : W 303 × D 347 × H 136 |
| Weight | : 8.5 Kg approximately |
| Product Tutorials | : Online on www.SciencetechLearning.com |

Included Accessories

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|------------|---------|
| Mains cord | : 1 no. |
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